



ORIGINAL

*Request for Proposals:
RFP#2021-W01*

*Professional Engineering Services for the
Mount Arlington Pump Station Improvement Project*



*Morris County Municipal Utilities Authority
214A Center Grove Road
Randolph, New Jersey 07869*



*March
2021*



March 3, 2021

Ms. Shana O'Mara, QPA
Morris County Municipal Utilities Authority
214A Center Grove Road
Randolph, NJ 07869

Re: Request for Proposals RFP#02021-W01
Professional Engineering Services
Mount Arlington Pump Station Improvent
BE File No.: PR-21-10394

Dear Ms. O'Mara:

Boswell Engineering (Boswell), in accordance with the Morris County Municipal Utilities Authority's (MCMUA) Request for Proposals (RFP) is pleased to submit three (3) copies of our Proposal in connection with the MCMUA's solicitation for Professional Engineering Services – Mount Arlington Pump Station Improvement Project.

We appreciate your consideration and would welcome the opportunity to meet with MCMUA officials to further discuss our credentials. Should there be any questions or if any further information is required, please do not hesitate to contact this office directly or in the alternate Giselle Diaz, P.E., (201-641-0770 / gdiaz@boswellengineering.com).

Very truly yours,

BOSWELL ENGINEERING

Kevin J. Boswell, P.E., P.P., CME

KJB/JEC/dm
Enclosure

TABLE OF CONTENTS

Section I:	Administrative Information Administrative Summary References Executive Summary Understanding of Need
Section II:	Professional Information Boswell Engineering Disciplines Representative Projects
Section III:	Resumes of Key Personnel
Section IV:	Required Forms



Morris County Municipal Utilities Authority

Administrative Information

Company Name Boswell Engineering

Address: 330 Phillips Avenue
South Hackensack, NJ 07606

Telephone/Email: 201-641-0770 / marketing@boswellengineering.com

Principal-In-Charge: Kevin J. Boswell, P.E.

Project Manager: Giselle Diaz, P.E., Division Lead, Wastewater

Key Personnel: Detailed resumes of key personnel are included in Section IV

Business Organization: Corporation (New Jersey)

Principals: Italconsult USA Corporation - 799 Madison Ave, Albany, NY
Italconsult S.p.A. – n. 20 Via di Villa Ricotti, Rome, Italy
Intesa Sanpaola S.p.A. – n. 156 Piazza San Carlo, Torino, Italy
Autostrade & Strade Engineering S.p.A. – n. 19 Via
Torremuzza,
Palermo, Italy
Antonio Bevilacqua – n. 10 Piazza Fonderia, Palermo, Italy


Boswell Engineering is a wholly-owned subsidiary of Italconsult USA Corporation. Boswell conducts its business activities independent of the parent company and therefore does not require any approval(s) in performing any activities in its normal course of business.

Firm Overview: Boswell Engineering, a fully integrated engineering firm, possessing civil, structural, environmental, municipal engineering, environmental science and construction management/inspection capability, is ranked nationally amongst *ENR's* Top 500 Design and Top 100 Construction Management firms and statewide among *NJBiz's* Top 25 Environmental firms. Since its foundings in 1924, Boswell has kept pace with the rapidly changing technological advancements in the industry in order to provide clients with a comprehensive range of multi-disciplinary engineering services. With over 250 employees, Boswell is regarded as one of the largest and most diverse New Jersey based engineering firms. Our contingent of more than 100 licensed and certified professionals, located at our South Hackensack, New Jersey corporate headquarters, possess the requisite management, administrative and technical expertise to provide the planning, design and construction phase services for numerous projects for public sector clients at all levels of government.

Years in Business/Current Mgmt: 97 years/38 years

Morris County Municipal Utilities Authority

State of New Jersey Business Registration Certificate: Certificate No. 0099760

STATE OF NEW JERSEY BUSINESS REGISTRATION CERTIFICATE FOR STATE AGENCY AND CASINO SERVICE CONTRACTORS		DEPARTMENT OF TREASURY DIVISION OF REVENUE PO BOX 282 TRENTON, N.J. 08646-0282
TAXPAYER NAME: BOSWELL ENGINEERING, INC.	TRADE NAME:	
TAXPAYER IDENTIFICATION#: 221-896-158/000	CONTRACTOR CERTIFICATION#: 0099760	
ADDRESS: 330 PHILLIPS AVE SOUTH HACKENSACK, NJ 07606	ISSUANCE DATE: 10/03/01	
EFFECTIVE DATE: 07/01/00	 Director, Division of Revenue	
FORM-BRC(08-01)		

This Certificate is NOT assignable or transferable. It must be conspicuously displayed at above address.

New Jersey State license(s) and/or certification(s) to perform activities follow in this Section.

New Jersey Certificate of Authorization to perform Engineering and Land Surveying – Certificate No. 24GA27958000

State of New Jersey Department of Environmental Protection Certification to perform: Underground Storage Tank (UST) Enclosure; Installation-entire UST System; Subsurface Evaluation; and, Tank Testing - Certificate No. US00041

State of New Jersey Certificate of Registration for Engaging in or Bidding on Public Work Certificate No. 601455

Affirmative Action: This is to verify that Boswell Engineering is in compliance with all affirmative action and equal opportunity employment regulations with respect to its business activities. Below is a copy of the firm's State of New Jersey Certificate of Employee Information Report.

Certification 1502	
CERTIFICATE OF EMPLOYEE INFORMATION REPORT RENEWAL	
This is to certify that the contractor listed below has submitted an Employee Information Report pursuant to N.J.A.C. 17:27-1.1 et. seq. and the State Treasurer has approved said report. This approval will remain in effect for the period of 15-JUN-2019 to 15-JUN-2022	
BOSWELL ENGINEERING, INC. 330 SOUTH HACKENSACK S. HACKENSACK NJ 07606	 ELIZABETH MAHER MUOIO State Treasurer

Morris County Municipal Utilities Authority

References

Passaic Valley Sewerage Commission
600 Wilson Avenue
Newark, New Jersey 07105
John S. Rotolo, P.E., Chief Engineer
973-817-5782

City of Garfield
111 Outwater Lane
Garfield, New Jersey 07026
Thomas J. Duch, City Manager
973-340-2000

Borough of Fort Lee
309 Main Street
Fort Lee, New Jersey 07024
Alfred R. Restaino, Borough Administrator
201-592-3500 x1500

Borough of Oakland
1 Municipal Plaza
Oakland, New Jersey 07436
Richard Kunze, Borough Administrator
201-337-8111 ext. 2005

North Bergen Municipal Utilities Authority
6200 Tonnelle Avenue
North Bergen, New Jersey 07047
Frank Pestana, Executive Director
201-422-0100

Wanaque Valley Regional Sewerage Authority
101 Warren Hagstrom Boulevard
Wanaque, New Jersey 07465
John Eskilson, Acting Executive Director
973-839-3000 x7100

Township of Mahwah
475 Corporate Drive
Mahwah, New Jersey 07430
Ben Kezmarsky, Township Administrator
201-529-5757

East Orange Water Commission
99 South Grove Street
East Orange, NJ 07018
Christopher Coke, Interim Executive Director
973-266-8869

Morris County Municipal Utilities Authority

Executive Summary

Boswell Engineering (Boswell) is a multi-disciplinary engineering firm possessing civil, structural, environmental engineering and construction management/in spection capabilities. Our firm is currently ranked nationally among ENR's Top Design Firms, Top 100 Construction Management Firms and ranked 12th statewide among NJBiz's Top Environmental Firms. Since its founding in 1924, Boswell has kept pace with the rapidly changing technological advancements in the industry in order to provide a comprehensive range of engineering and construction inspection services to numerous public-sector clients. With over 250 employees, Boswell is recognized as one of the largest and most diverse engineering firms in the State of New Jersey. Our contingent of more than 100 licensed professionals possess the background and technical expertise to successfully provide the requisite services to the Morris County Municipal Utilities Authority (MCMUA).

The proximity of our headquarters in South Hackensack (± 35 miles to the MCMUA) will enable both our office and field personnel to respond to inquiries, make site visits and attend all meetings with the MCMUA. The Boswell organization is committed to providing the necessary local resources and personalized services in an efficient and effective manner and can respond to any emergency situations on a 24/7 basis.



Boswell has been providing engineering services to public/private sector clients throughout New Jersey for over 97 years and is intimately familiar with all aspects of the highly regulated design/construction process unique to this state. Boswell's wealth of experience and deep roots in the New Jersey engineering profession provides clients with state-of-the-art services and unparalleled local knowledge. The firm's capabilities, coupled with a reputation of integrity, client satisfaction and public service allows our team to continuously grow and expand our scope of services each year.

Morris County Municipal Utilities Authority

Boswell has selected a skilled and highly knowledgeable team under the direction of Kevin Boswell, PE (Project Principal) and Giselle Diaz, PE, (Project Manager). Ms. Diaz has over 24 years of experience and is the director of Boswell's Water/Wastewater Division. Ms. Diaz has successfully provided design and construction support services for a broad range of water/wastewater improvement projects throughout New Jersey.

Diversity Program

Boswell Engineering is an Equal Opportunity / Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion or creed, sex, sexual orientation, gender identity, national origin, age, citizenship status, marital status, disability, military status, genetic information, or any other legally protected status.

Quality Assurance

Boswell hereby reaffirms its commitment to Quality Assurance/Quality Control. The firm's Quality Management Plan (QMP) policy is to consistently meet our clients' needs in the most cost effective and efficient manner. We accomplish this by providing high management standards, technical expertise and consistent completion of projects within the established time, quality and cost objectives. Boswell achieves this goal by working in a partnering role with our clients, contractors and all project stakeholders. Our corporate QMP is consistent with international standards for quality systems and has been reviewed and approved by the NJDOT. The QMP focuses on project management processes through systematic measurement, comparison with standards, monitoring and associated feedback to eliminate errors that may erode quality. This QMP sets forth the company's commitment to quality management and provides a framework for achieving desired results.

Project Approach

Generally, the proposal includes the design services associated with the rehabilitation of the Mt. Arlington Pump Station, including the following:

- Replacement of the facility electrical components;
- Standby Power Equipment Upgrades;
- Instrumentation and Control Improvements;
- Lighting Upgrades;
- Pumping Station Improvements;
- Heating and Ventilation Upgrades;
- Building Improvements and
- Exterior Improvements.

It is our understanding that the station must remain in service during construction and there will be no disruption to the conveyance of potable water.

Morris County Municipal Utilities Authority

Boswell will provide the following services, which are required to complete the work:

Task 1 – Existing Conditions

As a first step, Boswell will review all available documents pertaining to the existing station. As part of the data collection phase, Boswell will also attend a meeting with the MCMUA to discuss the scope of the project and to ensure all MCMUA standards and requirements are incorporated into the design.

Boswell will perform a field investigation of the site to confirm the information from the available documents. Boswell will also be prepared to perform a boundary and topographic survey, if requested by the MCMUA.

Boswell will incorporate all of the findings into the Basis of Design Report (BODR). The BODR will include the finalized scope of work that are required in the Station, including preliminary construction cost estimate and schedule to complete the work.

Boswell will submit five (5) copies of the draft BODR for review. All comments will be incorporated into the final report. Ten copies of the final BODR will be submitted to the MCMUA.

Task 2 – Engineering Design Services

Boswell will develop a design for the proposed pumping station improvements. The design will include all the improvements outlined in the BODR. The design will be in accordance with the requirements of the MCMUA and New Jersey Department of Environmental Protection (NJDEP). The specifications will be in CSI format, utilizing the MCMUA standard front-end format. A preliminary Master Equipment List will be included in the Bid specifications.

The construction plans will include the following:

- Title Sheet
- Site plans
- Demolition Plans
- Phasing Plans
- Architectural, structural, mechanical, electrical, instrumentation and specialty plans;
- Elevation/Section to scale
- Detail Sheets

Morris County Municipal Utilities Authority

Boswell will submit contract documents, construction cost estimates and project schedule for review at the following milestones:

- 30% Conceptual/Preliminary Design
- 60% Review Set
- 90% Review Set
- 100% Final Set

The submissions will include 10 copies of the specifications, five (5) copies of full size drawings and 10 copies of reduced size (11" x 17") drawings.

Once the plans have been reviewed by the MCMUA, Boswell will incorporate all comments and finalize plans. Final contract documents will be in a form and manner that will meet with all State and Federal requirements and will be in a form suitable for public bidding. Final submission will be 25 sets of the Contract Documents.

During the course of the design, Boswell will attend monthly progress meetings. Boswell is responsible for coordination and compliance with the local construction code and for obtaining JCP&L DR# and preparation of load letter for proposed electrical modifications and improvements pursuant to new service.

Boswell will perform the following services during bidding:

- Assist the MCMUA in publishing bid advertisement in local newspaper;
- Answer questions from prospective Contractors;
- Provide clarifications, as required;
- Prepare Addenda, as needed; and
- Provide Letter of Recommendation to the MCMUA.

THIS DOCUMENT IS PRINTED ON WATERMARKED PAPER, WITH A MULTI-COLORED
BACKGROUND AND MULTIPLE SECURITY FEATURES. PLEASE VERIFY AUTHENTICITY.

**State Of New Jersey
New Jersey Office of the Attorney General
Division of Consumer Affairs**

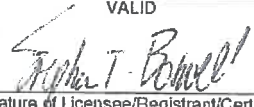
THIS IS TO CERTIFY THAT THE
Board of Prof. Engineers & Land Surveyors

HAS LICENSED

**BOSWELL ENGINEERING, INC.
STEPHEN T BOSWELL
330 Phillips Avenue
South Hackensack NJ 07606**

**FOR PRACTICE IN NEW JERSEY AS A(N): Certificate of Authorization
Engineering & Land Surveying**

07/31/2020 TO 08/31/2022
VALID


Signature of Licensee/Registrant/Certificate Holder

24GA27958000
LICENSE/REGISTRATION/CERTIFICATION #


ACTING DIRECTOR



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Certifies That

BOSWELL ENGINEERING
330 PHILLIPS AVE
South Hackensack, NJ 07606

*Having duly met the requirements of the
Underground Storage Tank Certification Program
N.J.S.A. 58:10A-24.1-8*

Is hereby approved to perform the following services:

CLOSURE
INSTALLATION-ENTIRE UST SYSTEM
SUBSURFACE EVALUATION
TANK TESTING

04/30/2022
EXPIRATION DATE

US00041
CERTIFICATION NUMBER

TO BE CONSPICUOUSLY DISPLAYED AT THE FACILITY

Certificate Number
601455

Registration Date: 08/19/2020
Expiration Date: 08/18/2022



State of New Jersey

Department of Labor and Workforce Development Division of Wage and Hour Compliance

Public Works Contractor Registration Act

Pursuant to N.J.S.A. 34:11-56.48, et seq. of the Public Works Contractor Registration Act, this certificate of registration is issued for purposes of bidding on any contract for public work or for engaging in the performance of any public work to:

Responsible Representative(s):
Stephen Boswell, President

Responsible Representative(s):
Kevin J. Boswell, Vice-President

Boswell Engineering, Inc.
2020

Robert Asaro-Angelo

Robert Asaro-Angelo, Commissioner
Department of Labor and Workforce Development

NON TRANSFERABLE

This certificate may not be transferred or assigned and may be revoked for cause by the Commissioner of Labor and Workforce Development.

Wastewater Division

Wastewater engineering is a core discipline at Boswell. We perform all aspects of studies, planning, design and construction administration for these types of projects and provide our clients with support services. Typical services provided for wastewater systems include:

- General Consulting
- Wastewater Master Plans
- Development Reviews
- Treatment Works Approvals
- Management Assistance
- Infiltration/Inflow Analysis
- Design
- Construction Management
- Operations Assistance
- Process Troubleshooting
- Start-up Services
- Instrumentation Upgrades

As a recognized leader in Municipal Engineering, Boswell has completed studies and designs for municipalities and sewerage authorities throughout New Jersey. Boswell has completed capital improvement projects including wastewater collection, conveyance and treatment facilities. We have developed solutions to difficult wastewater collection and conveyance challenges including design of state-of-the-art techniques.



We have provided design services for new wastewater systems, as well as rehabilitation of existing infrastructure. Our wastewater division has successfully completed projects with the Passaic Valley Sewerage Commission, Bergen County Utilities Authority, Wanaque Valley Regional Sewerage Authority, Jersey City Municipal Utilities Authority and the North Bergen Municipal Utilities Authority.

Boswell's experience also includes years of evaluation and rehabilitation of gravity and pressure systems for a wide range of flow and site conditions. Boswell has experience performing condition assessments for pipe diameters up to 120 inches. Data collected from internal inspections, including televised, sonar or subaqueous inspections, are used to determine the condition of infrastructure as well as, the method of rehabilitation that will be utilized. Rehabilitation designs range from complete replacement to trenchless technologies, utilizing chemical grouting, slip lining, fold and form lining, cured-in-place lining, or pipe bursting. Additionally, we have designed rehabilitation projects for manholes and structures utilizing cementitious, epoxy, and cured-in-place rehabilitation methods.



New Jersey Infrastructure Bank Design/Coordination

Boswell has designed numerous projects utilizing low-interest loans from the New Jersey Infrastructure Bank (NJIB) and has adhered to the State Financing Authority's processes and procedures, which are essential to ensure timely receipt of authorization to bid. Boswell is intimately familiar with the NJIB funding program and has a strong working relationship with review personnel. Boswell's NJIB project experience includes the successful completion of over 20 projects totalling in excess of \$85 Million in construction costs. Boswell performs all tasks associated with NJIB funding from preparation of the Environmental Planning Document to Construction Administration in accordance with all State and Federal regulations.

Previous NJEIT Project Experience	Client	Loan Amount
Wastewater Conveyance System Force Main	North Bergen Municipal Utilities	\$6.9 M
Water Storage Tank Rehabilitation	Borough of Roosevelt, NJ	\$720,000
Rehabilitation of CSO Regulators and Netting	North Bergen Municipal Utilities	\$1.8 M
NJEIT Pipe Replacement Project	North Bergen Municipal Utilities	\$2.1 M
NJEIT Pipe Lining Project	North Bergen Municipal Utilities	\$3.4 M
Bellis Parkway Sanitary Sewer Improvements	Borough of Oradell	\$700,000
Sanitary Sewer Improvements Phase 2	Borough of Oradell	\$1.1 M
Sanitary Sewer Improvements Phase 3	Borough of Oradell	\$1.6 M
Sanitary Sewer Improvements Phase 4	Borough of Oradell	\$1.3 M
NJEIT 2009 Sanitary Sewer Improvements	Borough of New Milford	\$870,000
NJEIT Water System Improvements, Phase 1	East Orange Water Commission	\$5.3 M
NJEIT Water System Improvements, Phase 2	East Orange Water Commission	\$320,000
NJEIT Water System Improvements, Phase 3	East Orange Water Commission	\$380,000
NJEIT Water System Resiliency Improvements	East Orange Water Commission	\$23 M

Wastewater Division

Mobile Combo Cleaning Machine	East Orange Water Commission	\$470,000
Storm Sewer Separation, Phase 1	City of Hackensack	\$3.4 M
Storm Sewer Separation, Phase 2	City of Hackensack	\$6.5 M
Boulevard Pumping Station and Belmont Hill Tank	City of Garfield	\$7.8 M
2008 Facility Improvements	Wanaque Valley Regional Sewerage	\$4.8 M
Capital Improvement Project	Wanaque Valley Regional Sewerage	\$5.3 M
Goffle Hill and Wagaraw Road Sewage Pumping	Borough of Hawthorne	\$660,000
Northeast Interceptor Cleaning and Inspection	Jersey City Municipal Utilities Authority	\$5.3 M
NJEIT Water Main Replacements	Borough of Hawthorne	\$2 M
Proposed Sanitary Sewer Improvements	Borough of Westwood	\$1 M
NJEIT Water System Improvements	Borough of Oakland	\$3.2 M

Asset Management

Boswell understands that efficient system operations are essential to public health and the protection of water quality. Asset management plans allow for better financial decision making and enables efficient record keeping and maintenance of the system. Boswell is familiar with the recently updated NJDEP requirements outlined in the "Asset Management Technical Guidance Document", dated September 2016, which is the latest revision to the "Asset Management Guidance and Best Practices".



Our team has prepared numerous Asset Management Plans which are developed to ensure compliance with NJDEP's five (5) regulatory requirements which consist of:

- **Asset Inventory/Mapping and Condition Assessment**
Geospatial location of assets and evaluation of condition.
- **Level of Service**
How each individual system is required to function?
- **Criticality/Prioritization Assessment**
Identification of key assets and ranking of necessary improvements.

- **Life Cycle Costing**
Complete asset cost from initial start-up to replacement.
- **Long-term Funding Strategy**
Capital budgeting and strategic planning.

The byproduct of a comprehensive asset management plan is an interactive resource that can be immediately implemented into daily operations to increase efficiency, resiliency and reliability.

Team Members

Key personnel within the Water/Wastewater Division selected to perform the requisite services include: Giselle Diaz, P.E. (Division Lead), Edward Stephens, P.E. (Project Manager), Alvaro Gonzalez, Ph.D., P.E. (Project Engineer), Rebecca Pianese (Design Engineer) and Kenneth Post, P.E. (Electrical Lead).

Site Remediation & Air Monitoring

Boswell's contingent of licensed professionals possesses the requisite credentials and technical expertise to provide professional services for the remediation of environmental contamination in the capacity of Licensed Site Remediation Professionals (LSRP). Boswell's president, Dr. Stephen Boswell, Ph.D., P.E., SECB together with senior level environmental staff, Frank J. Rossi, Chris E. Arntz, P.E. and Thomas J. O'Neill were among the first group to be licensed by the NJDEP as LSRPs. Since the inception of the SRRA and ARRCs, Boswell's LSRPs have kept abreast of the myriad of environmental regulation changes by attending numerous continuing education seminars offered by the NJDEP. This formal training of the industry's latest technologies has allowed us to be on the forefront of the learning curve and seamlessly transition our clients into this new regulatory paradigm.



Our Licensed Site Remediation Professional (LSRPs) are familiar with the NJDEP Technical Requirements for Site Remediation and Water Quality regulations as they pertain to soil and groundwater remediation, construction dewatering, and solid and hazardous waste disposal. The Boswell team has designed engineering plans and specifications for numerous projects involving subsurface utilities including storm and sanitary sewers lines, underground storage tank (UST) removals and installations, and remediation of contaminated soil. This includes the design of dewatering systems, regulatory compliance permitting, hazardous and non-hazardous waste classification and disposal, as well as the collection, containment, removal and treatment of groundwater and soil.

Boswell's Environmental Division, provides a wide spectrum of environmental services. This division is comprised of a team of versatile specialists with expertise in all aspects of the investigation and remediation of environmental contamination. Services offered include, but are not limited to the following:

- Preliminary Assessments (PA);
- ASTM Phase I & Phase II Reports;
- Asbestos/Lead Based Paint Surveys;
- Site/Remedial Investigations (SI/RI) for soil and groundwater;
- Remedial Action Workplans (RAW);
- Remedial Design/Oversight;

- Receptor Evaluations (RE);
- Site Remediation;
- Air Dispersion Modeling
- Deed Notice/Classification Exception Area (CEA) Preparation;
- Environmental Impact Statements/Assessments/Audits;
- Geophysical Surveys;
- Permitting & Regulatory Compliance;
- Access/Right of Entry Agreements; and,
- Vapor Intrusion (VI) Surveys.

Regulatory Permitting & Environmental Compliance

Boswell's permitting specialists have over 35 years of experience working with Federal, State, County and local regulatory agencies. Our team has intimate knowledge of the regulations and requirements associated with the NJDEP (Division of Land Use Regulation, Water Quality, Solid Waste, Air Quality, Compliance & Enforcement, Engineering, etc), Army Corps of Engineers, Environmental Protection Agency (EPA), FEMA, Coast Guard, New Jersey State Historic Preservation Office (SHPO), Green Acres Program and local soil conservation districts. Boswell also provides environmental compliance services associated with NJPDES, Air, NJDEP Discharge Prevention, Containment and Countermeasure (DPCC), and EPA Spill Prevention, Control, and Countermeasures (SPCC) permits.



Environmental Division

Our intimate knowledge of the region and longstanding relationships with local, State and Federal review agencies has allowed us to anticipate the complexity of each project and adopt best practices to eliminate costly design changes and delays in the construction schedule. Our permitting specialists have a proven record of securing approvals throughout the State and were instrumental in acquiring emergency permits for numerous public sector clients following Hurricane Irene and Superstorm Sandy. By fostering a collaborative partnership with regulatory stakeholders, we have been successful at achieving common goals as demonstrated through projects such as the NBMUA 30" Force Main, Jersey City Northeast Interceptor Inspection and City of Hackensack Phase 1 Sewer Separation.



Our past experience has emphasized the value of being proactive during the regulatory permitting process and involving each affected agency during the planning and design process. The EPA regards improvements to the nation's critical infrastructure as a high priority to ensure the protection of clean water and the ongoing viability of previously developed areas. This message has resonated at the State level and continues to earn a growing level of support as evidenced through FEMA, the NJIB and NJ Office of Smart Growth's Development and Redevelopment Plan.

Team Members

Key personnel within the Environmental Division selected to perform the requisite services include: Frank Rossi, LSRP (Division Lead), Chris Arntz, LSRP (Project Manager), and Thomas O'Neill LSRP (Senior Environmental Specialist).

Structural Division

Boswell, for more than nine decades, has provided professional structural engineering services to public sector clients at the State, County and local and levels of government. These services include planning, design and construction engineering related to capital improvements for roads, bridges, waterfront facilities, drainage and storm water management systems, water supply and distribution, combined sewer separation (CSO) and parks and recreational facilities. Boswell's major project design experience in this field is evident in complete constructible design concepts, reliable cost estimates and advance design technology. Our highly experienced staff is skilled in providing hundreds of miles of newly constructed, redesigned or relocated roads, as well as state and interstate highways and bridges. Among the more than 500 new bridges designed by Boswell are expressway interchanges, major water crossings, second level roadways and viaducts, grade separation and pedestrian bridges. Boswell's full spectrum of structural engineering projects range from the design of waterfront piers and parking garages to the installation of electrical duct banks and utility tunnels.



Additionally, our Structural Division provides feasibility studies, including evaluation of alternatives, through preparation of plans, specifications and construction estimate, as well as assisting its clients in technical and administrative areas such as capital budgeting, pavement management, site remediation, bid procedures, contract administration, data management and infrastructure maintenance.

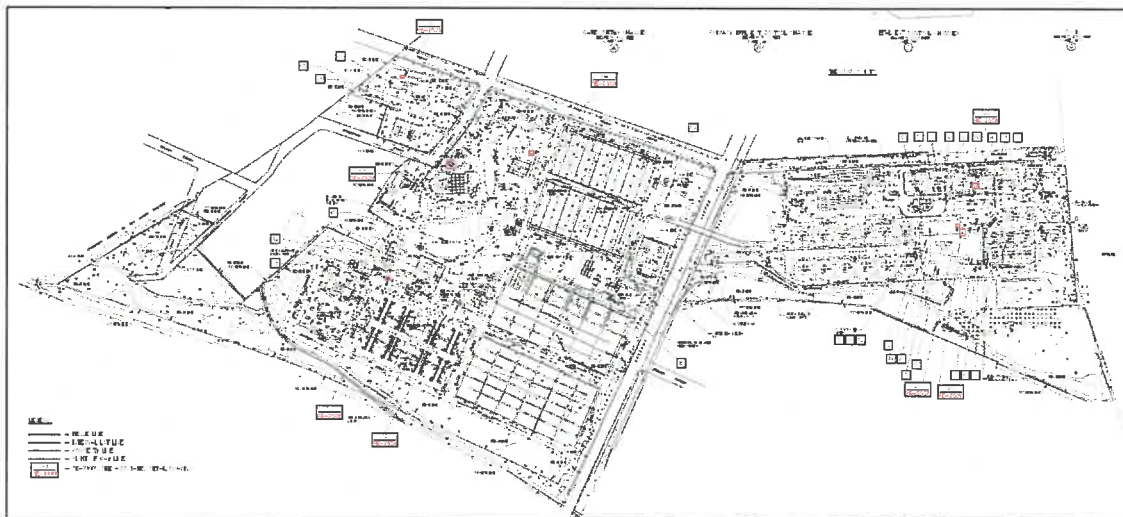
Team Members

Key personnel within the Structural Division selected to perform the requisite structural services include: John Valentin, P.E. (Division Lead), Tom O'Fallon, P.E. (Senior Engineer) and Gjorgi Kukutanov, P.E. (Design Engineer).

Survey Division

Boswell has kept pace with the rapidly changing technological advancements in the industry in order to provide our clients with state-of-the-art surveying services and has skillfully performed countless surveys over the years. Boswell continues in this tradition, performing hundreds of surveys each year utilizing advanced global navigation satellite system (GNSS) equipment and real-time kinematic (RTK) positioning, electronic total stations, and powerful laptop computers.

Boswell's survey services include complex boundary and topographic surveys, right-of-way surveying and mapping, as-builts, Green Acres surveys (both State and Local Unit acquisitions), Blue Acres surveys, flood elevation certifications, ALTA/NSPS Land Title Surveys, GNSS surveys, wetlands delineation surveys, route surveys, title surveys, utility surveying, construction stakeout (layout), monitoring well and hydrographic charting surveys. Boswell's experienced staff is available to respond immediately to the project needs and provide a timely turnaround of completed work. In addition, our standard quality control procedures will be followed in order to assure the highest standards are achieved and maintained throughout the performance of each project. Boswell has the capabilities, equipment, staff and experience to perform every phase of required survey services.

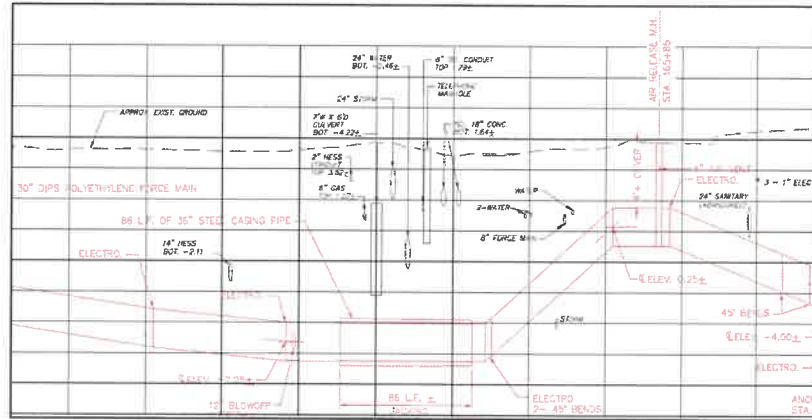


Boswell has completed projects for the Passaic Valley Sewerage Commission, Jersey City MUA, North Bergen MUA, North Hudson Sewerage Authority, Wanaque Valley Regional Sewerage Authority, PSE&G, FirstEnergy (Jersey Central Power & Light), North Jersey District Water Supply Commission, East Orange Water Commission and numerous other local utility authorities.

Boswell's survey crews are equipped with GNSS/RTK equipment (1 Leica GS1x VIVA GNSS System and 2 Leica System 1200 Receivers), total stations (2 Leica TS 11, 3 Leica TCR 1103,). Boswell's GS1 VIVA GNSS System and one of the System 1200 setups utilizes Leica Geosystems' high accuracy, high availability SmartNet North America RTK Network. The other System 1200 setup employs CDMA technology, with a base and rover configuration, resulting in a range of nearly 35 km. The field instruments utilized by our field personnel afford the luxury of direct interface with desktop computers in our office. The field instruments are also loaded with coordinate geometry programs to aid the field crews during radial stakeout. This enables any changes required by field conditions to be

Survey Division

handled at the site without loss of efficiency. All data collected by GNSS/RTK satellite surveying can be seamlessly integrated into our mapping via exporting and importing a standard ASCII file. Our collected GNSS/RTK data is processed utilizing Leica Infinity V3.3.2 software. Boswell's in-house GNSS group is experienced in the integration of data collected by GNSS/RTK satellite surveying into its mapping.



Boswell's Director of Surveying, Frank M. Krupinski, P.L.S., has over 37 years of experience in the field of surveying and has been a licensed land surveyor in the State of New Jersey for 28 years. He has been employed at Boswell since 1998 and has been the head of the survey department since 2007. Mr. Krupinski has been involved in numerous Green Acres surveys and Blue Acres surveys over the course of his career and had a major role in each of the representative projects listed in the following section.

Geographic Information Systems

Boswell currently provides sanitary sewer consulting services for over 40 municipalities/utility authorities throughout the State. Our diverse range of experience working on conditions assessments of similar size and scope for regional/municipal infrastructure allows us to understand the importance of developing user-friendly asset management programs which can be refined as data is validated and systems are upgraded over time.

Boswell utilizes Geo-7X Series Hand Held GPS Units with GLONASS receiver and dual frequency GNSS antenna with floodlight technology. Coordinate quality (CQ) of satellite data is closely monitored in the field to ensure accuracy and is adequate for most field applications. All field collected geospatial

data is uploaded using Trimble Navigation Terrasync Professional and geo-referenced into our ArcGIS database using Environmental Systems Research Institute (ESRI) ArcView 10 software. Field data is linked with relevant asset information and integrated into a digital database providing the Geo-databases created as part of this process can be imported into a number of digital mapping software packages (ArcGIS, HGL, AutoCAD, Microstation, etc.).

BOSWELLENGINEERING



BOSWELLENGINEERING

NJEIT Capital Improvement Project

Wanaque Valley Regional Sewerage Authority



Professional Services Provided

Design, Regulatory Permitting,
NJEIT Coordination, Construction
Administration

Reference

John Eskilson
Acting Executive Director
101 Warren Hagstrom Blvd
Wanaque, NJ
973-831-6658

The project include design of the following capital improvements at WVRSA facilities:

- Installation of 130 kW gas generator at the Haskell Pumping Station and a 1000 kW diesel generator at the wastewater treatment facility, to replace the existing diesel generators that were installed over 20 years ago;
- Installation of mechanical aerators and drives with increased aeration capacity for the existing oxidation ditch process system;
- Upgrade of three (3) influent pumps and drives to 40 HP;
- Installation of a rotary drum sludge thickener system;
- Installation of non-potable water pumps, dilution water pumps and drives;
- Mixers on sludge holding tanks; and
- Upgrade of discharge channel ultraviolet disinfection system.

Boswell prepared the planning documents and all associated loan paperwork in order to receive funding from the New Jersey Environmental Infrastructure Trust (NJEIT). Permitting acquired for this project included a Treatment Works Approval permit, Air permit and Highlands Exemption. Services also included construction inspection and administration.

Wastewater Conveyance System Force Main

North Bergen Municipal Utilities Authority



Professional Services Provided

Survey, Design, Regulatory
Permitting, Construction
Administration

Reference

Frank Pestana
Executive Director
6200 Tonnelle Avenue
North Bergen, NJ
201-422-0100

The design involved the installation of an underground force main and the retrofitting of the Central Treatment Plant. This design allows approximately 70 percent of North Bergen's and a portion of Union City's wastewater to be pumped into Jersey City's 54" Northwest Interceptor which leads to the Jersey City's West Side Pumping Station and eventually PVSC treatment plant in Newark.

The project involved the design of a 30" force main located parallel to the New York Susquehanna & Western Railroad (N.Y.S. & W.R.R.) extending approximately 15,250 L.F. from North Bergen to Jersey City. Boswell's environmental division was responsible for the delineation of all wetlands and the acquisition of local, State and Federal permits. The proposed project required an ACOE Individual Permit, NJMC Zoning Certificate, NJDEP Waterfront Development and negotiations with the ACOE Mitigation Unit. The key area of concern involved an existing wetland system which was previously selected for mitigation as a wetland enhancement area by another firm. Boswell worked closely with the ACOE to ensure this area would remain a viable mitigation site following installation of the force main.

Capital Improvement Projects

Wanaque Valley Regional Sewerage Authority



Professional Services Provided

Design, Regulatory Permitting,
Construction Administration

Reference

John Eskilson
Acting Executive Director
101 Warren Hagstrom Blvd
Wanaque, NJ
973-831-6658

Boswell prepared the planning and design documents for the various improvements to the existing treatment facility, in an effort to alleviate odor issues, improve worker safety and enhance overall security. The project entailed the septage receiving area, installation of rotary brush aerators, replacement of the ultraviolet disinfection units and various Supervisory Control and Data Acquisition (SCADA) and security upgrades. The project was funded by the American Recovery and Reinvestment Act (ARRA) and New Jersey Environmental Infrastructure Trust (NJEIT).

The project also involved the design and emergency permit preparation for the replacement of approximately 420 linear feet of an existing sanitary force main at the Haskell Pumping Station. **Boswell** was contacted immediately once the Authority was notified of the ruptured force main and was required to coordinate with the NJDEP Division of Land Use Regulation and secure the necessary permits to resolve the issue in a very limited time frame. The permits acquired included a Treatment Works Approval (TWA), an Individual Flood Hazard Area Permit and a Freshwater Wetlands General Permit No. 2.

Jacobus Avenue Water Station Improvements

Township of Wayne, NJ



Professional Services Provided

Design, Construction
Administration

Reference

Eric Fedor, CPWM
Assistant Director of Public Works
201 Dey Rd
Wayne, NJ 07470
973-694-5090

The project include design of the following improvements at the Jacobus Avenue Water Station:

- Installation of three (3) new 200 HP pumps, motors, variable frequency drives, and all new piping, including meters, valves and appurtenances;
- Installation of 450 kW diesel generator and removal of existing generator;
- Electrical upgrades in the station including the installation of a new electrical switchgear, reconnection of existing transformer, the installation of new electric distribution panels and pump control panels, installation of a new fire alarm system, and a new automatic transfer switch;
- Various building improvements such as pressure washing and painting the station, new doors, windows, chain link fence and new cupolas on the roof.

Services also included construction inspection and administration.

Lower Main Pumping Station Improvements

Borough of Fort Lee



Boswell conducted a study to evaluate the capacity of the existing 16 inch force main, which conveys flow from the Palisade Terrace Pumping Station to the Bergen County Utilities Authority (BCUA) interceptor. Two (2) developments, The Tucker Development Corporation and The Towers at Fort Lee, requested to tie into the municipal sanitary system. The findings of the study indicated an upgrade to the Lower Main Pumping Station was necessary, including the associated force main due to the lack of capacity at the Palisade Terrace Pumping Station.

Professional services included the design of the rehabilitation of the Lower Main Pumping Station including new pumps, piping, comminutor chamber and Supervisory Control and Data Acquisition (SCADA) system.

The design also includes the installation of 4,800 linear feet of 10" force main to the existing Bergen County Utilities Authority Interceptor.

Permitting acquired for this project included preparation of a Treatment Works Approval permit. Services also included construction inspection and administration.

Professional Services Provided

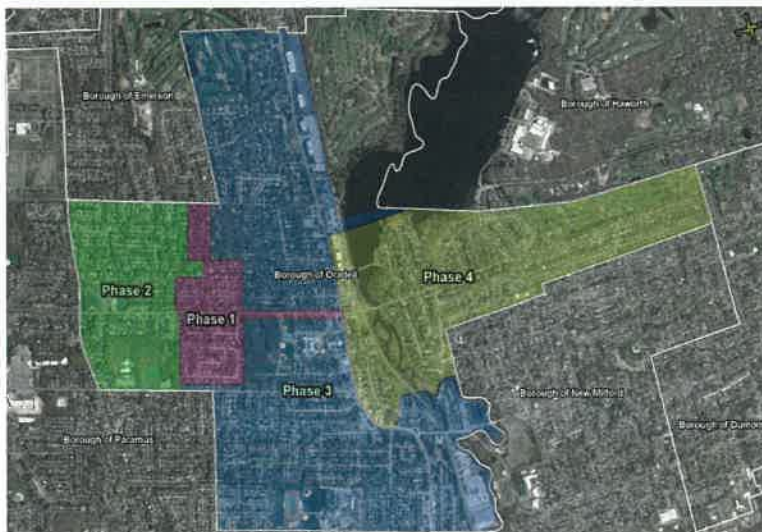
Survey, Design, Regulatory Permitting, NJEIT Coordination, Construction Administration

Reference

Alfred R. Restaino
Borough Administrator
309 Main Street, Room 202
Fort Lee, NJ 07024
201-592-3500 x1500

NJEIT Sanitary Sewer Improvements Phases 1-4

Borough of Oradell



Services included the design for a multi-phased sewer improvement project, including televised inspection and analysis of approximately 196,500 linear feet of pipe. Boswell prepared the contract documents for the replacement of 5,400 linear feet of pipe and lining of approximately 22,000 linear feet of existing sewer. Ground penetrating radar (GPR) was utilized to determine the depth and location of utilities during design to minimize utility conflicts during construction.

Portions of the pipe alignment was in unsuitable soil. Boswell included provisions in the design for testing and disposal of soil in accordance with State regulations. Boswell was responsible for coordination with the utility companies both during design and construction administration.

The project was funded by the New Jersey Environmental Infrastructure Trust (NJEIT). Boswell was responsible for preparation of the planning document, loan application and administration of the loan throughout the construction phase. As a requirement of the NJEIT Loan, Boswell was responsible for the preparation of an Asset Management Plan, including asset inventory, life of service, prioritization assessment, life cycle costing and funding.

Professional Services Provided

Design, Regulatory Permitting, Construction Administration

Reference

Laura J. Graham
Borough Administrator
355 Kinderkamack Road
Oradell, New Jersey
201-261-8200 ext. 246

YEARS OF EXPERIENCE: 39 Years

EDUCATION:

B.S. Civil Engineering, Colorado State University

REGISTRATION:

Professional Engineer - Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia

Professional Planner - New Jersey
Certified Municipal Engineer - New Jersey
OSHA 10-Hour Construction Course
Confined Space Entry Training

EXPERIENCE:

Mr. Boswell has over 39-years of experience in the civil engineering field. Mr. Boswell's civil and environmental expertise includes an extensive working knowledge of site development, roadway design, water and wastewater systems, as well as treatment and pumping facilities. Mr. Boswell has served as the project leader on an extensive number of site developments in the private sector serving residential, commercial and industrial real estate. His projects involve environmental permitting, as well as testimony before numerous Municipal, County, State and Federal agencies.

Mr. Boswell has also served an extensive number of public sector clients. These clients include various municipalities where he continues to serve in the capacity of Municipal Engineer. His experience with Municipal, County, and State agencies has permitted him to effectively secure, design, administer and complete many projects in involving complex funding requirements. He has extensive experience in public financing and has coordinated numerous applications for public sector projects which have received grants and loans totaling in excess of \$500M. Mr. Boswell currently serves as the Municipal Engineer for the City of Garfield, the Borough of Moonachie and the Borough of Oakland. Additionally, he serves as the Municipal Engineering Representative for the Township of Mahwah and the Boroughs of Franklin Lakes and Cliffside Park. He has also served as the project leader for numerous projects in the Counties of Bergen and Passaic over the past several decades.

Mr. Boswell also has an extensive background in the design of recreational facilities. His experience includes the design of natural and synthetic turf fields, lighting systems, bleachers, tracks and passive open space utilization. Mr. Boswell's recreation projects have won Project of the Year awards from the New Jersey Society of Municipal Engineers in 2002 and 2006. He has also won additional awards for projects completed in 2004 and 2012.

Mr. Boswell has also been recognized as an expert in the field of Civil Engineering by the New Jersey Superior Court and has served as an arbitrator in construction claims litigation in Bergen County.

KEVIN J. BOSWELL, P.E., P.P.

Mr. Boswell serves as a consultant to both water supply and wastewater agencies. His representative projects in the field of water/wastewater infrastructure include the following:

- ***Passaic Valley Sewerage Commission, Plant/Interceptor Asset Inventory.*** Preparation of a survey grade GIS database of the Passaic Valley Sewerage Commission's plant and ancillary facilities including all assets along an existing 22-mile main interceptor and 15-miles of branch interceptor. The asset inventory included the location and GIS data creation of over 580 manholes, 46 active CSO regulator chambers, 20 deactivated CSO regulator chambers, 5.5-miles of outfall line w/ three (3) shafts and two (2) pump stations.
- ***Lower Main Pumping Station, Fort Lee, NJ.*** Design of the rehabilitation of the Lower Main Pumping Station including new pumps, piping, comminutor chamber and SCADA system. The design also includes the installation of 4,800 LF of 10" force main into BCUA Interceptor.
- ***Bergen County Utilities Authority RDI/I Reduction Program.*** Responsible for Rain Derived Inflow and Infiltration (RDI/I) reduction studies for the Township of South Hackensack and the Borough of Haworth. Coordinate home surveys to determine extent and scope of work required to reduce RDI/I and eliminate illicit sump pump connections.
- ***East Orange Water Commission, Solar Array.*** This project involved the installation of an 18-acre, 5.5 megawatt photovoltaic power system to offset electrical consumption at the White Oak Ridge Pump Station. Permits were required and secured from the NJDEP, Green Acres, Millburn Planning Board and Essex County Planning Board.
- ***NJEIT 2009 Sanitary Sewer System Improvements, East Orange Water Commission.*** The project entailed the replacement of 5,560 LF of sanitary sewer pipe ranging from 8" to 36" and over 16,000 LF of cleaning and televised inspection of pipe. The construction for this project was \$2 Million and was funded by the New Jersey Environmental Infrastructure Trust (NJEIT).
- ***Passaic Valley Sewerage Commission, Constructability Review.*** Performed a constructability review of Contract A-315 for the Rehabilitation of the Main Intercepting Sewer and Various Manholes along 15 miles of pipeline consisting of a detailed evaluation of the specifications and contract drawings. The bid documents were reviewed for traffic protection, bypass pumping, safety controls, pipe lining methodology and manhole rehabilitation design.
- ***Northwest Bergen County Utilities Authority Sewer Feasibility Study, Wyckoff, NJ.*** Evaluated the feasibility of a wastewater collection system for a portion of the Township known as the Knolls Section, which utilized individual septic systems. The study included preliminary design, flow calculations and construction cost estimates.
- ***Combined Sewer Overflow Characterization and Workplan, Fort Lee, NJ.*** Developed a monitoring program to quantify dry and wet weather wastewater flows and determine pollutant concentrations at each CSO drainage basin. This information was utilized in the modeling process to calibrate and verify hydraulic and hydrologic models using InfoWorks. The project was the first phase of the baseline monitoring study to develop a system to assess storage, pollutant concentrations, loading during a storm event and hydraulic deficiency in the collection system. The project was essential in evaluating the pollutant loading to receiving waters.

KEVIN J. BOSWELL, P.E., P.P.

- ***Passaic Valley Sewerage Commission, Zimpro and Septage Liquid Waste Receiving Facilities Modifications.*** This project consisted of improvements to existing sludge thickening tank (including chain hoists and heat trace system), improvements to septage receiving areas (including stainless steel pipe installation), drainage improvements to roadway (including installation of trench drainage, 12" ductile iron pipe, catch basins, doghouse manholes and roadway milling and paving), and installation of yard hydrants (including hot water heating system).
- ***BCUA Municipal Collection System and Maintenance Study.*** Completed a detailed inventory of the municipal collection systems and maintenance study for Bergen County Utilities Authority within the Boroughs of Little Ferry, Dumont, Cliffside Park and the City of Hackensack. The project required a comprehensive GPS field survey of each collection system, conversion of raw preprocessed data into Arc GIS format, preparation of new sanitary/stormwater maps with field verified revisions and the creation of various geodatabases and their associated metadata in Federal Geographic Data Committee (FGDC) format. The project also included an analysis of the sanitary/stormwater systems to address existing inefficiencies, inflow and infiltration (I/I) issues, illicit connections and necessary emergency repairs.
- ***Passaic Valley Sewerage Commission, Operations and Maintenance Study, Northern NJ.*** Completed a comprehensive inventory of the municipal collection systems and maintenance study for Passaic Valley Sewerage Commissioners in the Cities of Garfield, East Orange, Passaic and the Town of Harrison. The project included extensive field surveying, post-processing raw data, developing a system-level GIS database and categorizing deficiencies identified during inspections. This contract also included oversight during the cleaning and televising of the Town of Harrison's sanitary collection system.
- ***Garfield Water Works, Garfield, NJ.*** Design of the replacement of three (3) existing water storage tanks due to deterioration of the existing tank structures and construction of a new 1.2 million gallon water storage tank. Design included preparation of engineering studies, permit applications and design documents for a new booster pumping station and reservoir tank to replace the existing facilities, which were at the end of their useful life. Project also included installation and implementation of a system-wide SCADA, which eliminates 24-hour manned controls. This project was funded by the NJEIT.

AFFILIATIONS:

American Society of Civil Engineers
National Society of Professional Engineers
New Jersey Society of Municipal Engineers
New Jersey Society of Professional Engineers - Bergen County Chapter

Giselle Diaz, P.E.
Department Head – Environmental Engineering



YEARS OF EXPERIENCE: 24 Years

EDUCATION:

B.E. Environmental Engineering, Stevens Institute of Technology, 1996
M.S. Construction Management, Stevens Institute of Technology, 2001

REGISTRATION:

Professional Engineer – New Jersey
Professional Engineer – New York
Certified Municipal Engineer – New Jersey
Confined Space Entry Training
OSHA 10-Hour Construction Course
NASSCO Certified PACP/LACP/MACP, U-0917-07009256

EXPERIENCE:

Mrs. Diaz has 24 years of experience in the field of civil, environmental and municipal engineering. Mrs. Diaz's experience includes preparation of studies and engineering reports and design of various water and wastewater improvement projects. She has also participated in the preparation of federal and state permit applications, as well as review of shop drawing submissions. Mrs. Diaz has worked on numerous New Jersey Environmental Infrastructure Trust (NJEIT) funded projects and is extremely knowledgeable with the process.

Mrs. Diaz has extensive experience with varied types of municipal projects. These projects include the installation and rehabilitation of sanitary sewer/combined sewer systems, water, storm and wastewater pumping stations. She has designed projects for numerous agencies and has a broad range of knowledge and familiarization with various standards and criteria. She is also proficient in CADD and WaterGEMS, a water distribution modeling software.

Mrs. Diaz's experience further includes serving as the firm's engineer representative to local Planning and Zoning Boards and Boards of Adjustment providing her technical expertise in the review of applications submitted to the respective land use boards.

Representative environmental projects include:

- **Capital Improvement Project, Wanaque Valley Regional Sewerage Authority.** The project included design for the replacement of mechanical aerators, influent sewage pump, rotary drum sludge thickener system and UV system. The project was funded by the New Jersey Environmental Infrastructure Trust.
- **Rehabilitation of Water Storage Tank, Hawthorne, NJ.** The project included the structural rehabilitation of the 1 million-gallon Goffle Hill Water Storage Tank, including a new coating system.
- **Sanitary Sewer Improvements, Phases 1-4, Oradell, NJ.** Services included the design for a multi-phased sewer improvement project, including televised inspection and analysis of approximately 196,500 linear feet of pipe. Boswell prepared the contract documents for the replacement of 5,400 linear feet of pipe and lining of approximately 22,000 linear feet of existing sewer. The project was funded by the NJEIT.
- **Lower Main Pumping Station, Fort Lee, NJ.** Design of the rehabilitation of the Lower Main Pumping Station including new pumps, piping, comminutor chamber and SCADA system. The design also includes the installation of 4,800 LF of 10" force main into BCUA Interceptor.
- **Rehabilitation of Water Storage Tank, Roosevelt, NJ.** The project included the design and preparation of planning documents for the rehabilitation of the existing water storage tank;

GISELLE DIAZ, P.E.

including concrete structure, removal and recoating of the interior and exterior of the tank, temporary water supply, and installation of cathodic protection. The Borough of Roosevelt is a small system and the project was funded by the New Jersey Water Association and the Drinking Water State Revolving Fund.

- ***Infrastructure Improvements, North Bergen, NJ.*** Preparation of design documents for the replacement of 8,000 LF of combined sewer, lining of approximately 18,000 LF of combined sewer and the rehabilitation of the regulators. The project was funded by the American Recovery and Reinvestment Act (ARRA) and NJEIT.
- ***Bergen County Utilities Authority RDI/I Reduction Program.*** Responsible for Rain Derived Inflow and Infiltration (RDI/I) reduction studies for the Township of South Hackensack and the Borough of Haworth. Coordinate home surveys to determine extent and scope of work required to reduce RDI/I and eliminate illicit sump pump connections.
- ***Sanitary Sewer System Improvements, East Orange Water Commission.*** The project entailed the replacement of 5,560 LF of sanitary sewer pipe ranging from 8" to 36" and over 16,000 LF of cleaning and televised inspection of pipe. The construction for this project was \$2 Million and was funded by the NJEIT.
- ***Garfield Water Works, Garfield, NJ.*** Design of the replacement of three (3) existing water storage tanks due to deterioration of the existing tank structures and construction of a new 1.2-million-gallon water storage tank. Design included preparation of engineering study, permit application and design documents for a new booster pumping station and reservoir tank to replace the existing facilities, which were at the end of its useful life.
- ***Northeast Interceptor Cleaning and Inspection, Jersey City, NJ.*** Preparation of the planning and design documents for the cleaning and inspection of approximately 19,000 LF of the Northeast Interceptor in order to remove debris and identify need for repairs within existing pipes. Pipes varied in size from 18" to 84" in diameter. The project also entailed the GIS mapping and GPS location of all manholes and chambers within the project limits.
- ***Storm Sewer Separation Phase 1, Hackensack, NJ.*** The services performed included the preparation of the planning and design documents for the first phase of combined sewer separation in a multiphase project. As part of the sewer separation project, the City installed a new dual 42" outfall to convey stormwater runoff to the Hackensack River. Boswell was responsible for obtaining Army Corps of Engineers Nationwide Permit No. 7, NJDEP Individual Waterfront Development Permit and BCSCD Authorization. During the construction phase, Boswell was responsible for coordination with all the utility companies. The project was funded by the NJEIT.
- ***Thornton Road Water Storage Tank, Oakland, NJ.*** Design of a 0.5 mg water storage tank, including transmission main and valve vault and upgrade of control and instruction for the Borough.
- ***Borough of Englewood Cliffs, NJ.*** Review and analysis of 22 miles of sanitary sewer videotapes to determine areas of rehabilitation.

AFFILIATIONS:

American Water Works Association
New Jersey Water Environment Association
Water Environment Federation

Edward Stephens, P.E.
Senior Environmental Engineer



YEARS OF EXPERIENCE: 56 Years

EDUCATION:

B.S. Civil Engineering, Newark College of Engineering - 1963
M.S. Civil Engineering, Newark College of Engineering - 1973

REGISTRATION:

Professional Engineer - New Jersey, New York

EXPERIENCE:

Mr. Stephens has over 56-years of comprehensive engineering related to civil and environmental projects. This in-depth experience as a Project Manager on public works projects includes the design of water and wastewater treatment plants, pumping stations, streets and roadways, construction administration and interfacing with regulatory agencies.

As a senior environmental engineer, he is responsible for studies, reports, planning and design contract documents for new and rehabilitated water and wastewater conveyance and treatment facilities.

Relevant experience includes:

- *Design for upgrades to the Lower Preakness Sewerage Pump Station, Wayne NJ.*
- *Design for relocation of a 3000 ft. section of the North Bergen Municipal Utilities Authority (NBMUA). 30-inch HDPE force main, to remove it from underneath a proposed New Jersey State highway.*
- *Design for upgrades to two sewerage pumping stations in Mahwah, NJ.*
- *Design for an additional pump at the NBMUA central pump station.*
- *Design for additional septage receiving equipment at the Wanaque Valley Regional Sewerage Authority.*
- *Design for upgrades to the Wanaque Valley Regional Sewerage Authority Wastewater Treatment Plant. Project included new pumps, aerators, UV system sludge mixing and thickening and emergency generators.*
- *Design for a Sanitary Sewer Siphon, Bergen County, NJ.*
- *Design for Stormwater Pumping Station, Moonachie, NJ.*
- *Investigations and designs for wastewater conveyance and pumping facilities in many New Jersey communities. Includes the following: Elmwood Park, Fort Lee, Hawthorne, North Haledon, Moonachie, Bogota, New Milford, Westwood, South Hackensack, Cliffside Park, Oakland, Mahwah, Clifton and Paramus.*
- *Designed new Zimpro and Septage Receiving facilities (truck unloading) for the Passaic Valley Sewerage Commission (PVSC) Wastewater Treatment Plant, Newark, NJ. Consisted of nine (9) septage and three (3) zimpro receiving stations.*

EDWARD STEPHENS, P.E.

- ***Designed the rehabilitation of the Influent Pump Station at the Central Wastewater Treatment Plant, North Bergen, NJ.*** Objective: to divert flow into the Jersey City sewer system via a thirty (30") inch HDPE force main. New facilities included comminutor, pumps and variable frequency drives, flow meter, controls and HVAC upgrade.
- ***Design for rehabilitation at the 8th Street Pumping Station, North Bergen, NJ.*** Included new pumps, comminutors, controls and HVAC upgrade. This project also diverted the flow into the Jersey City Sewer System via an eight (8") inch HDPE force main, which discharged into the Central Pumping Station force main.
- ***Initiated design work for the Rehabilitation of the Central Wastewater Treatment Plant (Rotating Biological Contractors), North Bergen, NJ.*** (8 mgd average flow) It was later decided to abandon the Central Wastewater Treatment Plant and transfer the flow into the PVSC Treatment Plant in Newark, NJ, via the Jersey City Sewer System.
- ***Designed a new pumping station and force main, Elmwood Park, NJ.***
- ***Designed for rehabilitation of pump stations, Hawthorne, New Milford & Moonachie, NJ.***
- ***Completed design work on pumping stations and force mains, Dunellen, NJ.***
- ***Preliminary planning to transfer sewage flows from Ridgewood, NJ into the PVSC system.*** Included a 13 mgd pumping station, 5,000 feet of 16" and 20" force mains, 11,000 feet of 30' gravity sewers and a river siphon.
- ***Road construction projects, Wayne & Elizabeth, NJ.***
- ***Water system survey and mapping program, Harrison, NJ.*** Developed indexed intersection maps of the water system. Computerized maps were created after field data was collected.
- ***Designed secondary wastewater treatment facilities, Edgewater, NJ.*** Included the rehabilitation of five (5) pump stations, installation of rotating biological contactors, new chlorine, sludge dewatering facilities and primary treatment units using EPA approved innovative RBC technology.
- ***Designed the maintenance facilities and administrative offices for Bergen County Utilities Authority (BCUA), Little Ferry, NJ.*** Included machine, welding, electrical, vehicle repair, painting and equipment cleaning shops, vehicle wash/parking facilities and a new administration building.
- ***Odor control facilities at Sussex County Municipal Utilities Authority (MUA) Wastewater Treatment Plant, NJ.*** Designed odor control by chemical mist absorption of odor-causing constituents in air exhausted from composting and septage/sludge storage facilities, eliminating community odor complaints.
- ***Planned sewerage system extensions, Carlstadt, NJ.***
- ***Design for the intermediate pumping station and site drainage for upgrading of the 20-mgd Wastewater Treatment Plant, Trenton, NJ.***
- ***Co-designed expansions of the BCUA wastewater treatment plant, Little Ferry, NJ.*** Expansions of the plant were 109 mgd, including plant hydraulics, new aeration, disinfection, and sludge treatment facilities.
- ***Designed overhead crane, heating and ventilation systems for expansion of the North Jersey District Water Supply Commission Treatment plant, Wanaque, NJ.*** (100 to 140 mgd).

Alvaro Gonzalez, Ph.D., P.E.
Project Engineer –Environmental Engineering



YEARS OF EXPERIENCE: 20 Years

EDUCATION:

B.S. Civil Engineering, University of Cartagena (2000)
M.S. Civil Engineering, University of Los Andes (2002)
M.Ph. Civil Engineering, The City College of New York (2011)
Ph.D. Civil Engineering, The City College of New York (2013)

REGISTRATION:

Professional Engineer - New York
OSHA 10-Hour Construction Course

EXPERIENCE:

Dr. Gonzalez has 20 years of experience in the field of hydrology and hydraulics (H&H), water and wastewater treatment and conveyance. His project involvement has included: evaluation of regional water resources; design of pipelines and conveyance systems; channels and culverts; hydrologic and hydraulic analyses of streams and open channels; flood studies; stream restoration; dam breach analyses; design of urban drainage systems, storm water management and the study and design of pond improvements. Over the course of his career, he has authored and coauthored eight peer-reviewed papers in different scientific journals on topics that range from hydrology to wastewater treatment.

Dr. Gonzalez has also worked as an Adjunct Professor for both undergraduate and graduate programs at The New York Institute of Technology, Vaughn College, Borough of Manhattan Community College, Fairleigh Dickinson University, University of Cartagena (Colombia), Fundación Universitaria Tecnológico de Comfenalco (Colombia), and Universidad Tecnológica de Bolívar (Colombia). Dr. Gonzalez has been the recipient of two scholarships: The City University of New York Engineering and Science Scholarship and the National Action Council for Minorities in Engineering (NACME) Scholarship.

Representative projects of Dr. Gonzalez include:

- ***Design of Wastewater Pumping Stations Oakwood Knolls, Chapel Hill, and Lakeside for the Borough of Oakland, NJ***– Responsible for the design of three sanitary pumping stations and conveyance system (combination of force main and gravity pipes) in replacement of the existing wastewater treatment plants. Engineer's report elaboration.
- ***Water and Sewer System Extension Engineering Report for Deer Pond Estates, Town of East Greenbush, NY***– Responsible for the design and preparation of the engineer's report for the water and wastewater systems for the referenced development project, including the sizing of a water storage tank and the hydraulic evaluation of the pipe water pressure.
- ***Design of GAC units at Wells 1 through 6 in the Borough of Ho-Ho-Kus, NJ***. Responsible for the design of GAC units for six wells for the Borough of Ho-Ho-Kus DPW for the removal of Perfluorinated compounds (PFCs).
- ***Feasibility study for the design of CSO underground storage tanks for NBMUA, North Bergen, NJ***. Alternatives assessment for the storage of combined stormwater overflow (CSO) of up to 8 MG for the North Bergen Municipal Utilities Authority (NBMUA).

Alvaro Gonzalez, Ph.D., P.E.

- ***Water Use and Conservation Management Plan (WUCMP), Borough of Oakland, NJ.*** Preparation of the WUCMP for the Borough of Oakland (NJ), which aims to both evaluate the current water demand in the subwatersheds, that are part of the Highlands Region and propose the water saving strategies to reduce identified water deficits, including monitoring activities.
- ***Sundown Community Flood Mitigation, NY.*** H&H task leader. Stream flow restoration project for a 2500-ft reach of the Roundout creek. The project included H&H modeling via HEC-HMS and HEC-RAS, a new stream alignment, and the design of the new stream cross sections to avoid flooding of the houses located at the vicinity of the intersection of Peekamoose Rd and County Line Sundown Rd.
- ***Adirondack-Conklingville Dam Evaluation, NY.*** H&H task leader. Elaboration of the Hydrological and Hydraulic component, which consisted of estimating of the Probable Maximum Precipitation (PMP) and Probable Maximum Flood (PMF). H&H modeling was performed by means of HEC-HMS. Evaluation of the spillway capacity was also performed.
- ***Ametek-Rotron wastewater treatment plant upgrade, NY.*** Design of the newly proposed system to reduce Ammonia concentration. The project also included the design of UV lamps and cascade aeration system.
- ***Wawarsing Water District Design and Formation, NY.*** Elaboration of the Map, Plan, and Report for the newly formed water district to serve the Town of Wawarsing, NY.
- ***Peekskill Infrastructure Assessment, NY.*** Project engineer leading the elaboration of a web-based Mapping for the water, sanitary sewer, and stormwater sewer system for the City of Peekskill, NY.
- ***Stormwater Master Plan of the City of Cartagena, Colombia.*** H&H task leader for the review of the design of the first phase of the Stormwater Master Plan of the City of Cartagena, which encompassed the design of eight concrete open channels.
- ***Stormwater drainage system at Yara Cartagena, Colombia.*** Full design of a 1172-ft open channel as part of the stormwater drainage system of the newly constructed storage facilities at Yara Colombia in the City of Cartagena.
- ***Oil Produced Water Treatment System Evaluation, Campo Rubiales, Colombia.*** H&H task leader for the evaluation on the acquisition of water treatment and management assets (two reverse osmosis treatment plants with a capacity of 500,000 barrels of oil produced water per day and a 3,000-ha oil palm crop) for implementing water reuse for irrigation, eco-restoration, and protection of morichales areas in the department of Meta, Colombia. Also, responsible for implementing a water balance model to comply with Colombian legislation for water reuse, hydrological regime analysis and evaluation, water quality monitoring plan, among others.

AFFILIATIONS:

American Society of Civil Engineers
American Water Resources Association

SELECTED PUBLICATIONS:

Assessing the Performance of Different Time of Concentration Equations in Urban Ungauged Watersheds: Case Study of Cartagena de Indias, Colombia <https://doi.org/10.3390/hydrology7030047>

Simulations of breakthrough curves for fixed-bed column adsorption of Cobalt (II) ions on spent tea leaves <https://doi.org/10.2166/wst.2020.295>

Analysis of the behavior of daily maximum rainfall within the Department of Atlántico, Colombia <https://doi.org/10.3390/w11122453>

Alvaro Gonzalez, Ph.D., P.E.

Isohyetal Maps of Daily Maximum Rainfall for Different Return Periods for the Colombian Caribbean Region <https://doi.org/10.3390/w11020358>

Effect of the Non-Stationarity of Rainfall Events on the Design of Hydraulic Structures for Runoff Management and Its Applications to a Case Study at Gordo Creek Watershed in Cartagena de Indias, Colombia <https://doi.org/10.3390/fluids3020027>

Adjustment to the curve number (NRCS-CN) to account for the vegetation effect on hydrological processes <https://doi.org/10.1080/02626667.2014.898119>

Rebecca E. Pianese, E.I.T.
Design Engineer – Environmental Engineering



YEARS OF EXPERIENCE: 7 Years

EDUCATION:

B.E. Environmental Engineering, Stevens Institute of Technology, 2012
M.E. Stevens Institute of Technology, 2016

PROFESSIONAL REGISTRATION:

Engineer-In-Training (EIT)

CERTIFICATIONS:

OSHA 10-Hour Occupational Safety and Health
OSHA Confined Space Entry

EXPERIENCE:

Ms. Pianese has been involved with the design of sanitary sewer infrastructure repairs, water and wastewater pumping stations and environmental studies. As a design engineer, her responsibilities include, design and preparation of plans, reports, cost estimates and specifications for water and wastewater improvement projects. Ms. Pianese has worked on numerous New Jersey Environmental Infrastructure Trust (NJEIT) funded projects and is extremely knowledgeable with the process.

Ms. Pianese has experience with various municipal project as well as project projects for numerous agencies. These projects include the installation and rehabilitation of sanitary sewer/combined sewer systems, water, storm and wastewater pumping stations. Ms. Pianese is proficient in CADD and WaterGEMS, a water distribution modeling software.

Representative environmental projects include:

- ***Jacobus Avenue Pumping Station, Wayne, NJ.*** Project included the rehabilitation of the Jacobus Avenue Pumping Station including new pumps, piping, motors, VFDs, meters, valves and appurtenances and SCADA system coordination.
- ***Rehabilitation of the Mary Street Water Storage Tank, Hawthorne, NJ.*** The project included the structural rehabilitation of the 3 million-gallon Mary Street Water Storage Tank, including a new coating system.
- ***Sanitary Sewer Improvements, Wyckoff, NJ.*** The project included the preparation of the planning and design documents for new sanitary sewer in the Knolls section of Wyckoff. The design included the installation of approximately 1,150 linear feet of 8" pipe and 435 linear feet of HDPE pipe bursting into the Northwest Bergen Utilities Authority (NBCUA) Interceptor.
- ***Watermain Lining Project, SUEZ New Jersey.*** The project included preparation of the planning as well as full time inspection for water main lining and water main pipe installation on various streets in Rutherford, Fairview, Hackensack, Oradell, Harrington Park, Emerson, and Washington Township.

REBECCA E. PIANESE, E.I.T.

- ***Rehabilitation of the Goffle Hill Water Storage Tank, Hawthorne, NJ.*** The project included the structural rehabilitation of the 1 million-gallon Goffle Hill Water Storage Tank, including a new coating system.
- ***Water Modeling for East Orange Water Commission.*** Hydraulic modeling and analysis of the East Orange water distribution system using WaterGEMS.
- ***Watermain Improvements, SUEZ New Jersey (formerly United Water).*** Preparation of the planning and design documents as well as full inspection for water main replacements on various streets in Union City, NJ and Washington Township, NJ.
- ***Storm Sewer Separation Phase 1, Hackensack, NJ.*** The services performed included the preparation of the planning and design documents for the first phase of combined sewer separation in a multiphase project. As part of the sewer separation project, the City installed a new dual 42" outfall to convey stormwater runoff to the Hackensack River. Boswell was responsible for obtaining Army Corps of Engineers Nationwide Permit No. 7, NJDEP Individual Waterfront Development Permit and BCSCD Authorization. During the construction phase, Boswell was responsible for coordination with all the utility companies. The project was funded by the NJEIT.
- ***Lower Main Pumping Station, Fort Lee, NJ.*** Design of the rehabilitation of the Lower Main Pumping Station including new pumps, piping, comminutor chamber and SCADA system. The design also includes the installation of 4,800 LF of 10" force main into BCUA Interceptor.
- ***Bergen County Utilities Authority RDI/I Reduction Program.*** Conducted a study to reduce excessive RDI/I, assure capacity in the BCUA transport and treatment facilities and collection and eliminate the need for an upgrade to the BCUA facilities. The study included data collection for both dry and wet events, property surveys, preparation of data reports, preparation of home survey reports, preparation of engineering reports, and for maintaining a photo log documenting all field investigations.
- ***Sanitary Sewer Improvements, Borough of Franklin Lakes, NJ.*** Preparation of the planning and design documents for sanitary sewer improvements along DeKorte Drive. The design included data collection, flow calculations, and construction cost estimate, and a Treatment Works Application.
- ***Sanitary Sewer Improvements, Phases 1-4, Oradell, NJ.*** Services included the design for a multi-phased sewer improvement project, including televised inspection and analysis of approximately 196,500 linear feet of pipe. Boswell prepared the contract documents for the replacement of 5,400 linear feet of pipe and lining of approximately 22,000 linear feet of existing sewer. The project was funded by the NJEIT.
- ***Sanitary Sewer Study, Borough of Woodland Park, NJ.*** Evaluated the feasibility of a wastewater system for fifteen different areas of Woodland Park currently utilizing septic systems. The study included preliminary design, flow calculations and construction cost estimate.
- ***Borough of Fort Lee, NJ.*** Assembled the necessary documentation which enabled the Borough to earn a certification for Sustainable Jersey.

AFFILIATIONS:

American Water Works Association

YEARS OF EXPERIENCE: 27 Years

EDUCATION:

B.S. Engineering, Calvin College, Grand Rapids, MI

REGISTRATION/CERTIFICATION:

Professional Engineer - New Jersey
Electrical Contracting - New Jersey
PSE&G Substation Training

EXPERIENCE:

Mr. Post has more than 25-years of Electrical Design and Construction Experience. He has been in charge of the design, construction and project management of numerous electrical engineering projects. The project types have ranged from commercial, institutional and industrial facilities, new and existing buildings. Project experience includes:

- **Eastside & Farview Pump Stations, Ridgewood NJ** – Designed Replacement Electrical Distribution Gear, including VFD's, and Backup Generator connections. Also designed replacement lighting and power connections for HVAC equipment.
- **Oakland Senior Center Backup Generator, Oakland NJ** – Electrical Design for introducing a Backup Generator to the existing Electrical Distribution Equipment.
- **Community Park & Massor Park Lighting, Montville NJ** – Designed new electric service and lighting control panels for field lighting upgrade.
- **Lower Preakness Sewage Pumping Station, Wayne NJ** – Designed the replacement Electrical Service and Power Distribution Gear, incorporating onsite backup generator and connection for rollup generator. Replacement 200hp pump motors with VFD controls. Designed replacement electric heat, and LED lighting.
- **Jacobus Ave Pumping Station, Wayne NJ** - Electric Design Including: Load Study, Short Circuit Calculation & Breaker Coordination
- **Van Ness Plastics, Clifton NJ** – Electrical design and project management for fire sprinkler pump addition. Including emergency generator, fire alarm, heating & ventilation.
- **Eastern Christian Children's Retreat, Wyckoff NJ - Bushman Building Renovations** - Electrical design and project management for additional treatment and office space. The design included: power distribution, lighting, nurse call & access control systems.
- **Eastern Christian Children's Retreat, Wyckoff NJ - Emergency Generator** - Electrical design and project management for emergency generator for entire campus. Detailed load analysis, integration into existing electrical switchgear while keeping facility in operation.

Kenneth H Post, P.E

- **Becton Dickinson & Company, Franklin Lakes, NJ- IT Rooms Upgrade** – Provided load analysis, design and project management for providing emergency power to new HVAC units and new IT racks throughout the campus.
- **Becton Dickinson & Company, Franklin Lakes, NJ -Fire Pump Generator** - Provided design and project management for backup generator and soft start for the existing fire sprinkler pump.
- **Becton Dickenson & Company, Franklin Lakes, NJ –Computer Room Renovations** - Provided design and project management for two 150 KVA power distribution units in the computer room for Howe corporate headquarters building.
- **Becton Dickenson & Company, Franklin Lakes, NJ – Rollup Generator Interface** - Provided Design and Project Management for interface of a roll up generator to emergency system in the event of a failure of the penthouse emergency generator.
- **Van Dyk Health Care, Hawthorne, NJ** – Provided electrical design and project management for nursing home and assisted living facility. Designed power distribution, emergency generator, fire alarm, access control, and lighting systems.
- **Van Dyk Health Care, Ridgewood, NJ** – Provided electrical design and project management for emergency generator including load analysis, integration and upgrade of electrical distribution arrangement in confines of existing mechanical spaces.
- **Cedar Hill Church, Wyckoff, NJ** – Provided electrical power distribution, lighting and fire alarm design and project management for education wing and sanctuary renovations.
- **Christ Church, Ridgewood, NJ** – Provided electrical design for power distribution and lighting for sanctuary & administration wing renovations.
- **Fisk Wire & Cable, Hawthorne, NJ** – Provided design for new electric service including load, short circuit analysis. Provided a solution for service upgrade while keeping customer in operation.

Mr. Post has also served as Project Engineer for Eii Inc., Cranford NJ in their Power Transmission & Distribution Division in several of their projects including:

- Roseland Switching Station: 500kv GIS upgrade & 138kv to 230kv upgrade
- Jersey City South Waterfront Station: ring bus replacement
- Jersey City Newport Substation: 230kv upgrades
- Branch Brook Substation: new 230 & 69kv substation construction
- Bergen-Linden Corridor: class H station upgrades
- Bergen Generating Station turbine upgrades
- Essex Switching Station 26kv shelter island switchgear
- Jersey City Switching Station: switching station replacement
- Bergen Switching Station 138kv ring bus replacement & reactor installation
- Jackson Road Substation: Installation of 230kv GIS, 13kv shelter island switchgear

Frank J. Rossi, LSRP
Environmental Science Department Head



YEARS OF EXPERIENCE: 39 Years

EDUCATION:

B.S. Chemistry, Fairleigh Dickinson University
M.S. Chemical Engineering, New Jersey Institute of Technology

CONTINUING PROFESSIONAL EDUCATION:

Rutgers University – Cook College:
Site Remediation Basics
Regulatory Training in Underground Storage Tanks
Groundwater in Fractured Bedrock
Practical Applications in Hydrogeology
Wetland Identification & Delineation
Advanced Wetland Delineation
Freshwater Wetland Construction Techniques
Onsite Wastewater Disposal Systems – Design, Inspection, O&M
Dam Design, Rehabilitation & Inspection
Pond Design, Management & Maintenance
Soil Erosion & Sediment Control Design & Inspection

REGISTRATIONS: NJDEP Licensed Site Remediation Professional (LSRP)

CERTIFICATIONS:

NPDES Certified Stormwater Inspector
NJDEP Licensed for UST – Installation, Testing, Closure and Subsurface Evaluation
NJDEP – Stormwater Management Design Review Course
OSHA 40-Hour HAZMAT & 8-Hour Annual Refresher
OSHA 10-Hour Construction Safety
AHERA Asbestos Inspector/Management Planner
Confined Space Entry
EPA/HUD Certified Lead Inspector
Certified Wetland Delineator

EXPERIENCE:

Mr. Rossi has over 39-years of experience as a project manager/senior environmental/chemical engineer. He has a strong diverse background in chemical, civil and environmental engineering. For over 3-decades Mr. Rossi has specialized in State and Federal permit acquisition, wetlands delineation, as well as coastal and waterfront development projects. Mr. Rossi has performed multi-disciplined environmental permitting efforts for numerous clients. His responsibilities include wetlands delineation and assessment as well as floodplain management and flood mitigation. He has experience in many areas of coastal and waterfront design projects including the preparation of State and Federal environmental permits for the NJDEP, including CAFRA,

FRANK J. ROSSI, LSRP

Waterfront Development, Coastal and Freshwater Wetlands, TWA, NJPDES, and the USACOE, NJDEP Fish Game and Wildlife Permits, and NJDEP Dam Permits and Inspections.

Mr. Rossi is also a licensed LSRP and has extensive hands-on experience in all types of contaminant investigation and remediation projects, including but not limited to, Preliminary Assessments (PA), Site/Remedial Investigations (SI/RI), underground storage tank (UST) removals and installations, remedial investigations (RI), Receptor Evaluations (RE) and remedial actions (RA). In addition to the aforementioned, Mr. Rossi's previous chemical engineering experience at several international firms makes him uniquely suited for the design and operation of soil and groundwater remediation systems.

His experience includes:

- ***Southern New Jersey Light Rail DBOM, New Jersey Transit.*** Project Manager for the environmental permitting portion of the Southern New Jersey Light Rail Design/Build/Operate/Maintain (DBOM) project. This project involved the construction of a 35-mile section of railroad between Camden and Trenton, New Jersey. The railroad passed through numerous environmentally sensitive wetland areas requiring Mr. Rossi's expertise in identifying the various State and Federal permits necessary for construction. A brief list of the permits identified and obtained for this project included NJDEP Freshwater Wetlands, ACOE Coastal Wetlands and U.S. Coast Guard.
- ***Dundee Island Park Improvements, Passaic, NJ.*** Project Manager for the environmental permitting portion of the project involving the \$10 million reconstruction of an 8-acre waterfront park being transferred from the City of Passaic to Passaic County. Since the project had several funding sources, work involved extensive coordination with multiple agencies including both the NJDEP's Land Use, Site Remediation and Green Acres Programs, The Trust for Historic Preservation as well as the City and County governments. Permits applied for and obtained included a US Army Corps Nationwide Permit No. 7, NJDEP Waterfront Permit and Individual Freshwater Wetland Permit. Also received a Flood Hazard Act (FHA) Hardship Exemption Waiver associated with the redistribution of contaminated historic material in the Passaic River floodway.
- ***River Drive Pedestrian Way & Preserve, Garfield, NJ.*** Project Manager for the environmental permitting of a several mile pedestrian walkway and riverfront park along the Passaic River in the City of Garfield. Following the acquisition and investigation/remediation of a number of underutilized and/or brownfield properties, performed all necessary environmental permitting services that included the acquisition of Waterfront Development and Flood Hazard Area permits.
- ***Riverview Club and Towers, East Rutherford & Carlstadt, NJ.*** Project manager for the preparation of engineering and environmental plans for the Riverview Club and Towers, a 1-million square foot multi-use, residential, hotel, retail, banquet facility and marina on the Hackensack waterfront. Conducted all phases of the project's wetland assessments, delineations, and permitting. Included the legalization of 3-acres of fill on wetlands through an interagency negotiation with the NJMC, ACOE, NJDEP, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA).
- ***Yaohan Shopping Plaza, Edgewater, NJ.*** Project Manager, this project included preparing a site plan for a 100,000-square foot retail shopping center and 25,000-square foot restaurant along the Hudson River waterfront. Prepared the waterfront development permit in compliance with the NJDEP coastal zone policies. Also prepared an ACOE Section 404 B

FRANK J. ROSSI, LSRP

program permit for the construction of a sea wall along the Hudson River as well as dredging and existing pier removal permits in conjunction with the EPA.

- ***Pulte Lifestyle Communities Property, Wanaque, NJ.*** Project manager for the development of a 442-acre active adult housing community for Pulte Homes. Prepared the site's wetland delineation, Environmental Impact Statement (EIS), Phase I Environmental Site Assessment (ESA), wildlife and vegetation inventory and noise impact study. Also performed a site survey with archeologists and town historians, prepared Letter of Interpretation (LOI) application to NJDEP and obtained Freshwater Wetland General Permits, Stream Encroachment Permits, Water Allocation Permits, Treatment Works Approval Permit and designed Best Management Practices (BMP) for a proposed 9-hole golf course.
- ***Wetland delineation & prepared individual Freshwater Wetland & Stream Encroachment Permit Applications, Goffle Brook, Hawthorne, NJ.*** Project manager for this 2-mile stretch of the Goffle Brook involved working with design engineers in ascertaining the most heavily eroded portions of the brook and assisted with the preparation of detailed plans and specifications for bioengineering bank stabilization.
- ***Preparation of Municipal Stormwater Management Plans (MSMP) for 24 municipalities in Bergen, Passaic & Hudson Counties, NJ.*** As project manager, assisted all municipalities during the preparation of their Tier A/Tier B NJPDES Permit Application. Provided Quality Assurance/Quality Control Review of all MSMPs. Also provided a Microsoft PowerPoint presentation for many of the Mayor, Council and planning boards detailing the stormwater regulations. Additionally, met with many local designated Stormwater Management Coordinators and provided direct assistance during the preparation of their Stormwater Pollution Prevention Plan (SP3).
- ***Decommissioning & Demolition of a former Nike missile site, Mahwah, NJ.*** Project manager who performed a detailed environmental investigation for USTs, PCB containing electrical transformers and capacitors, asbestos and lead-based paint. Once the site's environmental concerns were identified, managed the remedial action of all hazardous materials including PCB transformers and USTs and the abatement of asbestos and lead based paint. Following the hazardous materials removal, designed a treatment system to dewater the site's missile silos.
- ***Initial site/remedial investigation of the Port Authority's PATH tunnels following the World Trade Center (WTC) attack.*** Project manager who managed two (2) assessment teams traveling through the tunnels from Jersey City (Exchange Place) beneath the Hudson River to the former World Trade Center station at Ground Zero. The project was designed to investigate the tunnels for PCBs released from the WTC electrical transformers, petroleum hydrocarbons from the building's ruptured underground storage tanks (UST) as well as the presence of any other contaminants washed into the tunnels by both the fire fighting and dust suppression efforts at Ground Zero.
- ***Reconstruction of Bridge over the Hirschfeld Brook (Environmental Portion), New Milford, NJ.*** Mr. Rossi's, as project manager, expertise was required on an emergency basis when petroleum contaminated groundwater was encountered during the excavation of the bridge's abutments. Since the excavation required continuous dewatering, Mr. Rossi designed a groundwater treatment that included a Frac Tank as an oil/water separator and large granulated activated carbon units. Due to the system's effectiveness, the NJDEP granted the project an expedited permit that allowed the treated water to be discharged to the brook. The treatment system and subsequent discharge approval provided a significant cost savings and minimized serious project over-runs and delays.

FRANK J. ROSSI, LSRP

- ***Preliminary Assessment (PA), Greystone Psychiatric Hospital, Morris Plains, NJ.*** As project manager, performed a thorough and detailed assessment of this 900-acre, 125-year old facility. Work included a thorough inspection of over 50 buildings, some currently in use and others abandoned for decades; inspection of the utility tunnel and sub-tunnel system beneath a number of buildings to ascertain the possibility of decommissioning the central power plant and converting the facility to individual utilities; asbestos and lead-based paint surveys; mapped existing utilities utilizing electromagnetic instrumentation and ground penetrating radar; identification of electrical transformers containing PCBs; limited wetland identification; and preparation of a several hundred page report detailing the site's environmental areas of concern (AOC) including detailed plans depicting environmental constraints. Following the PA performed a soil/groundwater Site Investigation (SI) at the facility's former manufactured gas plant (MGP).
- ***UST removal & UST/AST installation, Department of Public Works, Municipal Building and five (5) pump stations, Elmwood Park, NJ.*** Project Manager work included the preparation of comprehensive plans and specifications; evaluated contractor bids and awarded contract; provided site supervision at many of the projects; performed Site and Remedial Investigations (SI/RI) (soil & groundwater); supervised contaminated soil excavation and free-phase petroleum product removal from the water table; prepared and/or reviewed SI/RI Reports for submission to the NJDEP; designed future groundwater remedial investigation/action at four (4) of the sites including the Municipal Building and Department of Public Works.
- ***Preliminary Assessment (PA) for 80-year old former gasoline filling station, Garfield, NJ.*** Designated project manager. Through the analysis of historic Sanborn Fire Insurance Maps identified six (6) USTs remaining on the property since the station's closure in the late 1960s. Also identified other potential concerns such as an in-ground hydraulic lift and ACM/LBP on the station building. Following the PA, performed the site's UST removal, site investigation and provided professional oversight during the facility's demolition.
- ***Preliminary Assessment (PA), Site Investigation (SI) and emergency Remedial Action (RA), Garden State Industrial Park warehouse complex.*** As project manager, performed and authored a detailed PA report; identified four (4) previously undocumented USTs through the use of ground penetrating radar (GPR); conducted the emergency removal of the four (4) leaking USTs in close proximity to facility and municipal production wells; performed SI following tank removal; field designed contamination interceptor systems utilizing geosynthetics.
- ***Site Investigation (SI) of an active gasoline service station, Rochelle Park, NJ.*** As project manager, performed subsurface investigations, monitoring well installation and gauging, soil vapor point installation and sampling and low flow groundwater sampling. Interpreted all laboratory data and prepared Remedial Action Progress Reports for submission to the NJDEP. Provided operation and maintenance (O&M) of an on-site oil water separator and groundwater air stripper. Delineated on-site/off-site volatile organic contaminant (VOC) contamination and provided hydraulic control of the site's VOC plume.

AFFILIATIONS:

New Jersey Licensed Site Remediation Professionals Association
New Jersey Water Environment Association

YEARS OF EXPERIENCE: 26 Years

EDUCATION:

A.S. Mathematics/A.A. Liberal Arts, Raritan Valley Community College
B.S. Civil Engineering, New Jersey Institute of Technology
M.S. Geo-environmental Engineering, New Jersey Institute of Technology

REGISTRATION/CERTIFICATION:

Professional Engineer – New Jersey, New York, New Hampshire
Professional Planner – New Jersey
NJDEP Licensed Site Remediation Professional (LSRP)
OSHA 40-Hour Hazardous Waste Site Operations, 8-Hour Site Supervisor
NJDEP Licensed for UST – Installation, Testing, Closure and Subsurface Evaluation
AHERA Certified Asbestos Inspector, Management Planner
Confined Space Entry
X-Ray Fluorescence Spectroscopy (XRF)
IATA/DOT Shipment of Hazardous Materials

EXPERIENCE:

Mr. Arntz has over 26-years of diverse experience in civil and environmental engineering. He has performed numerous preliminary assessments (PA), underground storage tank (UST) removals, soil and groundwater site/remedial investigations (SI/RI) and remediations, as well as asbestos containing material (ACM) and lead based paint (LBP) surveys. He has provided design, technical, logistical and administrative support at hazardous waste sites to both public and private clients, and served as a Region II Group Leader to the U.S. Environmental Protection Agency's Superfund program.

His experience on a wide variety of environmental engineering projects includes:

- ***Site Investigation (SI) and remediation of JJ Braddock/North Hudson County Park, North Bergen, NJ - Project Engineer.*** Following the discovery of creosote contaminated soil and debris during a park improvement project, prepared a Preliminary Assessment (PA) identifying that a portion of the site was once a low-lying wetland where dredge material, likely from Hudson River projects, was buried in order to raise the site's grade. Performed the necessary site and remedial investigations (SI/RI), prepared plans and specifications for public bidding and provided professional oversight during the excavation of 4,500-tons of material. Delineated the extent of the groundwater contamination, prepared the property's Deed Notice and authored all necessary reports following the work. Subsequently issued the site a Response Action Outcome (RAO) under the NJDEP's LSRP program.
- ***PA/SI Industrial Site Recovery Act (ISRA) Transaction of a former Eyeglass Manufacturer, Newark, NJ - Project Engineer.*** Work included preparation of all ISRA applications and reports (PA, SI, RI, and Remedial Action Workplan), performed all SI/RI activities such as geophysical investigation, UST removal, excavation of the site's former drainage system contaminated with chlorinated organic solvents, floor drain integrity testing (dye and videotape), horizontal and vertical delineation of soil and groundwater contamination, and borehole geophysical survey in bedrock monitoring wells.

CHRIS E. ARNTZ, P.E., P.P., LSRP

- ***Initial SI/RI of the Port Authority's PATH tunnels following the World Trade Center (WTC) attack - Project Engineer.*** Led two (2) assessment teams through the tunnels from Jersey City (Exchange Place) beneath the Hudson River to the former World Trade Center station at Ground Zero. The project was designed to investigate the tunnels for PCBs released from the WTC electrical transformers, petroleum hydrocarbons from the building's ruptured underground storage tanks (UST) as well as the presence of any other contaminants washed into the tunnels by both the fire fighting and dust suppression efforts at Ground Zero.
- ***Development of a Shared-services Department of Public Works (DPW) Complex, Cliffside Park & Fairview, NJ - Project Engineer.*** Prepared a Preliminary Assessment (PA) identifying the various environmental areas of concern (AOC) and estimated the potential remediation costs allowing for the property's purchase by the municipalities. Performed Site and Remedial Investigations (SI/RI) delineating the contaminant's extent. Prepared plans and specifications for the site's remediation including the demolition of two (2) existing structures, removal of underground storage tanks (UST), excavation of contaminated soil and removal of contaminated groundwater. Performed onsite supervision during remediation including the unexpected decommissioning of an undocumented below ground vault filled with PCB contaminated sludge. Authored all necessary reports following the work, designed the site's engineering control and prepared the property's Deed Notice. Subsequently issued the site a Response Action Outcome (RAO) under the NJDEP's LSRP program.
- ***Brownfield Redevelopment of a 3.5-acre former Bulk Oil/Gasoline Storage Terminal, Passaic, NJ - Project Engineer.*** Work included delineating the vertical and horizontal extent of both soil and groundwater contamination; planning and overseeing the demolition of several site structures; decommissioning of former facility USTs and piping network; remediation of PCB contaminated floor drains; New Jersey Pollution Discharge Elimination System (NJDEPS) permitting; and, the design and retro-fit of the a former oil/water separator into the current free phase petroleum product recovery system.
- ***PA, SI, RI and RAO of a former Getty filling station, South Hackensack, NJ - Project Engineer.*** Prior to sale, the property was retained by the current owner to investigate the site's potential environmental areas of concern (AOC) including former USTs, hydraulic lifts, floor drain system and historic fill. Supervised the excavation and disposal of 4,500-tons of petroleum contaminated soil as well as three (3) undocumented USTs encountered during the work. Authored all necessary reports following the work, designed the site's engineering control and prepared the property's Deed Notice. Subsequently issued the site a Response Action Outcome (RAO) under the NJDEP's LSRP program.
- ***Removal of USTs, SI and remediation of contaminated groundwater at a Gasoline Station, Albany, NY - Project Engineer.*** Performed subsurface investigation following UST removal; calculated efficiency of existing pump and treat system; supervised source soil removal with simultaneous transportation and disposal; implemented an emergency air sparging system concurrent with soil excavation; and, pilot tested and designed a remedial air sparging/soil vapor extraction (AS/SVE) system.
- ***Remediation & demolition of Witco Chemical, a 100-year old former fatty acid manufacturing plant adjacent to the Passaic Valley Sewerage Commissioners (PVSC) plant, Newark, NJ - Project Engineer.*** Prior to the 17-acre site's acquisition by the PVSC, reviewed all previous ISRA reporting by the property's former owner. During the demolition and remediation, provided professional oversight for the removal of all hazardous materials from the site; and, arranged and coordinated the transportation and disposal of over 140-tons of residual waste from beneath the building floor slabs. The project subsequently received a Distinguished Service Award from the Consulting Engineers Council of New Jersey.

CHRIS E. ARNTZ, P.E., P.P., LSRP

- ***Emergency removal of leaking USTs at the Fairview's DPW, Fairview, NJ - Project engineer.*** Work included oversight of the removal of three (3) documented and two (2) undocumented and leaking USTs. Following the tank's removal, supervised the excavation of 1,500-cubic yards of contaminated soil; and, vacuumed several thousand gallons of free phase petroleum product from atop the groundwater table. Designed the future soil and groundwater remedial investigation involving soil boring through the DPW garage's floor slab; and, the installation of eight (8) monitoring wells.
- ***U.S. Virgin Islands Hurricane Marilyn Emergency Response - Project Manager.*** Airlifted into St. Thomas with the US Military and led a site assessment team to establish all necessary logistical and technical support immediately following the natural disaster. Supervised the simultaneous time critical stabilization and removal of hazardous chemicals and contaminated soil at four (4) separate sites. Coordinated the collection, storage, analysis, transportation and disposal of several hundred electrical transformers (PCB & non-PCB) blown down during the storm. Provided technical oversight to USEPA and the US Coast Guard during recovery operations of a 50,000-gallon diesel fuel spill in Lindburgh Bay.
- ***UST removal and UST/AST installation for Elmwood Park's DPW, Municipal Building and five (5) pump stations, Elmwood Park, NJ - Project engineer.*** Work included the prepared comprehensive plans and specifications; evaluated contractor bids and awarded contract; provided site supervision at many of the projects; performed subsurface evaluation (soil & groundwater); supervised contaminated soil excavation and free-phase petroleum product removal from the water table; prepared and/or reviewed Site/Remedial Investigation Reports for submission to the NJDEP; and, designed future groundwater remedial investigation at four (4) of the remaining sites.
- ***USEPA Superfund investigation at a former lead smelter, Pedricktown, NJ - Project manager.*** Surveyed a sampling grid encompassing over 600 locations along a 3/4-mile stretch of river and completely delineated the extent of lead contamination utilizing x-ray fluorescence spectroscopy (XRF) on over 1,500 soil and sediment samples. Developed a detailed site plan to determine drainage patterns, contaminant migration pathways as well as the amount of cut and fill required to remediate the riverbank and sediment.
- ***USEPA Superfund site investigation and remediation of an electroplating chemical facility, New Hyde Park, NY - Project manager.*** The remediation consisted of the removal of over 3,000 chemical containers as well as contaminated soil beneath the facility. Duties included preparation of the health and safety; sampling and analysis and community relations plans; supervised in hazard categorization and development of waste bulk stream; delineated the soil contamination plume using X-Ray Fluorescence Spectroscopy; performed feasibility study of remedial options; and, coordinated transportation and disposal for all hazardous waste and contaminated soil.
- ***PA/SI of Fairleigh Dickinson University, Rutherford, NJ - Project engineer.*** Prior to the property's sale, performed a detailed PA/SI of this 11.5-acre college campus comprising 13 buildings, housing offices, auditoriums, classrooms, laboratories and residence halls.
- ***Investigation and remediation of Standard Tank Cleaning Corporation, Bayonne, NJ.*** The remediation consisted of the removal of 2.2 million gallons of hazardous oil sludge from an abandoned bulk oil storage and treatment terminal. Provided technical assistance in the design and conversion of an existing on-site tank into an oil/water separator that was used to treat 230,000 gallons of contaminated wash/rain water prior to discharge to the Passaic Valley Sewerage Commissioners (PVSC).

CHRIS E. ARNTZ, P.E., P.P., LSRP

- ***Initial soil, groundwater, waste pile and sediment sampling/delineation of Hudson Coal Tar, an abandoned manufactured coal gas plant (MGP), Hudson, NY.*** The sampling's results qualified the site for an emergency removal action under the EPA Superfund program. Prior to the contaminant's delineation, surveyed in a sampling grid system encompassing the site and the area immediately adjacent Hudson River. Following the contaminant's delineation and waste characterization, participated in the removal of coal tar waste piles and the design and pilot testing of the groundwater treatment system.
- ***Cambalache National Forest site - Project manager.*** Lead a site assessment team to a PCP contaminated wood treatment plant located within the boundaries of a national forest in Arecibo, Puerto Rico.
- ***New Cliffside Park Department of Public Works (DPW) Garage - Project engineer.*** Prior to the Borough's purchase of the property prepared a detailed PA identifying a number of environmental AOCs, including an abandoned UST previously located onsite but, due to previous subdivision, it was now found on a neighboring property. Subsequently performed a SI at each AOC and using the results, estimated the amount of remedial costs to be placed in an escrow account. Performed the necessary soil and groundwater RI and RA including the removal of the building's floor drain system and piping traveling from the UST now located on the adjacent property. Authored all necessary reports following the work, designed the site's engineering control and prepared the property's Deed Notice. Subsequently issued the site a Response Action Outcome (RAO) under the NJDEP's LSRP program.

AFFILIATIONS:

New Jersey Licensed Site Remediation Professionals Association

YEARS OF EXPERIENCE: 35 Years

EDUCATION:

New Jersey Institute of Technology

REGISTRATION:

Professional Land Surveyor - New Jersey

EXPERIENCE:

Mr. Krupinski has provided surveying services for both the public and private sector and has been involved in every aspect of the firm's survey projects. He has performed and/or directed control, topographic, hydrographic, structural, cadastral, route, construction and railway surveys for federal, state, county and municipal agencies, as well as transportation authorities, utilizing state-of-the-art Global Navigation Satellite System (GNSS) equipment such as Real-Time Kinematic (RTK), total stations and data collectors. Mr. Krupinski is highly experienced in the discipline of boundary surveying, which includes record research, deed analysis and the establishment of property and right of way lines, as well as the preparation of complete right of way documents for various state departments of transportation. He has performed and/or directed numerous boundary surveys ranging from 5,000 square feet to 255 acres. He is also proficient in the use of CADD engineering/surveying software and is directly responsible for the processing of field data and the preparation of mapping.

His project experience includes:

- ***New Jersey Department of Transportation (NJDOT), U.S. Route 30 (White Horse Pike) & Evesham Avenue Intersection Improvements, Magnolia, NJ.*** Responsible for planning and processing of the master control survey, which was performed utilizing GNSS. The GNSS system was also used for establishing horizontal and vertical control for the aerial mapping. Responsible for input and adjustment of survey baselines, downloading and processing of field survey data and supervising right-of-way document preparation.
- ***NJDOT, Widening of Sussex Turnpike, Randolph, NJ.*** On this 4-mile widening project, responsibilities included planned and executed the master control survey, which was performed utilizing GPS. The GPS system was also used for establishing horizontal and vertical control for the aerial mapping. Responsible for the downloading and processing of all data. Also responsible for deed search and filed map acquisition and the establishment of the existing right-of-way lines, preparation of proposed right-of-way documents, specifically general property parcel maps, entire tract maps, individual parcel maps and legal descriptions.
- ***BEM Systems/NJDOT, NJDOT Maintenance Facility, Deptford, NJ.*** Supervised the boundary, topographic and wetlands location survey and performed the necessary record research and boundary analysis for this site remediation project. While the outbound of the entire site could be easily defined and located, the project scope only required surveying two of the four tax lots owned by NJDOT. Much effort and analysis was needed to establish the internal lot lines of the DOT property, including acquiring old deeds and determining the location of old tax lots, due to the fact that the internal lot lines were not clearly defined.

FRANK M. KRUPINSKI, P.L.S.

- ***Newark Liberty International Airport, Utility Management System, Newark, NJ.*** Responsible for downloading, processing and drafting underground utility locations (both as-built and mark-out), as well as other pre-construction and post construction topographic surveys.
- ***NJDOT, Route 80, Section 20 Roadway Widening (Metric), Hackensack, South Hackensack & Teterboro, NJ.*** Responsibilities included planned and executed the master control survey, which was performed utilizing GNSS. The GNSS system was also used for establishing horizontal and vertical control for the aerial mapping. Responsible for the downloading and processing of all data.
- ***NJDOT, Route 9W, Section 1J Roadway Widening (Metric), Englewood Cliffs, NJ.*** This 1.2-mile roadway widening project included deed search and field map acquisition. Responsibilities for field locating the existing centerline monumentation and the subsequent analysis of the same; establishing existing right-of-way; the preparation of proposed right-of-way documents, specifically general property parcel maps, entire tract maps, individual parcel maps and descriptions; and the preparation of jurisdictional limit maps. Field survey requirements were to edit and update existing aerial mapping; determine heights of primary and secondary electric wires; and staking proposed soil borings.
- ***NJDOT, Billingsport Road over Conrail Deepwater Line (Metric), Greenwich & Paulsboro, NJ.*** This grade crossing elimination project included the field location of the existing property corners, establishing the existing right-of-way utilizing field locations and current deeds of record. Responsibilities also included the preparation of proposed right-of-way documents, specifically general property parcel maps, entire tract maps, individual parcel maps and descriptions.
- ***NJDOT, Route 4, Section 2AB - Farview Avenue over Rte. 4, Paramus, NJ.*** Responsible for deed search and filed map acquisition, and the establishment of the existing right-of-way lines, preparation of proposed right-of-way documents, specifically general property parcel maps, entire tract maps, cut-outs and agreements.
- ***NJDOT, Route 4, Section 2Y - Rte. 4 over Kinderkamack Road & Hackensack. Avenue over Rte. 4, Hackensack & River Edge, NJ.*** Responsible for deed search and filed map acquisition, establishing establishment of the existing right-of-way lines, preparation of proposed right-of-way documents, specifically general property parcel maps, entire tract maps, Riparian Grant Application, cut-outs and agreements.
- ***NJDOT, Route 4 & Route 17 Interchange Improvement (Metric), Paramus, NJ.*** Responsibilities included the horizontal control survey utilizing GNSS, established existing right-of-way and the existing construction baselines, based on deeds, filed maps, field locations and DOT. field notes and mapping, prepared the alignment preservation map and the advanced right-of-way plans, consisting of general property parcel maps, entire tract maps, cut-outs and descriptions. Also, supervised the field crew in the aerial mapping edit and update, as well as the final base mapping.
- ***Long Island Railroad, Penn Station (Platform 11 Extension, 5X Crossover and JO Interlocking), NY.*** As Chief of Survey responsibilities included detailed surveys of the platforms and tracks, as well as locating critical structural points and utilities. All work was performed during off-peak hours.
- ***NYSDOT, Route 35 / Route 100 Intersection Improvement, Westchester County, NY.*** This 15,000 L.F. widening project included establishing existing and proposed highway boundaries; the preparation of abstract request maps, right-of-way plans, appropriation maps and descriptions; and calculating taking areas for all parcels.

FRANK M. KRUPINSKI, P.L.S.

- ***NYS DOT, Route 35 / I-684 Interchange Improvement, Westchester County, NY.*** Responsibilities included establishing existing and proposed highway boundaries, preparing right-of-way plans, appropriation maps and descriptions; and calculating taking areas for all parcels, as well as calculating stations and offsets to all property corners.
- ***Molly Ann's Brook Flood Control Project, Passaic County, NJ.*** As chief of survey for the rehabilitation and/or replacement of six bridges, responsibilities included locating property corners and performed topographic surveys utilizing existing aerial control and established existing right-of-way, as well as base mapping for each bridge, preparation of complete right-of-way documents, consisting of general property parcel maps, entire tract maps, cut-outs and agreements.
- ***NJDOT, Stage II Scour Evaluation, Hunterdon, Mercer and Warren Counties, NJ.*** Responsibilities included obtaining stream cross sections and preparing mapping for 29 roadway bridges. Total project length was approximately 12,500 L.F.
- ***Henry Hudson Bridge Approach, NY.*** As chief of survey on roadway widening and drainage repair project for the Triborough Bridge and Tunnel Authority responsibilities included performing a closed horizontal control loop and detailed topographic survey within the 3,500 L.F. project limits, as well as the preparation of the base mapping.
- ***Passaic Valley Sewerage Commission, Newark Bay Treatment Plant, Newark, NJ.*** Responsible for the determination of the boundary for the four (4) tracts, containing 142 acres total, that comprise this complex. This complex boundary had instances where a current tax lot was defined by many deeds, some of which are nearly 100 years old. Numerous maps were acquired from the City of Newark, the New Jersey Turnpike Authority, and other surveyors to aide in the resolution and establishment of the boundary.
- ***Passaic Valley Sewerage Commission, Wallington Pump Station, Wallington, NJ.*** Responsible for the determination of the boundary for this facility. This complex boundary involved the former Passaic River Pierhead and Bulkhead Lines, the relocated Pierhead and Bulkhead Lines due to the construction on Route 21, locating Route 21 monumentation to establish the highway right of way lines, Tidelands Grants and determining the location of former roadways currently inundated by the relocation of the Passaic River.
- ***Old Stone Church Road Bridge Replacement, Upper Saddle River, NJ.*** Supervised the field survey and performed the necessary record research and boundary analysis, met with the County of Bergen, and prepared the easement maps and legal descriptions for the property acquisition required this bridge replacement project in just 6 working days from authorization to proceed. Just as construction was set to begin, it was realized that the permanent and temporary easements were never acquired, and this project was made a priority so that the construction schedule would not be interrupted.
- ***East Orange Water Commission, Millburn, NJ.*** Performed record research and boundary analysis for this ancient property which consisted of over 255 acres. A closed survey baseline loop of three and three quarters miles was run and wetlands flagging was located throughout this heavily wooded and mainly undeveloped property. Record deeds for the property dated back to the early 1900s and the latest road mapping for a portion of the property dated back to 1916.
- ***Bergen County Health Care Center, Rockleigh, NJ.*** Responsible for the determination of the boundary on this 50 acre tract. Since the deed of record did not close by 50', it was imperative that all available mapping and adjoining property deeds be thoroughly researched. More than 20 maps were assembled from the Bergen County Clerk's Office, the Bergen County Engineer's Office, the Borough of Rockleigh and other surveyors to aide in the resolution and establishment of the boundary.

Joseph C. O'Mahoney, P.L.S.
Licensed Surveyor



YEARS OF EXPERIENCE: 25 Years

EDUCATION:

Bachelor of Arts-Mathematics-Florida Atlantic University
Bachelor of Science- Surveying Engineering Technology-New Jersey Institute of Technology

REGISTRATION:

Professional Land Surveyor - New Jersey

EXPERIENCE:

Mr. O'Mahoney has provided surveying services for both the public and private sector and has been involved in many large-scale projects. He has performed and/or directed control, topographic, hydrographic, structural, cadastral, construction and railway surveys for federal, state, county and municipal agencies, as well as transportation authorities, utilizing state-of-the-art Global Navigation Satellite System (GNSS) equipment, including Real-Time Kinematic (RTK), total stations, high-density scanning (HDS) and data collectors. Mr. O'Mahoney is highly experienced in the discipline of boundary surveying, and heavy construction sites. He has performed and/or directed numerous boundary surveys, erected skyscrapers, and large bridges. He is also familiar with several CAD platforms as well as scanning software.

His project experience includes:

- **Hudson Yards, New York, N.Y.** Performed the original boundary survey for the largest retail development ever in the United States. He was also in charge of 6 field crews responsible for the steel erection for several of the buildings within the footprint of the site, including the retail section, Tower A, the Culture Shed, and the Vessel.
- **Saint Patrick's Cathedral, New York, N.Y.** Performed a 3-D HDS of the exterior of the cathedral during the exterior restoration. Also performed an interior survey of the parish house and the cardinal's residence, from field to finish, as well as a subfloor survey of the wing walls under the nave of the cathedral.
- **Farley Post Office and New York Penn Station, New York, N.Y.** Performed a control survey for the rehabilitation of Farley Post Office and the train & subway lines under Penn Station. Used the control survey to scan the railways and platforms underground.
- **Washington Monument Height Recertification, Washington, D.C.** Was part of a team invited by the National Park Services to recertify the height of the Washington Monument during its restoration in 1999 using static GPS.
- **Baltimore Penn Station, Baltimore, MD** In charge of preparing 3D drawings for the on-going rehabilitation of Penn Station in Baltimore
- **New Jersey Department of Transportation (NJDOT), Garden State Parkway & Burnt Tavern Road Interchange, Brick, N.J.** In charge of preparing a ROW and boundary survey for the 400 acres around the Burnt Tavern interchange.
- **Siphon Water Main, Brooklyn-Staten Island, N.Y.** In charge of the new water main connecting Brooklyn and Staten Island. Physically performed the field work as well as directed the CAD operator on how to prepare the deviation reports.
- **Woodhaven Residential Development, Old Bridge, N.J.** Performed GPS and terrestrial surveying for 1,200-acre site in Old Bridge, NJ. Performed existing conditions, layout, as-built, control, and wetland delineation surveys.

JOSEPH C. M. O'MAHONEY, P.L.S.

- ***108 Leonard Street, New York, N.Y.*** 15-story retrofit of an historic building in downtown Manhattan. Performed a best fit resolution of the existing skeleton to establish axis lines for the project. Challenges were found due to the 100-year-old building being built in two sections so the steel was actually not parallel and perpendicular. Performed an HDS of all the floors to create a heat map of the unevenness of the floors as well as display the location of the steel.
- ***540 West 25th Street, New York, N.Y.*** Scanned vacant lot in Manhattan prior to construction to assist the developer in making their building fit. Challenges were imparting the fact that even though a deed may have one dimension written, the real world may have a different dimension.
- ***NJDOT Bridge Clearance Study, multiple locations in N.J.*** Responsible for preparing reports to NJDOT detailing the clearances of several hundred bridges under NJDOT jurisdiction using HDS.
- ***Javits Center Boundary and Topographic Survey, New York, N.Y.*** Performed a boundary and topographic survey of the Javits Center on the West Side Highway for its expansion
- ***George Washington Bridge Elevator Study, Fort Lee, NJ & New York, N.Y.*** Responsible for a plumbness study for the rack and pinions that guide the elevators on both towers.
- ***Wittpenn Bridge on Route 7, Kearny to Jersey City, N.J.*** Responsible for setting control, staking out, and as-builts during the construction of the new Wittpenn Bridge. Challenges including steel expansion and scaling control from grid to ground and reporting to contractor when plans were in conflict with each other.

James M. Woodward
Environmental Scientist / GIS Analyst



YEARS OF EXPERIENCE: 7 Years

EDUCATION:

B.S. Environmental Science, Richard Stockton College of New Jersey

ACCREDITATIONS / CERTIFICATIONS:

Extensive Geographic Information Systems (GIS) Training
Rutgers University: ArcGIS Editing and Data Development
Field Data Collection Management Using ArcGIS
ArcGIS IV: Sharing Content on the Web
UAS Drone Pilot (Lic. No. 4162069)
OSHA 10-Hour Construction Safety
OSHA Confined Space Entry

EXPERIENCE:

Mr. Woodward has seven (7) years of experience in the field of environmental science that includes a broad range of environmental services such as the acquisition of local, County, State and Federal regulatory permits, environmental guidance, wetland delineations, and GIS mapping services. Mr. Woodward has extensive experience utilizing Geographic Information Systems (GIS) including evaluating environmental constraints, preparing necessary mapping for permit applications, creating job-specific data (e.g. 3D modeling), and generating/maintaining web mapping services.

Mr. Woodward's specific environmental experience includes the following representative projects:

GEOGRAPHIC INFORMATION SYSTEMS (GIS)

- ***North Jersey District Water Supply Commission (NJDWSC), Wanaque, NJ.*** Created an extensive geodatabase designed to organize all of the NJDWSC assets. Located over 625 manholes along all 3 aqueducts spanning over 37 miles which were then field verified using a Trimble Geo-7x GPS.
- ***Nitrate Dilution Analysis – Non-Sewer Service Area, Oakland, NJ.*** Utilized ArcGIS to calculate the total floor area square footage for all non-residential structures within the Borough of Oakland. The resulting square footage was then converted into the total equivalent dwelling units and added with the residential data to generate the total projected dwelling units within the non-sewer service area.
- ***Passaic Valley Sewerage Commission (PVSC) Plant/Interceptor Asset Inventory. Various Municipalities, NJ.*** The project included the preparation of a survey grade GIS database of the PVSC plant and ancillary facilities including all assets along an existing 22-mile main interceptor and 15-miles of branch interceptor. The asset inventory included locating over 580 manholes, 46 active combined sewer outfalls regulator chambers, and 5.5-miles of outfall line.
- ***MS4 Stormwater Outfall Survey, (Various Municipalities).*** Responsible for the inspection and condition assessment of all stormwater outfalls discharging into waterways within the Boroughs of Oakland, Emerson, Westwood, North Haledon, Rochelle Park, Paramus, Upper Saddle River, Moonachie, Closter, Waldwick, Townships of North Bergen, Wyckoff, and the City of Garfield.
- ***Wanaque Valley Regional Sewerage Authority (WVRSa), Wanaque, NJ.*** Created an Asset Management Plan to properly manage, operate, and maintain all parts of the wastewater treatment plant. Created shapefiles of the field verified equipment inventory used during the treatment process, as well as a web application viewer displaying the information.

James M. Woodward
Environmental Scientist / GIS Analyst

- ***Borough of Franklin Lakes Tax Parcels, Franklin Lakes, NJ.*** Developed various geodatabases of Borough's assets and provided on-site services to install and establish workstations capable of accessing a variety of municipal information. The project included the digitization of the existing tax maps as well as various other Borough owned assets.
- ***Eastern Concrete Quarry Reclamation, Glen Gardner, NJ.*** Determined the optimal reclamation plan for the proposed quarry expansion. Utilizing ArcGIS, developed multiple 3D Models and renders of the viable reclamation plans. Created videos containing clips from the different models and imported the information into a public presentation

ENVIRONMENTAL PERMITTING

- ***Bergen County's Emergency Bridge Repair Projects.*** Regulatory permitting for over 80 bridges and culverts classified as Scour Critical by the New Jersey Department of Transportation. Specific permits obtained for the projects included Freshwater Wetlands General Permits, Flood Hazard Area Individual and General Permits, and Waterfront Development Individual Permits.
- ***Port Liberté Bulkhead Reconstruction, Jersey City NJ.*** Regulatory Permitting for the replacement of a 1,400 linear foot (L.F.) sheet pile wall along the New York Bay which was damaged by Hurricane Sandy.
- ***Glen Island Park Seawall and Pavilion Restoration, New Rochelle, NY.*** Regulatory permitting for the restoration of a seawall and historic pavilions along the Long Island Sound which was damaged by Superstorm Sandy. Permits obtained included NYSDEC Tidal Wetlands Permit and Army Corps of Engineers Nationwide Permit.
- ***Parson's Pond Park Nature Trail, Franklin Lakes, NJ.*** Regulatory permitting for the expansion of the existing nature trail system including the construction of three (3) timber bridge crossings, 3,000 L.F. of multi-use bike paths (JORBA), and 2,850 L.F. of primitive nature trails.

WETLAND DELINEATION

- ***Great Oak Park, Oakland, NJ.*** Wetland delineation along a 39-acre site for the purpose of converting an abandoned swim club and recreation facility into a public park.
- ***Crestmont Country Club, West Orange, NJ.*** Wetland delineation along a 74-acre golf course for the purpose of locating the ideal position for a minor subdivision.
- ***Former NIKE Missile Base, Wayne, NJ.*** Wetland delineation along a 34-acre site associated with the proposed County of Passaic Department of Public Work Facilities.

UNMANNED AIRCRAFT SYSTEMS (UAS) PILOT

- ***Kinderkamack Road Improvements, Emerson, NJ.*** Captured drone images of the completed roadway widening and realignment project. Utilizing the images, created a New Jersey Society of Municipal Engineers (NJSME) award winning display board.
- ***Kuiken Brothers Newark, Newark, NJ.*** Captured drone images of the proposed Kuiken Brothers property along Doremus Avenue and the Newark Bay. Created an orthomosaic image of the 9.3-acre property that was used for site development.
- ***Observer Highway Improvements, Hoboken, NJ.*** Captured drone images and videos along the new pedestrian-bike paths constructed along Observer Highway within the city.

John R. Valentin, P.E.
Department Head - Structures

YEARS OF EXPERIENCE: 37 Years

EDUCATION:

B.S. Civil Engineering, University of Pittsburgh (1982)

REGISTRATION:

Professional Engineer - New Jersey, New York

EXPERIENCE:

Mr. Valentin has over 37 years of structural experience related to the inspection, design and construction of bridges, culverts, retaining walls, overhead sign structures, marine and waterfront structures, dams, parking structures, buildings, and utility facilities of varying sizes. He has served as a Project Manager and a Project Engineer on structural projects for numerous governmental agencies. These agencies include the New Jersey Turnpike Authority (NJTA), New Jersey Department of Transportation (NJDOT), New York City Transit (NYC Transit), New York City Department of Transportation (NYCDOT), the Triborough Bridge and Tunnel Authority (TBTA), Metro-North Railroad (Metro-North), New York State Department of Transportation (NYSDOT), New York State Thruway Authority (NYSTA) and the Port Authority of NY & NJ (PANY&NJ). He has also served as Project Manager and Structural Task Leader for numerous counties in New Jersey, including Bergen, Passaic, Sussex, and Warren. In addition, he has provided structural support to numerous northern New Jersey municipalities, and utility authorities.

RELEVANT UTILITY AUTHORITY AND MUNICIPAL PROJECTS:

- **Township of Wayne-** Water System Improvements Jacobus Avenue Booster Pumping Station and Lower Preakness Sewage Pumping station Improvements (2017)
- **North Jersey District Water Supply-** Condition/Structural Assessment and Preparation of Allowable Loads Tables for Commission Owned Pipelines (2014)
- **North Bergen Municipal Utilities Authority-** Sewage Treatment Plant- Retrofit of Rotating Biological Contactor Units, North Bergen, NJ (2008)
- **Bergen County Utilities Authority -** Rehabilitation of Barge Docking Facilities, Borough of Little Ferry, NJ (2005)

BRIDGES - RECONSTRUCTION:

- **County of Essex –** Replacement of Kingsland Road Bridge Over Third River, City of Clifton and Township of Nutley, NJ (2016)
- **County of Bergen,** Interim Rehabilitation of East Anderson Street Bridge Over the Hackensack, City of Hackensack, Township of Teaneck, NJ. (2016)
- **NYSTA, Rehabilitation of two (2) Structures.** Rynex Corners Road over the Thruway structure, and the Thruway over the Otsquago Creek structure. (2014)
- **County of Bergen –** Repair of Colonial Road Arch Over Pond Brook, Structure No. 0200-20A, Borough of Franklin Lakes, New Jersey: (2014)
- **County of Bergen –** Replacement of River Drive/Saddle River Avenue Bridge (a.k.a. Marsellus Bridge) over Saddle River, City of Garfield/Township of South Hackensack, NJ (2014)
- **County of Bergen –** Engineering Design Services for County Bridge No. 0200-23A on East Anderson Street Over the Hackensack River, City of Hackensack/Township of Teaneck, NJ (2014)
- **County of Warren –** Reconstruction of Bridge #08001A, Charles Street Over Trout Brook, Town of Hackettstown, New Jersey. (2013)
- **County of Passaic –** Rehabilitation of Warburton Avenue Bridge over Goffle Brook, Borough of Hawthorne, NJ. (Construction Completed - 2014)

JOHN R. VALENTIN, P.E.

- **County of Bergen** – Restoration of Cooper’s Pond - Borough of Bergenfield, New Jersey. (2011)
- **County of Sussex** – Rehabilitation of Bridges No. P-13 over Little Flat Brook, Township of Sandyston; B-03 over Culver Creek, Borough of Branchville; and D-30 over Papakating Creek, Township of Frankford, NJ. (2009 - 2010)
- **New Jersey Turnpike Authority (NJTA) GSP Division** – Driscoll Bridge Rehabilitation and Widening Project. (1999-2004)
- **County of Bergen** - Rehabilitation of Bear Swamp Road Bridge over the Ramapo River in the Township of Mahwah. (2006)
- **County of Passaic** - Design of the superstructure and the widening of the substructure of French Hill Road over Singac Brook. (2005 and 2007)
- **County of Bergen** – Bergen Turnpike Bridge Rehabilitation and Widening, Ridgefield and Ridgefield Park. (2005-2009)
- **County of Warren** – Rehabilitation of Warren County Bridge #03002, Hardwick/Prospect Streets over Pequest River. (2007-2008)
- **Route I-280 Bridge Eastbound and Westbound Bridges** over Eagle Rock Avenue and the I-280 Westbound Bridge over Erie Railroad, Roseland, Essex County, NJ. (2005)
- **DOT** - Park Avenue Viaduct. Inspector for rehabilitation of this structure.
- **NJDOT** - Manhattan Avenue Viaduct. Structural Engineer for the inspection and rehabilitation design.
- **NYS DOT** - Bridge Component Rehabilitation, Queens, Brooklyn and Staten Island.
- **NYCDOT** – Rehabilitation Unionport Bridge over Westchester Creek, Bronx, NY. (1997)
- **TBTA** - Repairs to Bridge Substructures, New York.
- **NYCDOT** - Queens Boulevard Bridge, Long Island City, NY.

BRIDGES – REPLACEMENT - CULVERTS:

- **County of Essex** - Replacement of Hoover Avenue Bridge Over Third River, Township of Bloomfield, NJ. (2017)
- **Intersection Improvement at Franklin Ave. and Circle Ave. Franklin Lakes, NJ** – Culvert Design. (2015)
- **County of Warren** – Culvert #01006 Replacement, County Route #612 Over a Tributary to the Pequest River, Township of Allamuchy, New Jersey. (2014)
- **County of Essex** – Lyons Avenue Bridge over Elizabeth River, Township of Irvington, NJ (2014)
- **County of Warren** - Replacement of Bridge No. 10031 County Route 519 Over the Lopatcong Creek, Township of Harmony, NJ. (2012)
- **County of Mercer** - Replacement of Mercer County Bridge #230.9 Carrying Old Mill Road Over Stony Brook, Township of Hopewell, NJ. (2012)
- **County of Essex** - Becker Park Improvements, Roseland and Livingston, NJ. (2011)
- **County of Essex** – Replacement of the Springfield Avenue and Chancellor Avenue Culverts at Lightning Brook. (2005 and 2007)
- **County of Passaic** - Replacement of the Belmont Avenue Bridge over Molly Ann's Brook, Borough of Haledon. (2005/2006)
- **NJDOT** - Arnot Street Bridge over Saddle River, Lodi, NJ. (1998)
- **NYS DOT** - Long Island Expressway (LIE), HOV and Capacity Improvement Project, Cross Island Parkway to the NYC Line, Exits 30-32, Queens County, NY. (1998-1999)

BRIDGES – PEDESTRIAN:

- **City of Hackensack/Borough of Teaneck** – Structural Inspection of the Fairleigh Dickenson University Pedestrian Bridge – Metropolitan Campus, Bergen County, NJ (2016)
- **County of Bergen** - Replacement of Bridge #SRCP 13 - Saddle River County Park, Borough of Glen Rock/Village of Ridgewood, NJ (2014)
- **Borough of Franklin Lakes** – Memorial Pond Trail Pedestrian Truss Bridge – Bergen County, NJ.

Thomas W. O'Fallon, P.E.
Structural Engineer



YEARS OF EXPERIENCE: 20 Years

EDUCATION:

B.S. Civil Engineering, New Jersey Institute of Technology (1997)
M.S. Civil Engineering, New Jersey Institute of Technology (2002)

REGISTRATION:

Professional Engineer - New Jersey (Lic. No. 43800)
- New York (Lic. No. Pending)
FHWA-NHI- 130055 Safety Inspection of In-Service Bridges (2019)

EXPERIENCE:

Mr. O'Fallon has over 20 years of experience in the design of structural engineering projects of varying sizes. He has extensive experience in the design, analysis, inspection and report preparation of buildings, bridge and highway structures, dams and marine structures of varying sizes. He has participated in all phases of projects from initial concept through contract documents preparation.

Mr. O'Fallon's project experience includes:

- ***Khubani Enterprises, Inc. - In-Depth Inspection/Design for the Rehabilitation of Parking Garage – 250 Prospect Street – City of East Orange, Essex County, NJ.*** Structural Engineer. Work included the visual inspection of the garage structural elements to assess its condition. Prepared an inspection framing plan, letter report, and photographs, along with recommendations for maintenance or rehabilitation. (2017-2018)
- ***Khubani Enterprises, Inc. - In-Depth Visual Inspection/Design for the Rehabilitation of Parking Garage – 1 Harmon Meadow Boulevard – Township of Secaucus - Hudson County, NJ.*** Structural Engineer. Work included the visual inspection and assessment of previous deck repairs, as well as, remaining structural elements to assess their condition. Prepared an inspection framing plan, letter report, and photographs, along with recommendations for maintenance or rehabilitation. (2017-2018)
- ***Township of Teaneck, Design of Bullet Resistant Backstop for Teaneck Police Department, 900 Teaneck Road - Bergen County, NJ.*** Structural Task Leader for the construction of a bullet resistant backstop at the above referenced building. I was responsible for the preparation of plans and specifications for public bidding, the design for the removal and replacement of the existing backstop and overhead deflection plates, attending pre-bid meetings, review shop drawings and perform construction inspection.(2017)
- ***County of Essex, Superstructure Replacement of Lyons Ave. Bridge, Structure No. 0700-025, Over Elizabeth River, Irvington, NJ.*** Structural Design Engineer for the superstructure replacement of this existing 28 feet single span concrete slab structure. The scope of services include: topographic survey, superstructure replacement design (proposed superstructure is prestressed concrete, adjacent slab beams with a composite concrete deck, MPT (detour), and environmental permitting (2016)

THOMAS W. O'FALLON, P.E.

- ***County of Passaic, County of Essex – Replacement of Kingsland Road Bridge over Third River, City of Clifton and Township of Nutley:*** This bridge is located in two (2) localities (City of Clifton and Town of Nutley in Passaic and Essex Counties, respectively). The existing concrete arch bridge will be replaced by a prestressed beam bridge. Due to the parkland setting of the structure, the proposed parapets as well as the wingwalls will be faced with stone to better blend into the surroundings. (ongoing)
- ***JCP&L, Transmission Tower Foundation Certifications, Construction Contracts along Garden State Parkway (GSP), NJ.*** Design engineer responsible for the review of foundation designs provided for 31 transmission towers at nine (9) project locations. Involved coordination with First Energy designers, review loading analyses, geotechnical reports, drilled shaft designs, and anchor cage designs. Prepared plans sign and seal in accordance with Authority requirements.(2013)
- ***Private Development, Port Liberte, Jersey City, NJ.*** Structural designer for repairs to the waterfront structures. This project included the rebuilding efforts of the Community in response to Hurricane Sandy. This project included the reconstruction of the existing failed sheetpile bulkhead sections along the Hudson River, remediation of various sections of timber walkways, and retaining wall systems. (2013-2014)
- ***Borough of New Milford, Hirschfeld Brook, NJ.*** Structural Task Leader on this project which involved the design of dry-laid boulder as part of a widening and desilting of the Hirschfeld Brook channel in New Milford. (2011) NM-481
- ***County of Bergen - River Drive Improvements, Garfield, NJ.*** Structural Task Leader for the design of a soldier pile retaining wall on this project for the widening of a two-lane, 0.8 mile section of River Drive from 28 feet to 46 feet to accommodate two (2) lanes in each direction. (2011-2012) GF-1473
- ***County of Warren, Reconstruction of Bridge No. 10031 County Route 519 Over the Lopatcong Creek, Harmony, NJ.*** The project included Design for replacement of an existing, 22' single span bridge over Lopatcong Creek with a 27' span – three (3)-sided precast concrete rigid frame structure. Major components of the project included roadway widening and realignment, structure replacement with precast including wingwalls, foundation design, hydraulic analysis, survey and wetland delineation, MPT/Detour plan preparation, design of a bypass roadway for a temporary bridge to allow for road closure and rapid structure construction, ROW takings and descriptions, utility relocation and NJDEP permitting. (2009-2012)
- ***County of Hudson, Castle Point and Sinatra Park Waterfront Walkway Reconstruction, Hoboken, NJ.*** This project involved the inspection, design, and preparation of contract plans for the replacement of collapsed portions of the sea walls at Castle Point (150') and Sinatra Park (38'). Items of work include construction of new pile supported retaining walls and platform structures, concrete repairs and pile jacketing at portions of existing seawall to remain and replacement of damaged walkway and soccer field sections. Acquisition of the necessary NJDEP and ACOE permits was also performed. (2012-2014)
- ***Barge Dock Rehabilitation – Bergen County Utility Authority, Little Ferry, NJ.*** Structural designer for repairs to the barge docking facility for the Authorities' sludge barge. This project included the repair to the three existing mooring platforms. The repairs included concrete repairs and repairs to the timber piles. Work also included repair to the timber walkways between the platforms. This project also included design of a new steel fender system, including piles and steel framing system. (2011-2013)

THOMAS W. O'FALLON, P.E.

- ***County of Sussex, Rehabilitation of Bridge B-03 over Culver Creek, Borough of Branchville, NJ.*** Structural Design Engineer which included superstructure/substructure repairs for Bridge B-03. This project involved the removal of the existing bridge deck topping and installing a new composite deck system. (2009 - 2010)
- ***Borough of Oakland - Allerman Brook Improvements, Bergen County, NJ.*** Structural Task Leader on this project which included design of reinforced concrete and gabion retaining walls for the stabilization of Allerman Brook resulting from severe erosion in the Borough of Oakland. (2010) OK-444
- ***Engineering Design Services for the Rehabilitation of Sussex County Bridge D-30, Sussex County Route 560 over Papakating Creek, Frankford Township, Sussex County, NJ.*** Structural Design Engineer on this project which included superstructure replacement and repairs to substructure. The superstructure design included a 64' long composite prestressed beam bridge. The design included sidewalks and bridge parapets. Contract plans implementing staged construction utilizing portable signals were developed for Bridge No. D-30. (2009-2010)
- ***Borough of Elmwood Park. Reconstruction of Van Riper Avenue Culvert, Construction Easement, Block 1401, Lot 6 - Bridge Engineer.*** The project involves the replacement of an existing 9.5' wide x 4' high culvert over Fleischer Brook to alleviate flooding within the area. Finalized design and contract documents for new 12' wide x 5.75' high three sided precast concrete arch structure subsequent to receipt of DEP permits. (2009)
- ***County of Warren, Rehabilitation of Warren County Bridge #03002, Hardwick/Prospect Streets over Pequest River, NJ.*** Bridge Design Engineer for the rehabilitation of the existing Prospect Street Bridge (arch bridge) over the Pequest River and adjacent to the arch bridge and the construction of a new pedestrian bridge to accommodate a pedestrian traffic, removal of the roadway fill on top of the arch, rehabilitating the top and bottom of the arch and placing membrane waterproofing on top of the arch. New pedestrian bridge substructure was designed to be supported on sheet piles limiting extent of construction impact to waterway. (2007-2008)
- ***220 Palisade Avenue, Cliffside Park, NJ.*** Performed the structural inspection and prepared report to assess structural integrity of the steel entrance walkway providing access to the rear apartments located above the parking garage. The steel exhibited severe deterioration. (2008)
- ***County of Bergen, Rivervale Road Slope Stabilization, Township of Hopewell, NJ.*** Structural Task Leader in charge if the design phase of the project, and perform engineering studies to ascertain the cause of the settlement of water located adjacent to the Hackensack River and to prepare construction plans to mitigate the unstable conditions and establishing proper drainage where required. The preliminary engineering consisted of the preparation of concept schemes for the unstable conditions on Rivervale Road should the results of the geotechnical investigation yield the potential for a less expensive wall system alternative compared to the previously design project. Project consisted of installing a steel sheet pile retaining walls, including the stallation of curbs, fences, guide rail and other incidentals. In additon permit applications were required to meet the current NJDEP and Bergen County Soil Conservation District regulations.(2007-2011) Gary Ascolese, BCDPW (139,000.00) (BC-93A).
- ***Passaic Valley Sewer Commission, Water Pollution Control Facilities, Degritting and Screening System Improvements, NJ.*** Structural Engineer for the design of steel framed building extension. Design of CIP piles, foundation slab, concrete encased steel columns and framing, and roofing system. Design of aluminum platforms and mechanical supports. All design in conformance with BOCA, ACI, and AISC. (2003)

Peter Pannucci, Jr., P.E.
Department Head – Construction Management / Inspection



YEARS OF EXPERIENCE: 27 Years

EDUCATION:

B.S. Civil Engineering, New Jersey Institute of Technology

REGISTRATION/CERTIFICATION:

Professional Engineer – New Jersey
NJSAT – Asphalt Paving Construction Technology
OSHA – 10-Hour Construction Industry
Confined Space Entry Certified
ACI Concrete Field Testing – Grade 1
Highway Inspection Procedures for Federal Aid Projects
First Energy Substation Entry Training
Manual of Operations Training

EXPERIENCE:

Mr. Pannucci has over 27-years of expertise in all aspects of major construction as a Project Manager, Resident Engineer and Design Engineer. His extensive knowledge related to construction engineering is a result of his experience which covers all types of construction projects including the construction associated with highways, local roadways, bridges, building renovations, parking structures, substation construction, utilities, sewer and water, drainage systems, asphalt, excavation, concrete (all phases) and easement work. Mr. Pannucci's experience includes projects for the New Jersey Turnpike Authority (NJTA), the New Jersey Department of Transportation (NJDOT) and numerous county and local governmental agencies throughout northern New Jersey.

Project Management/Resident Engineer experience includes the following:

- ***New Jersey Turnpike Authority (NJTA) OPS No. T3757, Contract No. T100.465, Bridge Repairs and Resurfacing Milepost 92 to 122 and the Newark Bay Hudson County Extension (2020) – Project Manager.*** This project included the repairs and rehabilitation of various bridge components of roughly 25 structures on the New Jersey Turnpike. Repairs and rehabilitations included, but were not limited to, concrete deck spall repairs, pier and abutment spall repairs, concrete deck replacement, parapet reconstruction, joint reconstruction, joint seal replacement, structural steel repairs, laminated elastomeric bearings, drainage improvements, temporary and permanent lighting improvements and MPT. Also included was roadway resurfacing including approximately 30,000 SY of pavement removal, 12,500 SY of membrane waterproofing, 160 LF of crack sealing membrane, 27,500 LF of polymerized joint adhesive, and 3,500 Tons of Hot Mix Asphalt 12.5M76 Surface Course. In order to maximize production on the structures without significant impacts to the travelling public, construction was performed during day shifts, evening shifts, and high-intensity construction cycles (HICCs) where NJTA Operations permitted extended lane closures between Friday evening and Monday morning and work was performed continuously until the work was completed. (February 2020 – present) Approximate Construction Cost \$15 million. Contact: Jason Massa, P.E. 732-750-5300 ext. 8448
- ***Suez Water Company, Lead Service Line Removals*** – This project included the construction management and inspections of investigations completed by Contractor to identify lead service lines. Lead service lines were removed and replaced when identified with new copper service lines, including new corporation taps at main and new curbstops. Coordination provided with residents, municipalities, counties and Suez for logistics and customer interactions, including providing informative literature to

PETER PANNUCCI, JR., P.E.

residents. 2000+ locations were completed in North Bergen, Cliffside Park, Ridgefield Park, Englewood and Fort Lee for an estimated cost of \$8.7 million. In addition, permits were applied for and obtained for over 17 municipalities and two counties for the program.

- ***Garden State Parkway Water Main Lining, East Orange, Essex County, NJ*** - This Project required field investigation to figuring the cause of expansion joints failure in the existing 8" and 12" steel water mains suspended under the Garden State Parkway overpasses in four different locations. The project included removal and replacement of 8" and 12" gate valves, videotaping, cleaning, design and determination of proper lining material that structurally supported the water mains where the expansion joints had failed. The major item of this project included 200 linear feet of 8" and approximately 600 linear feet of 12" structural watermain linings. Approximate construction cost of \$700,000.
- ***Borough of Hawthorne, Goffle Hill Tank Improvements***. This project consisted of the rehabilitation of the 1 million gallon capacity water tank including structural repairs, sandblasting interior and exterior surfaces, replacement of tank appurtenances and repainting. Also performed but not included in this project was the installation of two (2) isolation valves in the existing 12" water main. (Approximate construction cost of \$640,000)
- ***SUEZ, New Jersey***. This project included full time construction inspection services and project coordination for multiple Bergen County Municipalities for water main lining using 3M epoxy and water main pipe installation on various streets in Rutherford, Fairview, Hackensack, Oradell, Harrington Park, Emerson, and Washington Township.
- ***SUEZ New Jersey (formerly United Water)***. This project included full time construction inspection services and project coordination for Municipalities in Hudson and Bergen Counties. The projects consisted of complete water main replacements, hydrant and service replacements, bacterial testing, roadway restoration, milling and paving on various streets in Union City, NJ and Washington Township, NJ.
- ***Capital Improvements Project – Wanaque Valley Regional Sewer Authority – Project Manager***. Contract work included the replacement of the following: two (2) generators, six (6) mechanical aerators and drives, three (3) influent sewage pumps and drives, rotary drum sludge thickener system, two (2) non-potable pumps and drives, two (2) dilution water pumps, three (3) sludge holding tank mixers and one (1) UV system. Contract work also includes installation of the following: 200L.F. of 10" DIP force main, deep bed scrubber odor control system, upgraded electrical service and motor control center. (June 2015 – May 2017)
- ***Borough of Fort Lee, Lower Main Street Pump Station Upgrades and Force Main – Project Manager***. This project involved major upgrades to the Lower Main Street Pump Station in Fort Lee, NJ, including a pump station shutdown with bypass system, construction of a new comminutor chamber, new electrical service with transformer, the installation of a 5,000 l.f. DIP force main, air release manholes, blow-off valves, existing drainage system improvements, concrete curb and patterned sidewalk, asphalt milling and paving, decorative street lighting, tree planting and street signage. Approximate construction cost of \$5 Million.
- ***City of Hackensack, NJ, Storm Sewer Separation, Phase I – Project Manager***. Project included the installation of various size storm pipes, storm chambers, manholes, inlets and 43" x 68" RCECP. Project also included various sized in-place sewer pipe liners, concrete sidewalks, and curbs, HMA base course, HMA surface course, traffic striping and maintenance and protection of traffic. Approximate construction cost of \$2.4 Million.

Frank J. Masella, P.E.
Department Head – Construction Management & Inspection



YEARS OF EXPERIENCE: 26 Years

EDUCATION: B.S. Civil Engineering, North Carolina State University, 1991

REGISTRATION:

Professional Engineer - NJ - #41963
NICET Level III - Registration #085718
NJSAT - Certified Paving Technician
ACI - Grade I Concrete Field Testing Technician
OSHA Safety Course – 10 Hour
OSHA Confined Space Entry Training
Highway Inspection Procedures for Federal Aid Projects
First Energy Substation Entry Training
First Energy Manual of Operations Training
First Energy Critical Infrastructure Protection (CIP) Training
First Energy FERC Standards of Conduct Training
First Energy Anti-Phishing Essentials Training
First Energy Cyber Security Awareness Training (CSAT)

EXPERIENCE:

Mr. Masella has 26-years of experience on major construction projects as a Construction Manager and Resident Engineer. He has extensive experience in highway and bridge construction and resurfacing projects, utility construction, sewer and water projects, drainage systems, asphalt, excavation, concrete (all phases), easement work and all facets of highway traffic control and protection. Mr. Masella's construction engineering experience includes projects for the New Jersey Turnpike Authority (NJTA), the New Jersey Department of Transportation (NJDOT), various local and county projects and projects involving regional and municipal utility authorities and commissions. Mr. Masella also has construction management experience on First Energy/JCP&L property pertaining to construction inside Electrical Substations and on overhead transmission lines.

Construction Management Experience Includes:

- ***First Energy/JCP&L Larrabee Substation Reconfiguration, Convert 8 Breaker Ring Bus to 12 Breaker-and-a-Half – Construction Manager.*** This project is currently on going and scheduled to be completed by June 2018. This project was strategically designed and engineered into eight phases. The purpose of this project is to add new protection schemes to existing and new equipment as well as give First Energy the flexibility to isolate certain lines, bus and or equipment during emergencies and or routine maintenance. This project consisted/consists of drilling and pouring 143 - 3'-0" x 9'-0" buss supports, ccvt/wave trap and switch stand foundations, 4 - 6'-0" x 17'-6" dead end foundations and 5 - 230kV breaker pad foundations, installing 8,500' of 4" aluminum bus, 1,500' of 2 ½" aluminum buss, 1 Alstom 230kV live tank circuit switcher, 10 group manual operated disconnect switches, 5 - 230kV circuit breakers, 9 ccvt's, 3 wave traps with line tuners, lightning arrestors, insulators, extra high strength insulators, 35,000'+ of various size wire, 25,000' of 4" schedule 40 conduit, 41 Larrabee substation relays, 10 Larrabee substation UPLC's, 12 remote end relays, 7 remote end UPLC's, and 1 transfer trip panel. Approximate construction cost of \$6.3 Million.

FRANK J. MASELLA, P.E.

- ***First Energy/JCP&L Capacitor Reactor Installation Projects – Construction Manager.*** Program involving below and above grade work at multiple substations including Bernardsville, Chester, East Flemington, Long Branch, Pohatcong and Riverdale. Below grade work included foundation construction, conduit relocation, and grounding restoration. Above grade work included installation of structural steel, capacitor reactors, and bus ties.
- ***First Energy/JCP&L Whippany Substation VBM Replacement Project – Construction Manager.*** Project included the replacement of 34.5kV capacitor switchers, current transformers and control panels for capacitor banks 1, 2 and 3. Below grade work included the installation of foundations, duct bank, pull boxes, conduit, and grounding. Above grade work included the installation of all structures, equipment, conductors, and pre-wired switchboards. New equipment being installed included three 34.5kV capacitor switchers, eighteen free standing current transformers, twelve surge arresters, one DC panelboard, three control panels, and miscellaneous associated relays. Approximate construction cost of \$0.6 Million.
- ***First Energy/JCP&L Oyster Creek Substation Breaker Replacement Project – Construction Manager.*** Project included the replacement of the Q121, R144, S145 and Z52 breakers with new Siemens 72.5kV, 3000A, 40kA breakers. New control wire was pulled for all the breakers back to the existing control house inside existing conduit with 2 breakers receiving new line side disconnect switches. New cable tray was installed inside the control house. Approximate construction cost of \$0.9 Million.
- ***City of Clifton, Storm and Sanitary Sewer Improvements – Project Manager.*** Project includes construction of new underground storm and sanitary pipe and chambers and pipe as well as cleaning, CCTV and lining of designated existing sanitary sewer pipes. Approximate construction cost of \$1 Million.
- ***North Bergen Municipal Utilities Authority - Resident Engineer.*** Two simultaneous projects: a \$7.4 Million rehabilitation of the sewage pump stations at the Central Treatment Plant and at 8th Street and a \$9.1 Million, 3-mile sewer force main installation using butt-fused HDPE pipe.
- ***Garfield Water Works, Phase 1, Garfield, NJ - Resident Engineer.*** This project includes the construction of 1.4 and 0.4 million gallon water storage tanks, the construction of a new water pump station building, installation of ductile iron water pipe and the installation of a SCADA System. (Approximate construction cost of \$5.7 Million)
- ***Passaic Valley Sewerage Commissioners (PVSC) - Resident Engineer.*** Sludge Degritting and Screening System Improvements. This sewerage plant and process upgrade includes a building addition, installation of new process equipment and pile foundations. (Approximate construction cost of \$7.6 Million)
- ***Resident Engineer.*** Culvert replacement for the Borough of Elmwood Park and roadway realignment for the County of Bergen in Elmwood Park. (Approximate construction cost of \$1 Million)
- ***Resident Engineer.*** Recreation facility for the Township of Mahwah, which includes a concession building, a synthetic turf multi-purpose field and a skateboard park at Continental Soldiers Park. (Approximate construction cost of \$4 Million)
- ***Resident Engineer.*** Intersection Improvement Project (\$1.4 Million) for the County of Bergen at Grand Avenue and Chestnut Ridge Road. This project includes roadway widening and reconstruction, drainage improvements and guide rail improvements.

MORRIS COUNTY MUA

Administrative Documents

- A. Failure to submit the following documents at the time of proposal opening may be cause for rejection of the proposal.

Owner's Checkmarks		Bidder's Initials
X	Statement of Ownership Disclosure	VB
X	Acknowledgement of receipt of any notice(s) or revision(s) or addenda to an advertisement, specifications or bid document(s)	VB
X	Non-Collusion Affidavit	VB
X	Disclosure of Investment Activities in Iran	VB
X	Affidavit of Non-Debarred Status	VB
X	Price Proposal Table	VB
X	Price Proposal Signature Form	VB
X	Experience & Qualifications Questionnaire	VB
X	Corporate Acknowledgement	VB
X	Acknowledgement of Contractor, if Bidder is a Partnership N/A	VB
X	Acknowledgement of Contractor, if Bidder is an Individual N/A	VB
X	Acknowledgement of Contractor, LLC N/A	VB
X	Certified Copy of Resolution of Board of Directors, if Bidder is a Corporation	VB
X	Affirmative Action Compliance Notice	VB
X	Mandatory EEO Language	VB
X	Certificate of Employee Information Report/AA-302	VB
X	Americans with Disability Act of 1990	VB
X	Pay to Play Advisory Notice	VB
X	W-9	VB
X	Anti-Discrimination Requirements	VB

MORRIS COUNTY MUA

Administrative Documents

B. The following documents are to be submitted prior to contract award.

Owner's Checkmarks		Bidder's Initials
X	New Jersey Business Registration Certificate	(KB)
X	Certificate of Insurance	(KB)

C. The undersigned hereby acknowledges and has submitted the above required documents.

Business Name: Boswell Engineering, Inc.

Representative's Name: Kevin J. Boswell, P.E.

Representative's Signature:



Date: March 3, 2021

Phone: 201-641-0770

MORRIS COUNTY MUA

Acknowledgement of Receipt of Addenda

Pursuant to the NJSA 40A:11-23.1a, the undersigned Vendor hereby acknowledges receipt of the following notices, revisions or addenda to the Legal Notice, Proposal Specifications or Proposal Documents. By indicating date of receipt, Vendor acknowledges the submitted Proposal takes into account the provisions of the notice, revision or addendum. Note that the local unit's record of proper notice to Vendors, per NJSA 40A:11-23(c), shall take precedence and Vendor's failure to acknowledge receipt of addenda shall result in rejection of Proposal.

Title of Addendum/Revision	Received Via (email, fax, etc.)	Date Received
Clarification #1	email	2/25/2021

☐ No Addenda Issued Initials _____

ACKNOWLEDGEMENT OF VENDOR

Name of Vendor: Boswell Engineering, Inc.

Vendor's Signature: 

Printed Name & Title: Kevin J. Boswell, P.E., Vice President

Date: March 3, 2021

MORRIS COUNTY MUA

Price Proposal Table

PROPOSAL TO:

Morris County Municipal Utilities Authority

FOR:

Professional Engineering Services for Mount Arlington Pump Station Improvement Project

TASK 1. Existing Conditions

Lump Sum 27,195.00

TASK 2. Engineering Design Services

Lump Sum 94,435.00

Allowance. Unanticipated & Unexpected Work

\$15,000.00

Total \$136,630.00

Firm Name: Boswell Engineering, Inc.

Signature: 

Kevin J. Boswell, P.E.

Date: March 3, 2021

Official Position: Vice President

Note: Lump Sum Tasks require 'Level of Effort' (man hour) breakdown and projected out-of-pocket expenses for each subtask. Hourly Rates table for all resources shall be provided with the proposal.

Cost Estimate

[illegible]

BOSWELL ENGINEERING

2021 RATE SCHEDULE

**** THE FOLLOWING RATES ARE INCLUSIVE OF SECRETARIAL AND CLERICAL ASSISTANCE, AND ROUTINE TELEPHONE AND EMAIL COMMUNICATIONS.**

<u>Title</u>	<u>Hourly Rate</u>
Project Manager	\$216.00
Senior Project Engineer	\$211.00
Project Engineer	\$205.00
Senior Design Engineer	\$194.00
Design Engineer	\$185.00
Asst. Design Engineer	\$122.00
CADD Technician	\$152.00
Survey Field Crew (2 Person Team)	\$328.00
Survey Analyst	\$205.00
Field Technician	\$79.00
Resident Engineer	\$152.00
Inspector	\$132.00
Inspector II	\$101.00
Licensed Site Remediation Professional (LSRP)	\$216.00
Senior Environmental Scientist	\$211.00
Environmental Scientist	\$90.00
Senior Environmental Specialist	\$205.00
Environmental Specialist	\$132.00
GIS Analyst	\$128.00

MORRIS COUNTY MUA

Price Proposal Signature Form

From: Boswell Engineering, Inc.

Vendor: The undersigned has reviewed the proposal submitted in response **RFP#2021-W01 Professional Engineering Services for Mount Arlington Pump Station Improvement Project** issued by the MCMUA.

We affirm that the contents of the proposal (which proposal is incorporated herein by reference) is accurate, factual and complete to the best of our knowledge and belief, and that the proposal is submitted in good faith upon express understanding that any false statements may result in the disqualification of our proposal.

The undersigned hereby agrees to furnish all labor, materials, supplies, supervision, equipment and other means as necessary to perform all the work and furnish all the materials in accordance with the Specifications at the proposed prices within the time constraints of Specifications:

Business Name: Boswell Engineering, Inc.

Representative's Name (print): Kevin J. Boswell, P.E.

Representative's Signature: 

Title: Vice President

Complete Address: 330 Phillips Avenue

South Hackensack, New Jersey 07606

Affix Seal if Corporation:

MORRIS COUNTY MUA

Experience & Qualifications Questionnaire

This questionnaire must be filled out and submitted as a part of the Proposal. Failure to complete this form or to provide any of the requested information will be grounds for the rejection of the proposal. If additional space is required, the respondent shall add additional sheets, which identify the question being answered.

Number of years in business under present name & address:

97 years in Bergen County

If less than 5 years, list previous names and address:

Within the last 5 years has the business or any officer/partner failed to complete a contract awarded to them: No. If yes, provide the details in on a separate page.

Have any liens and lawsuits been filed against the company in the past 5 years: No

If yes, please provide details:

List similar services you are now providing for which you have signed contract, but not yet started work:

N/A

List all major subcontractors to be used to complete the service and the area of their responsibility:

N/A

MORRIS COUNTY MUA

Experience & Qualifications Questionnaire

Please provide at least 3 references below:

Name: North Bergen Municipal Utilities Authority **Phone:** 201-422-0100

Address: 6200 Tonnelle Ave., North Bergen, New Jersey 07047

Equipment/Service Provided: Design, planning, permitting for new pump station to convey flow to
PVSC

Contract Amount: \$5 Million

Name: Wanaque Valley Regional Sewerage Authority **Phone:** 973-839-3000 x 100

Address: 101 Warren Hagstrom Boulevard, Wanaque, New Jersey 07465

Equipment/Service Provided: Design, planning, permitting for wastewater treatment plant & pump station
improvements

Contract Amount: \$4.3 Million

Name: Borough of Fort Lee **Phone:** 201-592-3500 x1500

Address: 309 Main Street, Fort Lee, New Jersey 07024

Equipment/Service Provided: Design & permitting for pump station improvements and associated force main

Contract Amount: \$3 Million

Name: Township of Mahwah **Phone:** 201-529-5757

Address: 475 Corporate Drive, Mahwah, New Jersey 07430

Equipment/Service Provided: Design, planning, permitting for various pump stations throughout township

Contract Amount: \$3 Million

MORRIS COUNTY MUA

Mandatory EEO Language

EXHIBIT A

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE

N.J.S.A. 10:5-31 et seq. (P.L.1975, c.127)

N.J.A.C. 17:27 et seq.

GOODS, GENERAL SERVICES, AND PROFESSIONAL SERVICES CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union of the contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to meet targeted county employment goals established in accordance with N.J.A.C. 17:27-5.2.

MORRIS COUNTY MUA

Mandatory EEO Language

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, and labor unions, that it does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the targeted employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions. The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

Letter of Federal Affirmative Action Plan Approval;

Certificate of Employee Information Report; or

Employee Information Report Form AA-302 (electronically provided by the Division and distributed to the public agency through the Division's website at: http://www.state.nj.us/treasury/contract_compliance.)

The contractor and its subcontractors shall furnish such reports or other documents to the Division of Purchase & Property, CCAU, EEO Monitoring Program as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Purchase & Property, CCAU, EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq

Business Name: Boswell Engineering, Inc.

Representative's Name (print): Kevin J. Boswell, P.E.

Representative's Signature:



Date: February 25, 2021

MORRIS COUNTY MUA

Affirmative Action Compliance Notice

EXHIBIT A

GOODS, GENERAL SERVICES, AND PROFESSIONAL SERVICES CONTRACTS

This form is a summary of the successful vendor's requirement to comply with the requirements of N.J.S.A. 10:5-31 and N.J.A.C. 17:27.

The successful respondent shall submit to the public agency, after notification of award but prior to execution of the contract, one of the following three documents as forms of evidence:

1. Letter of Federal Affirmative Action Plan Approval
2. Certificate of Employee Information Report
3. A photocopy of an Employee Information Report (AA302) provided by the Division and distributed to the public agency to be completed by the vendor in accordance with N.J.A.C. 17:27-4.

The successful vendor(s) must submit the copies of the AA302 Report to the Division of Contract Compliance and Equal Employment Opportunity in Public Contracts (Division). The Public Agency copy is submitted to the public agency, and the vendor copy is retained by the vendor.

The undersigned vendor further understands that his/her proposal shall be rejected as non-responsive if said vendor fails to comply with the requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27.

Business Name: Boswell Engineering, Inc.

Representative's Name (print): Kevin J. Boswell, P.E.

Representative's Signature:



Date: February 25, 2021

Phone: 201-641-0770

MORRIS COUNTY MUA

Affirmative Action Evidence

Sample Federal Letter of Approval

Attachment 5

U.S. Department of Labor

Employment Standards Administration
Office of Federal Contract Compliance Programs
Newark Area Office
124 Evergreen Place, Fourth Floor
East Orange, NJ 07108



February 27, 20_

Dear

Our recent compliance review of your establishment's equal employment opportunity policies and practices was completed on February 27, 20_.

We found no apparent deficiencies or violations of Executive Order 11266, as amended, Section 503 of the Rehabilitation Act of 1973 or 38 USC 2012 (the Vietnam Era Veterans Readjustment Assistance Act). Accordingly, your establishment is deemed to be in compliance with these laws based on the material reviewed.

The Office of Federal Contract Compliance Programs sincerely appreciates the cooperation and courtesies extended by you and your staff during the conduct of the compliance review.

Sincerely,

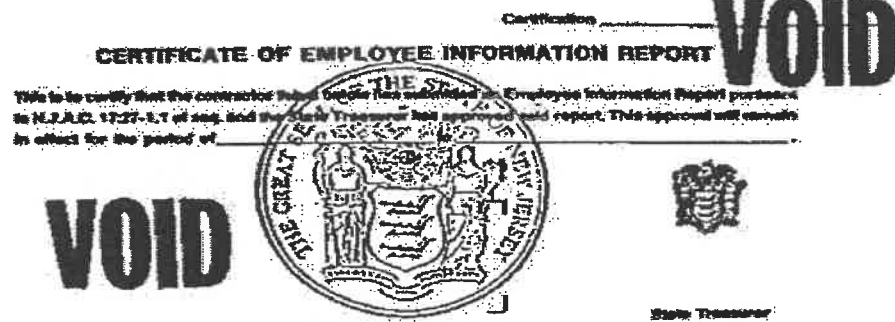
Area Office Director.

MORRIS COUNTY MUA

Affirmative Action Evidence

Attachment # 6

SAMPLE CERTIFICATE OF EMPLOYEE INFORMATION REPORT



MORRIS COUNTY MUA

Affirmative Action Evidence

Attachment 7

Form AA302
Rev. 11/11

STATE OF NEW JERSEY Division of Purchase & Property Contract Compliance Audit Unit EEO Monitoring Program

EMPLOYEE INFORMATION REPORT

IMPORTANT: READ INSTRUCTIONS CAREFULLY BEFORE COMPLETING FORM. FAILURE TO PROPERLY COMPLETE THE ENTIRE FORM AND TO SUBMIT THE REQUIRED \$750.00 FEE MAY DELAY ISSUANCE OF YOUR CERTIFICATE. DO NOT SUBMIT EEO-1 REPORT FOR SECTION B, ITEM 11. For instructions on completing the form go to: <http://www.state.nj.us/divisionofpurchaseandproperty/compliance/eo1/aa302nm.pdf>

SECTION A - COMPANY IDENTIFICATION

1. FID. NO. OR SOCIAL SECURITY:	2. TYPE OF BUSINESS: <input type="checkbox"/> 1. MFG. <input type="checkbox"/> 2. SERVICE <input type="checkbox"/> 3. WHOLESALE <input type="checkbox"/> 4. RETAIL <input type="checkbox"/> 5. OTHER	3. TOTAL NO. EMPLOYEES IN THE ENTIRE COMPANY
4. COMPANY NAME		
5. STREET	CITY	COUNTY STATE ZIP CODE
6. NAME OF PARENT OR AFFILIATED COMPANY (IF NONE SO INDICATE)		CITY STATE ZIP CODE
7. CHECK ONE: IS THE COMPANY: <input type="checkbox"/> SINGLE-ESTABLISHMENT EMPLOYER <input type="checkbox"/> MULTIPLE-ESTABLISHMENT EMPLOYER		
8. IF MULTIPLE-ESTABLISHMENT EMPLOYER: STATE THE NUMBER OF ESTABLISHMENTS IN NJ		
9. TOTAL NUMBER OF EMPLOYEES AT ESTABLISHMENT WHICH HAS BEEN AWARDED THE CONTRACT		
10. PUBLIC AGENCY AWARDED CONTRACT		
CITY COUNTY STATE ZIP CODE		

Official Use Only	DATE RECEIVED	ISSUANCE DATE	ASSIGNED CERTIFICATION NUMBER

SECTION B - EMPLOYMENT DATA

11. Report all permanent, temporary and part-time employees ON YOUR OWN PAYROLL. Enter the appropriate figures on all lines and in all columns. Where there are no employees in a particular category, enter a zero. Include ALL employees, not just those in minority/non-minority categories in columns 1, 2, & 3. **DO NOT SUBMIT UNNEEDED REPORT.**

JOB CATEGORIES	ALL EMPLOYEES			PERMANENT MINORITY/NON MINORITY EMPLOYEE BREAKDOWN									
	COL. 1 TOTAL (CODE 2 & 3)	COL. 2 MALE	COL. 3 FEMALE	MALE					FEMALE				
				BLACK	HISPANIC	AMER. INDIAN	ASIAN	NON-MIN.	BLACK	HISPANIC	AMER. INDIAN	ASIAN	NON-MIN.
Officials/Managers													
Professionals													
Technicians													
Sales Workers													
Office & Clerical													
Craftworkers (Skilled)													
Operatives (Semi-skilled)													
Laborers (Unskilled)													
Service Workers													
TOTAL													
Total employment from previous Report (if any)													
Temporary & Part-Time Employees													

The data below shall NOT be included in the figures for the appropriate categories above:

12. HOW WAS INFORMATION AS TO RACE OR ETHNIC GROUP IN SECTION B OBTAINED? <input type="checkbox"/> 1. Visual Survey <input type="checkbox"/> 2. Employment Record <input type="checkbox"/> 3. Other (Specify)	14. IS THIS THE FIRST Employee Information Report Submitted? 1. YES <input type="checkbox"/> 2. NO <input type="checkbox"/>	15. IF NO, DATE LAST REPORT SUBMITTED MO. DAY YEAR
13. DATES OF PAYROLL PERIOD USED From: To:		

SECTION C - SIGNATURE AND IDENTIFICATION

16. NAME OF PERSON COMPLETING FORM (Print or Type)	SIGNATURE	TITLE	DATE MO DAY YEAR
17. ADDRESS NO. & STREET	CITY	COUNTY STATE	ZIP CODE PHONE (AREA CODE NO. EXTENSION)

MORRIS COUNTY MUA

Employee Information Report Instructions – Form AA302

If you have a current Certificate of Employee Information Report, please submit with your Bid Proposal.

For forms or more information: www.state.nj.us/treasury/contract_compliance



State of New Jersey

DEPARTMENT OF THE TREASURY
DIVISION OF PURCHASE AND PROPERTY
CONTRACT COMPLIANCE & AUDIT UNIT
EEO MONITORING PROGRAM
33 WEST STATE STREET
P. O. BOX 206
TRENTON, NEW JERSEY 08625-0206

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

ELIZABETH MAHER MUOIO
State Treasurer

MAURICE A. GRIFFIN
Acting Director

APR 29 2019

ISSUANCE CERTIFICATE OF EMPLOYEE INFORMATION REPORT

Enclosed is your Certificate of Employee information Report (hereinafter referred to as the "Certificate" and issued based on the Employee Information Report (AA-302) form completed by a representative of your company or firm. Immediately upon receipt, this certificate should be forwarded to the person in your company or firm responsible for ensuring equal employment opportunity and/or overseeing the company or firm's contracts with public agencies. Typically, this person may be your company or firm's Human Resources Manager, Equal Employment Opportunity Officer or Contract Administrator. If you do not know to whom the certificate should be forward, kindly forward it to the head of your company or firm. Copies of the certificate should also be distributed to all facilities of your company or firm who engage in bidding on public contracts in New Jersey and who use the same federal identification number and company name. The certificate should be retained in your records until the date it expires. This is very important since a request for a duplicate/replacement certificate will result in a \$75.00 fee.

On future successful bids on public contracts, your company or firm must present a photocopy of the certificate to the public agency awarding the contract after notification of the award but prior to execution of a goods and services or professional services contract. Failure to present the certificate within the time limits prescribed may result in the awarded contract being rescinded in accordance with N.J.A.C. 17:27-4.3b.

Please be advised that this certificate has been approved only for the time periods stated on the certificate. As early as ninety (90) days prior to its expiration, the Division will forward a renewal notification. Upon the Division's receipt of a properly completed renewal application and \$150.00 application fee, it will issue a renewal certificate. In addition, representatives from the Division may conduct periodic visits and/or request additional information to monitor and evaluate the continued equal employment opportunity compliance of your company or firm. Moreover, the Division may provide your company or firm with technical assistance, as required. Please be sure to notify the Division immediately if your company's federal identification number, name or address changes.

If you have any questions, please call (609) 292-5473 and a representative will be available to assist you.

Rev. 4/18

Certification 1502

CERTIFICATE OF EMPLOYEE INFORMATION REPORT RENEWAL

This is to certify that the contractor listed below has submitted an Employee Information Report pursuant to N.J.A.C. 17:27-1.1 et seq. and the State Treasurer has approved said report. This approval will remain in effect for the period of 15-JUN-2019 to 15-JUN-2022

BOSWELL ENGINEERING, INC.
330 SOUTH HACKENSACK
S. HACKENSACK NJ 07606



Elizabeth Maher Muoio
ELIZABETH MAHER MUOIO
State Treasurer

MORRIS COUNTY MUA

Americans with Disabilities Act of 1990

The CONTRACTOR and the OWNER do hereby agree that the provisions of Title 11 of the Americans With Disabilities Act of 1990 (the "ACT") (42 U.S.C. §12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs, and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereto, are made a part of this contract. In providing any act benefit, or service on behalf of the OWNER pursuant to this contract, the CONTRACTOR agrees that the performance shall be in strict compliance with the Act. In the event that the Contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the CONTRACTOR shall defend the OWNER in any action or administrative proceeding commenced pursuant to this Act. The Contractor shall indemnify, protect, and save harmless the OWNER, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages, of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The CONTRACTOR shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the OWNER grievance procedure, the CONTRACTOR agrees to abide by any decision of the OWNER which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the OWNER or if the OWNER must any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the CONTRACTOR shall satisfy and discharge the same at its OWN expense.

The OWNER shall, as soon as practicable after a claim has been made against it, give written notice thereof to the CONTRACTOR along with full and complete particulars of the claim. If any action or administrative proceedings is brought against the OWNER or any of its agents, servants, and employees, the OWNER shall expeditiously forward or have forwarded to the CONTRACTOR every demand, complaint, notice, summons, pleading, or other process received by the OWNER or its representatives.

It is expressly agreed and understood that any approval by the OWNER of the services provided by the CONTRACTOR pursuant to this contract will not relieve the CONTRACTOR of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless the OWNER pursuant to this paragraph.

It is further agreed and understood that the OWNER assumes no obligation to indemnify or save harmless the CONTRACTOR, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the CONTRACTOR expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the CONTRACTOR'S obligations assumed in this Agreement, nor shall they be construed to relieve the CONTRACTOR from any liability, nor preclude the OWNER from taking any other actions available to it under any other provisions of the Agreement or otherwise at law.

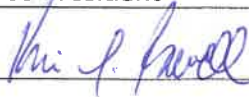
Furthermore, the contractor expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the contractor's obligations assumed in this Agreement, nor shall they be construed to relieve the contractor from any liability, nor preclude the owner from taking any other actions available to it under any other provisions of the Agreement or otherwise at law.

Business Name (Print): Boswell Engineering, Inc.

Representative's Name (Print): Kevin J. Boswell, P.E.

Representative's Title: Vice President

Representative's Signature:



Phone: 201-641-0770

Date: February 25, 2021

MORRIS COUNTY MUA

New Jersey Anti-Discrimination

Pursuant to N.J.S.A. 10:2-1:

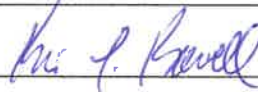
- a. In the hiring of persons for the performance of work under this contract or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under this contract, no contractor, nor any person acting on behalf of such contractor or subcontractor, shall, by reason of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates;
- b. No contractor, subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engaged in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under such contract, on account of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex;
- c. There may be deducted from the amount payable to the contractor by the contracting public agency, under this contract, a penalty of \$ 50.00 for each person for each calendar day during which such person is discriminated against or intimidated in violation of the provisions of the contract; and
- d. This contract may be canceled or terminated by the contracting public agency, and all money due or to become due hereunder may be forfeited, for any violation of this section of the contract occurring after notice to the contractor from the contracting public agency of any prior violation of this section of the contract.

Business Name (Print): Boswell Engineering, Inc.

Representative's Name (Print): Kevin J. Boswell, P.E.

Representative's Title: Vice President

Representative's Signature:



Phone: 201-641-0770

Date: February 25, 2021

MORRIS COUNTY MUA

Statement of Ownership Disclosure

N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L. 2016, c.43)

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information with the bid is cause for automatic rejection of the bid or proposal.

Name of Organization: Boswell Engineering, Inc.

Organization Address: 330 Phillips Avenue, South Hackensack, New Jersey 07606

Part I Check the box that represents the type of business organization:

- ☐ Sole Proprietorship (skip Parts II and III, execute certification in Part IV)
- ☐ Non-Profit Corporation (skip Parts II and III, execute certification in Part IV)
- ☒ For-Profit Corporation (any type) ☐ Limited Liability Company (LLC)
- ☐ Partnership ☐ Limited Partnership ☐ Limited Liability Partnership (LLP)
- ☐ Other (be specific): _____

Part II

- ☒ The list below contains the names and addresses of all stockholders in the corporation who own 10 percent or more of its stock, of any class, or of all individual partners in the partnership who own a 10 percent or greater interest therein, or of all members in the limited liability company who own a 10 percent or greater interest therein, as the case may be. (**COMPLETE THE LIST BELOW IN THIS SECTION**)

OR

- ☐ No one stockholder in the corporation owns 10 percent or more of its stock, of any class, or no individual partner in the partnership owns a 10 percent or greater interest therein, or no member in the limited liability company owns a 10 percent or greater interest therein, as the case may be. (**SKIP TO PART IV**)

(Please attach additional sheets if more space is needed):

Name of Individual or Business Entity	Address
Italconsult USA Corporation	799 Madison Avenue, Albany, New York 12208

MORRIS COUNTY MUA

Statement of Ownership Disclosure

Part III DISCLOSURE OF 10% OR GREATER OWNERSHIP IN THE STOCKHOLDERS, PARTNERS OR LLC MEMBERS LISTED IN PART II

If a bidder has a direct or indirect parent entity which is publicly traded, and any person holds a 10 percent or greater beneficial interest in the publicly traded parent entity as of the last annual federal Security and Exchange Commission (SEC) or foreign equivalent filing, ownership disclosure can be met by providing links to the website(s) containing the last annual filing(s) with the federal Securities and Exchange Commission (or foreign equivalent) that contain the name and address of each person holding a 10% or greater beneficial interest in the publicly traded parent entity, along with the relevant page numbers of the filing(s) that contain the information on each such person. **Attach additional sheets if more space is needed.**

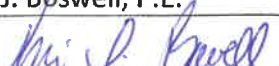
Website (URL) containing the last annual SEC (or foreign equivalent) filing	Page #'s

Please list the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II other than for any publicly traded parent entities referenced above. **The disclosure shall be continued until names and addresses of every noncorporate stockholder, and individual partner, and member exceeding the 10 percent ownership criteria established pursuant to N.J.S.A. 52:25-24.2 has been listed. Attach additional sheets if more space is needed.**

Stockholder/Partner/Member and Corresponding Entity Listed in Part II	Address
1. Italconsult S.p.A.	Via di Villa Ricotti, n. 20, Rome, Italy 00161
2. Intesa Sanpaola S.p.A.	Piazza San Carlo, n. 156, Torino, Italy 10121
3. Autostrade & Strade Engineering S.p.A.	Via Torremuzza, n. 19, Palermo, Italy 90133
4. Antonio Bevilacqua	Piazza Fonderia, n. 10, Palermo, Italy 90133

Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the **Morris County Municipal Utilities Authority** is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with **Morris County Municipal Utilities Authority** to notify the **Morris County Municipal Utilities Authority** in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the, permitting the **Morris County Municipal Utilities Authority** to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):	Kevin J. Boswell, P.E.	Title:	Vice President
Signature:	 29	Date:	February 25, 2021

MORRIS COUNTY MUA

Corporate Acknowledgement

STATE OF)) SS:
COUNTY OF Bergen)

On this 25th day of February in the year 2021, before me personally came
and appeared

Kevin J. Boswell

to me known, who, being by me duly sworn, did depose and say, that he resides at
760 Peach Tree Lane

Franklin Lakes, New Jersey 07417

That he is the
Vice President

(principle executive officer or duly authorized representative)

of

Boswell Engineering, Inc.

the Corporation described in and which executed the foregoing instrument; that he knows the seal of
said Corporation; that one of the impressions affixed to said instrument in an impression of such
seal, that it was so affixed by order of the Board of Directors of said Corporation, and he signed his
name thereto by like order.

(Seal)

Notary Public

Linda T. Kearns

Bergen County, State NJ

LINDA T. KEARNS
NOTARY PUBLIC
STATE OF NEW JERSEY
MY COMMISSION EXPIRES AUGUST 1, 2024

N/A

MORRIS COUNTY MUA

Acknowledgement of Contractor, if a Partnership or LLP

STATE OF)
COUNTY OF) SS:
)

On this _____ day of _____ in the year 20____, before me personally came

and _____ appeared

to me known, who, being by me duly sworn, did depose and say, that he is the:

_____ of the
(general partner or duly authorized representative)

firm of: _____

described in and which executed the foregoing instrument by and with the consent of all partners and he acknowledged to me that he executed the same as and for the act and deed of said firm.

(Seal)

Notary Public

_____ County, State

N/A

MORRIS COUNTY MUA

Acknowledgement of Contractor, if an Individual

STATE OF)
COUNTY OF) SS:
)

On this _____ day of _____ in the year 20____, before me personally
came and appeared _____

to me known, who, being by me duly sworn, did depose and say, that he is the person described in
and who executed the foregoing instrument and acknowledged to me that he executed the same.

(Seal)

Notary Public

County, State

N/A

MORRIS COUNTY MUA

Acknowledgement of Contractor, if a Limited Liability Company

STATE OF _____)
) SS:
COUNTY OF _____)

On this _____ day of _____ in the year 20____, before me personally came

and _____ appeared

to me known, who, being by me duly sworn, did depose and say, that he is the:

_____ of the
(Managing Member of LLC or duly authorized representative)

firm of: _____

described in and which executed the foregoing instrument by and with the consent of all partners and he acknowledged to me that he executed the same as and for the act and deed of said firm.

(Seal)

Notary Public

_____ County, State

MORRIS COUNTY MUA

Certified Copy of Resolution of Board of Directors

Boswell Engineering, Inc.

(Name of Corporation)

RESOLVED that Kevin J. Boswell, Vice President
(Person Authorized to Sign) (Title)

of Boswell Engineering, Inc. be authorized to sign and submit the Proposal of this
(Name of Corporation)

Corporation for the following project:

Professional Engineering Services for Mount Arlington Pump Station Improvement Project

The foregoing is a true and correct copy of the Resolution adopted by

Boswell Engineering, Inc. at a meeting of its Board of Directors

held on the 1st day of March, 2021.

By B. J. Rypkema
Brian J. Rypkema, Esq.

Title Secretary

(SEAL)

This form must be completed if the Proposer is a Corporation.

MORRIS COUNTY MUA

New Jersey Business Registration Certification

Pursuant to N.J.S.A. 52:32-44, the Morris County Municipal Utilities Authority is prohibited from entering into a contract with an entity unless the bidder/proposer/contractor, and each subcontractor that is required by law to be named in a bid/proposal/contract has a valid Business Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of the Treasury.

Prior to contract award or authorization, the contractor shall provide the Morris County Municipal Utilities Authority with its proof of business registration and that of any named subcontractor(s).

Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the Morris County Municipal Utilities Authority prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

During the course of contract performance:

- (1) the contractor shall not enter into a contract with a subcontractor unless the subcontractor first provides the contractor with a valid proof of business registration.
- (2) the contractor shall maintain and submit to the Morris County Municipal Utilities Authority a list of subcontractors and their addresses that may be updated from time to time.
- (3) the contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall collect and remit to the Director of the Division of Taxation in the Department of the Treasury, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into the State. Any questions in this regard can be directed to the Division of Taxation at (609)292-6400. Form NJ-REG can be filed online at <http://www.state.nj.us/treasury/revenue/busregcert.shtml>.

Before final payment is made under the contract, the contractor shall submit to the Morris County Municipal Utilities Authority a complete and accurate list of all subcontractors used and their addresses.

Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000, for each proof of business registration not properly provided under a contract with a contracting agency.

STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE
FOR STATE AGENCY AND CASINO SERVICE CONTRACTORS

DEPARTMENT OF TREASURY/
DIVISION OF REVENUE
PO BOX 252
TRENTON, N J 08646-0252

TAXPAYER NAME:

BOSWELL ENGINEERING, INC.

TRADE NAME:

TAXPAYER IDENTIFICATION#

221-896-168/000

CONTRACTOR CERTIFICATION#

0099760

ADDRESS:

330 PHILLIPS AVE
SO HACKENSACK NJ 07606

ISSUANCE DATE:

10/03/01

EFFECTIVE DATE:

07/01/66

Patricia A. Chiacchis

FORM-BRC(08-01)

Director, Division of Revenue

This Certificate is NOT assignable or transferable. It must be conspicuously displayed at above address.

MORRIS COUNTY MUA

Pay to Play Advisory

PAY TO PLAY ADVISORY

Disclosure Requirement

**P.L. 2005, Chapter 271, Section 3 Reporting
(N.J.S.A. 19:44A – 20.27)**

Any business entity that has received \$50,000 or more in contracts from government entities in a calendar year will be required to file an annual disclosure report with ELEC.

The report will include certain contributions and contract information for the current calendar year.

At a minimum, a list of all business entities that file an annual disclosure report will be listed on ELEC's website at www.elec.state.nj.us.

If you have any questions please contact ELEC at:
1-888-313-ELEC (toll free in NJ) or
609-292-8700

An analyst from ELEC's Special Programs Section will assist you.

Initials



MORRIS COUNTY MUA

Disclosure of Investment Activities in Iran

Pursuant to Public Law 2012, c. 25, any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must complete the certification below to attest, under penalty of perjury, that the person or entity, or one of the person or entity's parents, subsidiaries, or affiliates, is not identified on a list created and maintained by the Department of the Treasury as a person or entity engaging in investment activities in Iran. If the Director finds a person or entity to be in violation of the principles which are the subject of this law, s/he shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the person or entity.

I certify, pursuant to Public Law 2012, c. 25, that the person or entity listed for which I am authorized to bid/renew:

Bidder/Offoror: Boswell Engineering, Inc.

- ☒ is not providing goods or services of \$20,000,000 or more in the energy sector of Iran, including a person or entity that provides oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran; is not a financial institution that extends \$20,000,000 or more in credit to another person or entity, for 45 days or more, if that person or entity will use the credit to provide goods or services in the energy sector in Iran.

In the event that a person or entity is unable to make the above certification because it or one of its parents, subsidiaries, or affiliates has engaged in the above-referenced activities, a detailed, accurate and precise description of the activities must be provided in part 2 below to the Division of Purchase under penalty of perjury. Failure to provide such will result in the proposal being rendered as non-responsive and appropriate penalties, fines and/or sanctions will be assessed as provided by law.

PART 2: PLEASE PROVIDE FURTHER INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN

You must provide, accurate and precise description of the activities of the bidding person/entity, or one of its parents, subsidiaries or affiliates, engaging in the investment activities in Iran outlined above by completing the boxes below.

Name: _____ Relationship to Bidder/Offoror: _____

Description of Activities: _____

Duration of Engagement: _____ Anticipated Cessation Date: _____

Bidder/Offoror Contact Name: _____ Contact Phone Number: _____

Certification: I, being duly sworn upon my oath, hereby represent and state that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I attest that I am authorized to execute this certification on behalf of the above-referenced person or entity. I acknowledge that Town/ Township/ Borough/Government Agency is relying on the information contained herein and thereby acknowledge that I am under a continuing obligation from the date of this certification through the completion of any contracts with the MCMUA to notify the MCMUA in writing of any changes to the answers of information contained herein. I acknowledge that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I recognize that I am subject to criminal prosecution under the law and that it will also constitute a material breach of my agreement(s) with Morris County Municipal Utilities Authority, New Jersey and that the MCMUA at its option may declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print): Kevin J. Boswell, P.E. Signature: 

Title: Vice President Date: February 25, 2021

MORRIS COUNTY MUA

Non-Collusion Affidavit

STATE OF NEW JERSEY

MORRIS COUNTY MUNICIPAL UTILITIES AUTHORITY ss:

I certify that I am Vice President

of the firm of Boswell Engineering, Inc.

the Respondent making this Proposal for the bid or proposal for the above named project, that I executed the said proposal with full authority to do so; that said bidder has not, directly or indirectly entered into any agreement, participated in any collusion in connection with the above named project; and that all statements contained in said proposal and this affidavit are true, correct, and made with full knowledge that the Morris County Municipal Utilities Authority relies upon the truth of the statements contained in said Proposals and in the statements contained in this affidavit in awarding the contract for the said project.

I further warrant that no person or selling agency has been employed or retained to solicit or secure such contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except bona fide employees or bona fide established commercial or selling agencies.

Signature of Representative:


Kevin J. Boswell, P.E.

Subscribed and sworn to before me this 25th day of February, 2021

Print Name of Affiant: Kevin J. Boswell, P.E.

Notary Public of



My commission expires

LINDA T. KEARNS
NOTARY PUBLIC
STATE OF NEW JERSEY
MY COMMISSION EXPIRES AUGUST 1, 2024

MORRIS COUNTY MUA

Affidavit of Non-Debarred Status

AFFIDAVIT OF NON-DEBARRED STATUS

STATE OF NEW JERSEY)
) SS:
COUNTY OF Bergen)

I, Kevin J. Boswell ^{Borough} of the ~~City/Town~~ ^{of} Franklin Lakes, in the County of Bergen

and the State of New Jersey, of full age, being duly sworn according to law on my oath depose and say that:

I am Kevin J. Boswell, a Vice President
(Name) (Title, Position, etc.)

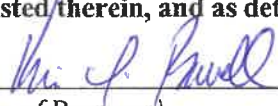
of Boswell Engineering, Inc., the Proposer
(Name of Firm, Company or Corporation)

making the Proposal for the Morris County Municipal Utilities Authority and that I executed the said Proposal with full authority so to do; that said Proposer at the time of making this Proposal is not included on the State of New Jersey, State Treasurer's List of Debarred, Suspended and Disqualified Proposers; and all statements contained in said Proposal and in this affidavit are true and correct and made with the full knowledge that the Morris County Municipal Utilities Authority relies upon the truth of the statements contained in said Proposal and in the Statements contained in this affidavit in awarding Contract for said project.

The undersigned further warrants that should the name of the firm, company or corporation making this Proposal appear on the State Treasurer's List of Debarred, Suspended and Disqualified Proposers at anytime prior to, and during the life of the Contract, including the Guarantee Period, that the Morris County Municipal Utilities Authority shall be immediately so notified by the signatory to this Eligibility Affidavit.

The undersigned understands that the firm, company or corporation making the Proposal as a CONTRACTOR is subject to debarment, suspension and/or disqualification in contracting with the State of New Jersey and the Department of Environmental Protection if the CONTRACTOR, pursuant to NJAC 7:1-5.2, commits any of the acts listed therein, and as determined according to applicable law and regulation.

(Seal if Corporation)


(Signature of Proposer)

Kevin J. Boswell, P.E., Vice President
(Printed or Typed Name & Title of Proposer)
330 Phillips Avenue, South Hackensack, NJ 07606
(Address of Proposer)

MORRIS COUNTY MUA

W-9

Form W-9
(Rev. November 2017)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the
requester. Do not
send to the IRS.

Print or type.
See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank. Boswell Engineering, Inc.	
2 Business name/disregarded entity name, if different from above	
3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes. <input checked="" type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) <u> </u> Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner. Other (see instructions) <u> </u>	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) <u> </u> Exemption from FATCA reporting code (if any) <u> </u> (Applies to accounts maintained outside the U.S.)
5 Address (number, street, and apt. or suite no.) See instructions. 330 Phillips Avenue	Requester's name and address (optional)
6 City, state, and ZIP code South Hackensack, NJ 07606	

7 List account number(s) here (optional)

Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number									
or									
Employer identification number									
2	2		1	8	9	6	1	6	8

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here Signature of U.S. person P. J. Redden

Date **February 25, 2021**

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.