

BOSWELL

EST 1924

Proposal

FOR THE PROVISION OF

TOWN OF BOONTON RFP #04-2025 GENERAL ENGINEERING SERVICES

SUBMIT: JUNE 24, 2025



330 PHILLIPS AVENUE
SOUTH HACKENSACK, NEW JERSEY
P. 201-641-0770

Engineered For Life

June 24, 2025

Neil Henry
Business Administrator
Town of Boonton
100 Washington Street
Boonton, NJ 07005

Re: Request for Proposal
Professional Services RFP #04-2025
General Engineering Services
File No. PR-25-13811

Dear Mr. Henry:

Boswell, Inc. (Boswell), in accordance with the Town of Boonton's (Town) Request for Proposal (RFP) is pleased to submit one (1) original and one (1) copy via USB of our Proposal for the provision of General Engineering Services.

Over the course of 100 years, Boswell has provided Professional Engineering services to numerous municipalities throughout New Jersey. This long-term commitment and our in-depth experience in this specialized discipline enables us to offer a comprehensive range of multi-disciplinary professional engineering and planning services to local governing bodies.

Please note, we are currently in the process of updating our company name from "Boswell Engineering, Inc." to "Boswell, Inc.". As a result, some documents within this proposal may still reflect our previous name.

We thank you for the opportunity to present our Proposal and look forward to our work with the Town. Should there be any questions or if any additional information is required, please do not hesitate to contact this office directly.

Very truly yours,



Paul W. Ferriero, P.E.
Vice President Municipal Services

PF/sc
Enclosures

Corporate Headquarters
330 Phillips Avenue
South Hackensack, NJ 07606
O 201 641 0770

New York Capital Region Office
799 Madison Avenue
Albany, NY 12208
O 518 436 6310

Hudson Valley Region Office
82 Washington Street Suite 201
Poughkeepsie, NY 12601
O 914 682 5900

Western New Jersey Office
180 Main Street P.O. Box 571
Chester, NJ 07930
O 908 879 6209

Central New Jersey Office
17 Model Avenue
Hopewell, NJ 08525
O 609 466 0002

TABLE OF CONTENTS

SECTION I – Administrative Information

- Statement of Interest
- Executive Summary
- Boswell Team

SECTION II – Professional Information

- Understanding the Town's Needs and Goals
- Scope of Services
- Municipal Engineering Qualifications
- Representative Experience
- Firm Capabilities
- References

SECTION III – Key Personnel/Resumes

SECTION IV – Cost Proposal

SECTION V – Required Documents

- Boswell Licenses/Certificates
- New Jersey Affirmative Action Compliance AA302
- W-9

SECTION I



Section I – Administrative Information

Statement of Interest: Based on our review of the Scope of Services, **Boswell Inc. (Boswell)** has a full understanding of all work necessary to provide General Engineering Services and looks forward to providing our myriad of various professional services to the Town of Boonton (Town). **Boswell** has been providing these services throughout the State of New Jersey for over 100 years and is committed to delivering personalized services commensurate with the needs of the Town. **Boswell** is headquartered in South Hackensack with offices in Chester and Hopewell, New Jersey, with additional offices in New York State. We have personnel located in the area who are readily available to complete the requisite work.

Company Name: **Boswell, Inc.**

Address: **Corporate Headquarters**
330 Phillips Avenue
South Hackensack, NJ 07606
Tel: 201-641-0770

Chester New Jersey Office (Servicing Office)
180 Main Street
Chester, NJ 07930
Tel: 908-879-6209

Hopewell New Jersey Office
17 Model Avenue
Hopewell, NJ 08525
Tel: 609-466-0002

Officer-in-Charge: Kevin J. Boswell, P.E., P.P., CME
President and CEO

Key Contact: Paul W. Ferriero, P.E., P.P., CME
Vice President

Peter C. Ten Kate, P.E., P.P.
Vice President

Boswell nor **Boswell's** principles have been engaged as a defendant in any litigation and/or has been subject to any professional disciplinary action over the last three (3) years.

Boswell has no ongoing investigations and/or litigation matters involving **Boswell's** performance as a municipal professional service.

Boswell has no existing or potential conflicts of interest.

Boswell's New Jersey Business Registration Certificate is included in Section V of this submission.

Boswell's W-9 Form is included in Section V of this submission.

Boswell has not represented within the past three (3) years and does not represent any adverse parties and claims whether administrative, civil, criminal, or otherwise, against the Town of Boonton.

Boswell maintains professional liability insurance through CNA, a carrier that holds an A (Excellent) rating.

Executive Summary

Company Overview – **Boswell**, a leading, fully integrated, multi-disciplinary engineering and consulting firm, providing a comprehensive range of engineering and power & energy services. **Boswell**, with its extensive professional engineering experience, is currently ranked nationally among Engineering News Record's (ENR) Top 500 Design and Top 100 Construction Management firms; regionally among ENR's Top Design Firms in the NY/NJ Metropolitan area; and statewide among NJBiz's Top 25 Engineering and Top Environmental firms. Since its founding in 1924, **Boswell** has kept pace with the rapidly changing technological advancements in the industry in order to consistently provide clients with current and up-to-date professional services. With over 280 employees, **Boswell** is recognized as one of the largest and most diverse engineering firms in the State of New Jersey. Our contingent of over 100 licensed and certified professionals possess the requisite background and technical experience to successfully provide multi-disciplinary engineering services regionally, statewide, and locally throughout New Jersey and New York.

Staff – **Boswell's** contingent of licensed and certified professionals include: New Jersey Licensed Professional Engineers (P.E.); Certified Municipal Engineers (CME); licensed Professional Planners (P.P); Certified Public Works Managers (CPWM); Licensed Site Remediation Professionals (LSRP); Certified Flood Plain Managers (CFPM); LEED Accredited Professionals (LEED-AP); Certified Professional Traffic Operations Engineers (PTOE); Certified International Municipal Signal Association Professionals (IMSA); Certified Landscape Designers; Board Certified Environmental Engineers (BCEE); Professional Land Surveyors (PLS); and, NICET Certified Construction Inspectors. These licensed and/or certified individuals provide a broad base of support with professional, managerial and administrative capabilities to provide their requisite expertise on the varied projects.

Services - **Boswell** has significant experience of providing consulting services to numerous New Jersey municipalities on a variety of public works, infrastructure and infrastructure maintenance, and environmental projects. These services include design, planning and analysis, engineering/environmental reports, surveys, and construction phase engineering associated with: roadway improvements; intersection improvements; traffic studies; signalization; streetscapes; development and redevelopment; curbs, sidewalks, and handicap ramps; safe routes to school; complete streets; safe streets to transit; pavement management; bridges and culverts; green infrastructure; stormwater management; drainage systems; parks and recreational facilities; emergency infrastructure and structural investigations; water systems; storm and sanitary sewers; pump stations; flood control; environmental studies and assessments; regulatory permitting; environmental compliance; site remediation; LSRP services; FEMA studies; site plans, subdivision and variance application review; municipal land use; master planning, COAH; preparation and updating of digital tax maps; geographic information systems (GIS); asset management; infrastructure maps; zoning map updates; preparation of bid documents; and engineer's cost estimates. We have partnered with respected geotechnical and MEP engineers for the delivery of building projects.

Meetings – **Boswell** is well suited to promptly accommodate meetings with the Mayor and Council, the various boards, governmental agencies, utility companies, residents, and/or any individuals/entities as directed by the administration. The close proximity of our office in Chester (within 22 miles of the Town), will enable us to attend meetings as required and be responsive on a 24/7 basis to any emergent situation in an expeditious and efficient manner. The firm's Lead Engineer assigned to the Town will attend meetings of the governing body, be available for consultation on a regular basis, and at the direction of the Town, assist residents in resolving problems and/or concerns. Detailed resumes of key personnel and support staff are included in Section III.

History and Experience – **Boswell's** outstanding history of engineering accomplishments is long, beginning as a two-man field office concentrating on surveying and civil engineering. For more than 100 years, **Boswell**, has successfully demonstrated its extensive experience in all aspects of professional engineering and power & energy services to federal, state, county, and local governmental agencies, as well as private-sector clients throughout the State of New Jersey. **Boswell** has established an exceptional reputation in every sector in which we operate. Our projects are accomplished with sound, long-lasting solutions that prioritize our clients' needs.

In addition, **Boswell** has consistently demonstrated its ability to assist public sector clients with regulatory compliance at the federal, state, regional, and local levels of government, independent planning commissions and non-profit organizations. We have established an excellent professional relationship with planning and engineering departments, the NJDOT, NJDEP, NJDCA, NJ Transit, County Soil Conservation Districts, multiple Municipal Utilities Authorities, and many utility entities including Veolia New Jersey, PSE&G, and First Energy. Furthermore we have considerable knowledge and expertise related to: Municipal Land Use; the Council on

Affordable Housing (COAH), Fair Share Housing Center (FSHC), NJDEP Land Resource Protection regulations, NJDEP Water Quality regulations, NJ Stormwater Management regulations; AASHTO and MUTCD regulations; ADA regulations; NJDOT Local Aid projects, (since CY 2016 **Boswell** has successfully prepared and submitted more than 200 NJDOT Local Aid applications which have resulted in the award of Local Aid Grants totaling more than \$50 million); NJDOT Special Transportation Aid projects, Federal Community Development Block Grant Program (CDBG); NJDEP Green Acres Grants Program; and New Jersey Environmental Infrastructure Trust (NJEIF) financing through the New Jersey Infrastructure Bank (successful NJIB loan/grants of more than \$163 million). Furthermore, **Boswell** is proficient in its ability to assist clients in areas such as administrative and planning, capital programming, pavement management, recreational facilities, public bidding, GIS/Asset Management support, grants and low interest loan applications, land use, master planning, and infrastructure maintenance.

Task Performance - **Boswell** ensures that the professional services rendered satisfy the established goals while maintaining total project control, a high level of technical quality, and project completion within the project's schedule and budget. The firm's Quality Management Plan (QMP) consistently meets our client's needs in the most professional, cost-effective, and efficient manner. This procedure serves to ensure delivery of a quality product, exceeding expectations, providing services in a timely manner, and ultimately resulting as a benefit to the taxpayers. **Boswell** achieves this goal by working in partnership with our clients, contractors, and all project stakeholders. We utilize Primavera P6 as our Project Portfolio Management (PPM) tool and have experienced project managers and schedulers building project planning and control systems and providing updates as each project develops from preliminary design to final design.

Boswell Team

Boswell has selected a highly skilled and knowledgeable team under the direction of Kevin J. Boswell, P.E. (Officer-In-Charge) and Paul Ferriero, P.E. (Vice President of Municipal Services), who will ultimately be responsible for the quality and timeliness of all projects performed on behalf of the Town. Mr. Boswell and Mr. Ferriero collectively have more than 80 years of experience in all aspects of municipal engineering, both being licensed professional engineers in the State of New Jersey since 1988. In addition, both professionals are Certified Municipal Engineers (CME), and licensed Professional Planners. **Boswell's** full proposed key personnel to be assigned to provide the Town's General Engineering Services is included with resumes in Section III.

SECTION II



Section II - Professional Information

Understanding the Town's Needs and Goals

The Town of Boonton has a long history of being a business and residential center in Morris County. The historic downtown area has provided unique opportunities for commercial revitalization in the context of the narrow Main Street. The Town has extensive road, water and sewer infrastructure that is aging and requires continued attention. **Boswell's** success in obtaining grants from a variety of sources can offset the impact of these costs on the tax payers.

Scope of Services

Boswell, over the course of 100 years, has successfully demonstrated its extensive experience in all aspects of Municipal Engineering. With this in-depth experience, combined with the local resource of our expert multidisciplinary staff, **Boswell** has the unique ability to not only understand the many concerns and intricacies a community is confronted with, but to anticipate these areas of concern. The firm and each of its professional staff is adept at effectively interfacing and communicating with elected officials, municipal employees, and local citizens. Our experience has proven that community outreach is essential to effectively meet the challenging needs of our clients.

Boswell will provide professional engineering services (see Services Summary following in this Section) commensurate with the needs of the Town. These services include but are not limited to the following:

- Provide engineering services as requested by the Town, Mayor, and Council and perform such duties as are prescribed by State statutes, general law and local ordinance;
- Prepare plans, designs, and specifications and perform construction phase engineering for public works and capital improvements projects undertaken by the Town;
- Provide and maintain surveys, maps, plans, specifications, and control records with respect to public works and facilities owned or operated by the Town;
- Review and develop site plans, coordinate with developers, and provide written comments to be compliant with building ordinances and Town requirements;
- Respond to Town emergencies, as needed, to ensure proper and expedient reconstruction or rehabilitation of infrastructure or systems;
- Review all aspects of ordinances and ensure plans are compliant with Local, State, and Federal regulations or legislation;
- When requested by the Mayor and Town Council, reply to inquiries from residents and/or commercial enterprises;
- Assist the Town in technical, administrative and planning areas (e.g. capital programming, municipal budgeting, traffic engineering, storm water management, water system, operations, GIS, assessment management, pavement management, public bidding, grants and low interest loan applications, regulatory compliance, land use, master planning, infrastructure maintenance, interagency coordination, etc.);
- Prepare reports and provide advice to the Mayor and Town Council regarding issues that arise that include but are not limited to: regulations, legislations, and ordinances;
- Attend regular, executive, and special meetings of the Mayor and Council.

Boswell is totally committed to achieve the highest performance standards in order to attain reliable and cost-effective solutions to the challenges facing local governmental entities. Furthermore, the **Boswell** organization remains steadfast in its pledge to provide personalized service commensurate with the needs of the community.

Municipal Engineering Qualifications

Business Organization - Boswell, a New Jersey based firm founded in 1924, was first licensed as a corporation in the State of New Jersey in 1969.

Municipal Engineering Experience - The firm has specialized in providing Municipal Engineering services to local governmental entities for 100 years. Over this period of time the firm has provided consulting services and has served as the Officially Appointed Municipal Engineer, Special Project Engineer and Engineering Consultant to Planning Boards, Zoning Boards of Adjustment and Joint Land Use Boards to numerous municipalities throughout New Jersey.

Certified Municipal Engineer(s) (CME) - Kevin J. Boswell, P.E., P.P., CME, President and CEO has more than 40 years municipal engineering expertise. Mr. Boswell serves as the officially appointed Municipal/Planning Board/Board of Adjustment Engineer and/or Special Engineering Consultant in several communities. Furthermore, in addition to Mr. Boswell, the firm's professional staff includes more than 20 engineers who have been certified by the New Jersey Society of Municipal Engineers as CMEs.

Multi-Disciplinary Services - Boswell is a fully integrated engineering firm with the in-house capabilities and local resources to provide a comprehensive range of services. A summary of these services includes: municipal engineering; transportation/traffic engineering; structural engineering (bridges/ buildings); environmental engineering (sewer/water); environmental science; LSRP services and regulatory compliance/permitting; parks/recreation/athletic field design; site/civil engineering; marine/ waterfront engineering; underwater inspection; construction management/inspection; surveying; Geographic Information System (GIS); and asset management. We have partnered with respected architects and MEP engineers for the delivery of building projects.

Good Standing with the Professional Community - Our commitment and active role in professional organizations illustrates the firm's reputable standing within the engineering profession.

Kevin J. Boswell, P.E., P.P., CME - Executive Committee, Director ACEC NJ.

Joseph Pomante, P.E., CME - Past President, NJ Society of Municipal Engineers (NJSME).

Giselle Diaz, P.E., CME - ACEC NJ Member, Environmental Engineering Committee, Member, AWWA NJ Section, Vice Chair.

Peter Pannucci Jr., P.E., ACEC NJTA CI Committee Vice Chair.

Peter T. Ten Kate, P.E., CME - Past President, NJSME, Fellow ASCE.

John Yakimik, P.E., CME - Member, ACEC NJ Awards and Scholarships Committee.

Paul W. Ferriero, P.E., P.P., CME, LEED AP, CFM - Member, ASCE, Member ASFPMP

Joseph Kosinski, P.G., CFM, LEED AP, CFM - Member, ASFPMP, Member, ASEG

Representative Experience

Boswell is extremely well suited and meets the requirements to provide engineering support to the Town of Boonton. Our municipal engineering staff has represented land use boards throughout northern and central New Jersey for many years. Our municipal representatives attend these board meetings and advise the boards regarding applications that are presented. This work includes detailed review of the ordinance compliance and constructability of the projects as well as compliance with the ever-changing stormwater requirements of the NJDEP. Our highway department designs millions of dollars of road projects each year ranging from simple mill and pave overlays to extensive roadway relocation designs. Once these projects are complete, our construction inspection and management department provide successful outcomes from pre-construction meetings to final project close outs. Our environmental sciences department is in contact with the NJDEP on virtually a daily basis as we process permits and site remediation projects through the department. Our water services department designs and manages projects that include all aspects of water and sewer infrastructure. **Boswell** will bring this expertise to the Town of Boonton and provide professional services commensurate with the Town's needs.

Boswell's Capabilities

Municipal Engineering - The firm's Municipal Engineering Division provides advisory services to local governing bodies, planning, zoning and land use boards, and local utility authorities. Additionally, our government liaison services assist clients in complying with all federal, state, regional and local regulations, and in securing of all necessary permits.

Services offered to municipal clients include reports and preliminary studies, surveys, designs and construction supervision for: road and street improvements; signalization; bridges and culverts; intersection improvements; NJDOT Local Aid, Transportation Improvements; streetscapes; curbs and sidewalks; drainage systems; storm and sanitary sewers; flood control; underground storage tanks; environmental impact studies and assessments; site remediation; FEMA studies; site plan review; master planning; preparation of computerized tax maps; zoning map updates; and construction documents and cost estimates.

Transportation/Traffic Engineering - The planning, design, and construction management/ inspection of roadways and bridges is a principal area of specialization at **Boswell**. The firm's transportation division provides clients with a broad range of engineering services necessary for state and interstate, county and local road and/or bridge projects - from project scoping and feasibility studies (traffic studies and analysis, and the evaluation of alternatives); through the design phase (preparation of plans, specifications, and construction estimates); and ultimately, construction engineering (constructability review, administration of bid procedure, contract administration, and construction management/inspection).

Boswell's designs account for hundreds of miles of newly constructed, redesigned, or realigned roads, as well as local aid roadway rehabilitation and resurfacing projects every year. The firm's comprehensive professional expertise relative to transportation improvement projects is further demonstrated by the design and construction inspection of: streetscape and downtown revitalization projects; signalization and intersection improvements; curbs, sidewalks and ADA compliant ramps; bump-outs at signalized and uncontrolled intersections; Safe Routes to School, Complete Streets and Safe Routes to Transit; roadway lighting; pavement management; and, stormwater management systems.

Structural Engineering - **Boswell's** Structural Engineering Division delivers structural solutions, such as bridges, culverts, retaining walls and buildings, to solve our clients' infrastructure needs. The firm's designs use concrete and steel alternatives, providing the best constructible, functional, economic, and sustainable results. From new construction to rehabilitation, **Boswell** delivers high-quality structures that are safe, functional, and in the case of bridges, aesthetically suited to their environments while meeting ever-evolving water management regulations. We combine a century of history with being a fully integrated, multidisciplinary services firm that maximizes the deep technical expertise of our staff to achieve the highest level of results.

Boswell's structural services include: structural design of new and replacement bridges and culverts for the state, county, and municipal governments; design of repairs and retrofits of bridges and culverts; structural design of various types of buildings; design of repairs and modifications of structural elements for buildings, including schools, municipal buildings, parking garages; retaining wall system design with various materials, including reinforced concrete, masonry block, stone, steel sheet piles, and timber; miscellaneous structural element design with lighting and sign foundations, pump and pipe support, screening walls; crane systems for utility buildings; and, utility chamber design for pumps, valves, and grinders.

Water Services (Sewer/Water) - The services offered by the company's Water Services Division range from projects involving stormwater, water and wastewater supply, conveyance and treatment. In addition, **Boswell** excels in permit acquisition, including determination and securing of required permits. This division is also responsible for facilitating the preparation of all required documentation associated with available public financing sources offering low-interest rate solutions for various infrastructure related improvements.

The utilization of reliable funding sources saves our public sector clients millions of dollars in the form of grants and interest cost savings. Representative environmental projects include design and construction management of: water and wastewater treatment facilities; water supply distribution; storm and sanitary sewers; secondary and tertiary wastewater treatment plans; combined sewer overflow projects; pumping stations and force mains; infiltration/inflow analyses; air stripping facilities for potable water and groundwater cleanup.

Environmental Science – **Boswell's** Environmental Science Division has a wealth of experience in the areas affecting our natural resources including biology, chemistry, hydrology, and hydrogeology. This Division is comprised of a team of versatile specialists with expertise in all aspects of environmental resource analysis, permit acquisition and regulatory compliance. The Division's long-standing relationship with such agencies as the NJDEP, the U.S. EPA, ACOE and the Bergen County Soil Conservation District, etc. is an asset to our clients and has led to the successful resolution of various local and regional matters. This Division provides a full spectrum of services including: LSRP services; environmental impact studies, assessments, and audits; ASTM Phase I and Phase II reports; water quality management; storm water management; wetlands investigation, delineation and reports; wetland/riparian mitigation; coastal permitting; watercourse restoration and bank stabilization design; FEMA studies; noise and air quality studies; asbestos and lead surveys; soil erosion and sediment control; removal/installation of underground/aboveground storage tanks; environmental testing plans; landfill capping; site remediation; and, all local, state and federal regulatory compliance.

Recreational Facilities/Parks - Sound planning and attention to detail in the design and development of parks and recreational complexes and athletic field facilities provides tangible evidence of our expertise in this area. **Boswell's** comprehensive understanding regarding the creation of quality open space has been utilized in the planning, design, and construction management/inspection of numerous active and passive recreational projects. Our staff is proficient in the full spectrum of open space and recreation projects ranging from neighborhood playgrounds and athletic fields to historic County and locally-owned land containing hundreds of acres of natural and man-made resources. These projects, which have enhanced the quality of life for the residents of numerous towns, cities and counties, include: tennis, basketball, and sand beach volleyball courts; baseball, football, lacrosse, and soccer fields (synthetic and natural turf surfaces); running tracks; hiking and nature trails; roller hockey rinks; playgrounds; spray parks, bicycle trails; dog parks; recreational buildings; and municipal swimming pools.

Construction Supervision/Management – **Boswell's** Construction Management Division, with its comprehensive range of construction management capabilities, oversees every phase of construction for infrastructure and public works projects. We ensure that the final project is in accordance with the contract documents and that payment to the contractor reflects the work performed. The firm's expert staff of civil and structural engineers, construction managers, resident engineers, and NICET certified inspectors coordinate each stage of construction, from initial constructability review through project closeout. The utilization of digital field operations promote accuracy, facilitate on-the-spot revisions, and efficiently maintain project costs and schedules, all while minimizing construction claims. Services offered include: construction management/inspection; administration of bid procedure; contract administration; constructability review; change order review; project schedule review; shop drawing review; preparation of as-builts; and, claims analysis and defense.

Site/Civil Engineering – **Boswell's** engineering expertise, surveying knowledge, and highly experienced and qualified staff of civil engineers provides the optimal combination required for any development project. **Boswell** also assists in preparing the necessary applications and documents and provides expert representation on behalf of applicants to regulatory agencies in order to obtain required approvals. Site/Civil engineering capabilities include: site plan review; preparation of detailed topographical and boundary surveys; site environmental assessments; site grading designs; conceptual, preliminary, and final subdivision layouts and site plans; right-of-way and roadway designs; traffic studies; hydrologic and hydraulic studies; drainage/flood control system designs; and, storm and sanitary sewer designs.

Survey - **Boswell** has established an early reputation for excellence by providing countless surveys during the last 100 years. Today, **Boswell** continues to perform hundreds of surveys each year by utilizing advanced surveying equipment and field instruments. Electronic total stations, Global Positioning Systems (GPS), and powerful laptop computers are some of the sophisticated equipment utilized in the field. The firm is also recognized as a leader in surveying by title insurance companies, courts, and public agencies who seek the **Boswell** expertise in the final determination of land riparian boundaries. Our surveying services include: GPS surveys, boundary and topographic surveys, right-of-way surveying and mapping ground control and baseline surveys, construction stakeout, and hydrographic charting and surveys.

Geographic Information System (GIS)/Asset Management – **Boswell's** GIS team has established comprehensive asset inventories for a broad range of public agencies. The creation of each individual database is customized to meet the specific needs of our clients, from reducing operation and maintenance costs to monitoring critical infrastructure. **Boswell's** strong presence in the public sector has provided the opportunity to complete large-scale mapping and databases for a variety of projects from locally-managed water systems to regional utility

authorities, e.g. Passaic Valley Sewerage Commission's (PVSC), databases for its facility, and infrastructure and distribution systems was part of an expansive effort involving 46 communities. This type of collaboration emphasizes the benefit of digitizing traditional records (paper maps, maintenance reports, road program data, as-built drawings) into a managed map-based product that can be easily utilized on a daily basis. **Boswell's** extensive GIS/Asset Management capabilities provide our clients with the necessary tools to better manage their assets by utilizing the most updated technological methods available.

References

Bedminster Township
55 Miller Lane
Bedminster, NJ 07921
Robin Ray, Administrator
908-212-7000

Morris County
PO Box 900
Morristown, NJ 07963
Chris Vitz, County Engineer
973-285-6040

Borough of Mendham
2 West Main Street
Mendham, NJ 07945
Joyce Bushman, Administrator
973-543-7152

Glen Ridge Borough
825 Bloomfield Avenue
Glen Ridge, NJ 07028
Michael Zichelli, Administrator
973-748-8400

Borough of Lebanon
6 High Street
Lebanon, NJ 08833
Karen Romano, Administrator
908-236-2425

A partial listing of **Boswell's** current public sector clients is included in Section II.

BOSWELL

Below is a partial listing of our municipal clients for which **Boswell** is presently serving as the Officially Appointed Municipal Engineer or Special Project Consultant. Additionally, in the majority of these communities we are the engineering consultant to their respective Planning Board, Zoning Board of Adjustment and/or Joint Land Use Board. () year initially appointed

Municipality	Contact	Address
Bedminster (Township) (1990) Population: 8,200	Robin Ray, Administrator 908-212-7000	55 Miller Lane Bedminster, NJ 07921
Chatham (Borough) (2011) Population: 9,200	Stephen Williams, Administrator 973-635-0674	54 Fairmount Avenue Chatham, NJ 07928
Cliffside Park (Borough) (1911) Population: 25,500	Joseph Rutch, Administrator 201-945-3456	525 Palisade Avenue Cliffside Park, NJ 07010
Closter (Borough) (1981) Population: 8,500	Mayor John Glidden, Jr. 201-784-0600	295 Closter Dock Road Closter, NJ 07624
Dumont (Borough) (1993) Population: 18,000	Jeanine Siek, Acting Administrator 201-387-5022	50 Washington Avenue Dumont, NJ 07628
East Hanover (Township) (2017) Population: 11,100	Nicolette Riggi, Township Clerk 973-888-6008	411 Ridgedale Avenue East Hanover, NJ 07936
Fort Lee (Borough) (1918) Population: 39,700	Al Restaino, Administrator 201-592-3500	309 Main Street Fort Lee, NJ 07024
Franklin Lakes (Borough) (1992) Population: 11,000	Gregory C. Hart, Administrator 201-891-4000	480 DeKorte Drive Franklin Lakes, NJ 07417
Garfield (City) (1982) Population: 32,500	Erin Delaney, City Manager 201-340-2000	111 Outwater Lane Garfield, NJ 07026
Glen Ridge (Borough) (2021) Population: 8,000	Michael Zichelli, Administrator 973-748-8400	825 Bloomfield Avenue Glen Ridge, NJ 07028
Hawthorne (Borough) (1994) Population: 19,500	Mayor John V. Lane 973-427-1168	445 Lafayette Avenue Hawthorne, NJ 07506
Hopewell (Township) (2021) Population: 17,400	George Snyder, Administrator 609-737-0605	201 Washington Crossing Pennington Road Titusville, NJ 08560
Hopewell (Borough) (2011) Population: 1,800	Doug Walker, Administrator 609-466-2636	88 East Broad Street Hopewell, NJ 08525
Lebanon (Borough) (2000) Population: 1,900	Karen Romano, Administrator 908-236-2425	6 High Street Lebanon, NJ 08833
Mansfield (Township) (2021) Population: 9,000	Wendy Barras, Township Clerk 908-689-6151	100 Port Murray Road Port Murray, NJ 07865

BOSWELL

Municipality	Contact	Address
Mendham (Borough) (1999) Population: 5,000	Joyce Bushman, Administrator 973-543-7152	2 West Main Street Mendham, NJ 07945
Moonachie (Borough) (1939) Population: 3,100	Mayor Dennis Vaccaro 201-641-1813	70 Moonachie Road Moonachie, NJ 07074
North Bergen (Township) (1970) Population: 59,400	Janet Castro, Administrator 201-392-2027	4233 Kennedy Boulevard North Bergen, NJ 07047
North Haledon (Borough) (1995) Population: 8,600	Mayor Randy George 973-437-7793	103 Overlook Avenue North Haledon, NJ 07508
Oakland (Borough) (1990) Population: 12,700	Richard S. Kunze, Administrator 201-337-8111	One Municipal Plaza Oakland, NJ 07436
Readington (Township) (2000) Population: 16,300	Richard Sheola, Administrator 908-534-4051	509 Route 523 Whitehouse Station, NJ 08889
Ridgefield Park (Village) (1924) Population: 13,100	Mayor John H. Anlian 201-641-4950	234 Main Street Ridgefield Park, NJ 07660
Rockaway (Township) (2010) Population: 26,400	Allison K. Ferrante, P.E., Township Engineer 973-983-2810	65 Mount Hope Road Rockaway, NJ 07866
Roseland (Borough) (2019) Population: 6,300	Mayor James R. Spango 973-226-8080	140 Eagle Rock Avenue Roseland, NJ 07068
Roxbury (Township) (2006) Population: 23,200	John Shepard, Township Manager 973-448-2002	1715 Route 46 Ledgewood, NJ 07852
Secaucus (Town) (2017) Population: 21,000	Gary Jeffas, Esq., Administrator 201-330-2008	1203 Paterson Plank Road Secaucus, NJ 07094
Summit (City) (2008) Population: 22,300	Aaron Schrager, P.E., Director of Community Services 908-277-9400	512 Springfield Avenue Summit, NJ 07901
Teterboro (Borough) (1920) Population: 90	Nicholas Saros, Borough Manager 201-288-1200	510 Route 46 W Teterboro, NJ 07608
Waldwick (Borough) (1950) Population: 10,100	Mayor Thomas Giordano 201-652-5300	63 Franklin Turnpike Waldwick, NJ 07463
Weehawken (Township) (2023) Population: 17,200	Mayor Richard Turner 201-319-6005	400 Park Ave Weehawken, NJ 07086
West Milford (Township) (2018) Population: 25,900	Mayor Michele Dale 973-728-1113	1480 Union Valley Road West Milford, NJ 07480
West New York (Town) (2017) Population: 50,700	Mayor Albio Sires 201-295-5100	428-60th Street West New York, NJ, 07093

BOSWELL

Municipality	Contact	Address
Westwood (Borough) (2001) Population: 11,200	Mayor Raymond Arroyo 201-664-7100	101 Washington Avenue Westwood, NJ 07675
Wyckoff (Township) (1986) Population: 17,000	Matthew A. Cavallo, Administrator 201-891-7000	340 Franklin Avenue Wyckoff, NJ 07481

BOSWELL

ENGINEERED FOR LIFE

SERVICES SUMMARY

Civil/Structural

- Airport Ramp & Runway Design
- Athletic Field Design
- Bridge & Culvert Design
- Bridge Inspections/Rating
- Channel Stabilization Design
- Dam Inspection & Design
- Dam Classification/Reclassification
- Drainage System Design
- Emergency Generator Design
- Expert Testimony
- Grant Applications
- Golf Course Design
- Hydrologic & Hydraulic Studies/Reports
- Intersection Improvement Design
- IVHS Design
- Master Planning
- Municipal Engineering
- Occupancy/Crossing Permitting
- Parks, Playground/Recreational Facility Design
- Pavement Management
- Pier/Bulkhead Design
- Planning & Feasibility Analyses
- Project Management
- Retaining Wall Design
- Road & Street Design
- Signalization
- Site Engineering
- Site Plan Review
- Scoping & Preliminary Engineering
- State & Interstate Highway Design
- Storm Drainage Analysis & Design
- Storm Water Management
- Streetscape Design
- Structural Integrity Inspection
- Traffic Studies & Impacts
- Traffic Signal Design & Certification
- Transportation Engineering
- Utility Engineering
- Value Engineering
- Waterfront Structure Condition Surveys
- Zoning Analysis

Construction Management

- Administration of Bid Procedure
- Change Order Review
- Claims Analysis & Defense
- Contract Administration
- Construction Cost Estimates
- Constructibility Review
- Construction Supervision & Field Testing
- Environmental Oversight
- Preparation of As-Builts
- Project Closeout
- Schedule/CPM Review
- Shop Drawing Review
- Underwater/Marine Construction Inspection

Surveying & Digital Mapping

- Acquisition Map Preparation
- ALTA/NSPS Land Title Surveys
- As-Built Surveys
- Boundary and Topographic Surveys
- Computer-Aided Drafting
- Construction Stakeout
- Data Management
- Digital Terrain Modeling
- Engineering Surveys
- Flood Elevation Surveys & Certificates
- GNSS/RTK (GPS) Surveying
- Geographic Information Systems (GIS)
- Ground Control & Baseline Survey
- Horizontal & Vertical Ground Control
- Hydrographic & Fathometric Surveys
- Photogrammetric Control Surveys
- Right-of-Way and Property Surveys
- Riparian Claims
- Settlement & Deformation Surveys
- Tax Map Preparation & Revision
- Title Surveys
- Topographic & Utility Mapping
- Trigonometric Surveys

Underwater

- Bridge Diving Inspections
- Bridge Scour Investigations
- Marine Borer Investigation
- Marine Investigation Diving Services
- Subaqueous Condition Surveys
- Underwater Structural Investigation/Inspection
- Ultrasonic & Non-Destructive Testing

Water/Wastewater

- Water Supply Storage and Distribution
- Water Treatment Facilities
- Wastewater Infrastructure Planning and Design
- Wastewater Treatment Plant Design
- Infiltration/Inflow Analysis
- Pumping Station/Force Main Design
- Combined Sewer Separation
- Asset Management Plans
- Lead Service Line Replacement

Environmental

- Air Dispersion Modeling
- Air Monitoring/Permitting
- Air Stripping & Carbon Adsorption Facilities Design
- Asbestos & Lead Surveys
- Asset Management
- Bi-axial Tilt Meter Monitoring
- Bioremediation
- Brownfield Remediation
- Crack Gauge Monitoring
- Environmental Impact Statements/Assessments
- Facility Decommissioning
- FEMA Studies
- Federal/State Mitigation Proposals
- Geophysical Surveys
- ISRA Assessment/Investigations
- Landfill Site Development/Capping
- LSRP Services
- Noise & Air Quality Studies
- Odor Mitigation Studies
- Permitting & Regulatory Compliance
- Phase I Site Assessments
- Phase II Site Investigations
- Potable & Groundwater Sampling/Modeling/Remediation
- Resource Recovery Facilities
- Remedial Investigations
- SEQRA Evaluations & Reports
- Site Remediation
- Soil Vapor Dispersion Modeling
- Stack Emission Testing
- UST/AST Removal/Installation
- Vapor Intrusion Mitigation Systems
- Wetlands Delineation/Studies



SECTION III



BOSWELL

KEY PERSONNEL

President/CEO	Kevin J. Boswell, P.E., P.P. ^{1,2,3}
Vice President/COO Technical Divisions	Joseph A. Pomante, P.E. ¹
Municipal Services	Paul W. Ferriero, P.E., P.P. ^{1,3,6} Peter C. Ten Kate, P.E., P.P. ^{1,2,3}
Construction Management /Inspection	Peter Pannucci, Jr., P.E.
Electrical	Bruce M. Rockwell, P.E. Kenneth H. Post, P.E.
Environmental Science/Permitting	Frank J. Rossi, LSRP ⁴ Chris E. Arntz, P.E., LSRP ⁴
GIS/Asset Management	James M. Woodward
Hydrology/Drainage	Alvaro Gonzalez, Ph.D., P.E. Alireza “Ali” Farid, Ph.D. Jess Symonds, P.E.
Parks and Recreational Facilities	Joseph S. Kosinski, P.G., LEED AP ^{3,6} Robert C. Brightly, P.E., P.P. ¹
Stormwater Management	Alvaro Gonzalez, Ph.D., P.E. Steven B. Bolio, P.E. ¹
Site Engineering	Jeffrey L. Morris, P.E., P.L.S., P.P. ^{1,3,4} Joseph S. Kosinski, P.G., LEED AP ^{3,6} Candice J. Davis P.E. ¹ Jess Symonds, P.E.
Streets and Roads	Nick DeNicola, P.E., P.P. ^{1,2,3,5,6} James J. McGinnis, P.E. ^{1,3,6}
Streetscape/Business Dist. Renaissance	Nick DeNicola, P.E., P.P. ^{1,2,3,5,6} James J. McGinnis, P.E. ^{1,3,6}
Structural/Buildings/Bridges	Thomas W. O’Fallon, P.E.
Survey	Frank M. Krupinski, P.L.S.
Traffic	Frank Dobiszewski, P.E., PTOE, IMSA III
Water Services	Giselle Diaz, P.E. ^{1,3} Edward Stephens, P.E.

¹ Certified Municipal Engineer

² Certified Public Works Manager

³ Also serves as Municipal Engineering Representative

⁴ NJDEP Certified UST/AST

⁵ Certified Value Engineer

⁶ Certified Floodplain Manager

YEARS OF EXPERIENCE: 42 Years

EDUCATION:

B.S. Civil Engineering, Colorado State University

REGISTRATION:

Professional Engineer - Alabama, Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Mississippi, Missouri, New Hampshire, Nevada, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Vermont, Virginia, Washington DC, and West Virginia

Professional Planner - New Jersey

Certified Municipal Engineer - New Jersey

EXPERIENCE:

Kevin Boswell, with more than 42 years of experience in the civil, municipal and environmental engineering, presently serves as Boswell's President and Chief Executive Officer. As the President and CEO of Boswell Engineering, Kevin directs all phases of the business. As a recognized expert in his field, Mr. Boswell has served as an expert witness for numerous public and private entities in litigation, arbitration and mediation proceedings. Under his leadership, Boswell continues to play a significant role in the future for federal, state, and local governmental agencies as well as private sector clients and utility companies. His 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 a wide array of site development projects 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 also serves as an engineering consultant to numerous public sector clients. He presently serves as the appointed Municipal Engineer or Special Projects Engineer in more than 40 northern New Jersey communities. He is also the officer in-charge for numerous projects in the Counties of Bergen, Essex, Hudson, Passaic and Sussex. Mr. Boswell's expertise includes all aspects of securing projects with complex funding requirements. These funding sources include the New Jersey Infrastructure Bank (NJIB), New Jersey Office of Green Acres, HUD, NJDOT, FHWA, NJDEP and US EPA. Furthermore, Mr. Boswell also has an extensive background in the design of recreational facilities. This experience includes the design of natural and synthetic turf fields, lighting systems, bleachers, tracks and passive open space utilization.

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. He has assisted public and private sector clients in litigation defense and resolution. Mr. Boswell serves as a consultant to both water supply and wastewater agencies.

Mr. Boswell currently serves Municipal Water Supply agencies and Municipal/Regional Utility Authorities and Commissioners for the City of Garfield, the Borough of Oakland, Waldwick and Hawthorne, the Township of Mahwah and the East Orange Board of Water Commissioners. He also serves BPU regulated agencies such as Veolia of New Jersey, the North Jersey District Water Supply Commission, Jersey Central Power & Light, and Public Sewer Electric & Gas.

AFFILIATIONS:

American Society of Civil Engineers

New Jersey Society of Municipal Engineers

YEARS OF EXPERIENCE: 29 Years

EDUCATION:

B.S. Civil Engineering, New Jersey Institute of Technology - 1994

REGISTRATION:

Professional Engineer - New Jersey, New York
Certified Municipal Engineer – New Jersey

EXPERIENCE:

Mr. Pomante has over 29 years of experience related to civil, municipal and environmental engineering, project management and construction management. As the firm's Chief Operations Officer of the Technical Divisions, he is in responsible charge of managing, administering, directing, and overseeing the day-to-day operations of each of the company's technical departments. Mr. Pomante has been involved with the design and administration of numerous public works, infrastructure and utility projects for numerous local, county, and state governmental agencies. His experience further includes an in-depth knowledge associated with the design and construction administration of stormwater, water supply and wastewater treatment. Mr. Pomante's ability to manage and administer projects from the planning phase through construction is enhanced by his demonstrated ability to coordinate with utilities, direct sequencing and ensure compliance with all regulatory permits.

A sampling of Mr. Pomante's diverse experience includes:

- ***Borough of Roseland, Borough Tennis and Basketball Court Improvements*** – The work consists of replacing the existing tennis court nets, installing new pickle ball netting, installation of new fencing, and resurfacing the tennis courts at Harrison Park. The work at Tedesco Park includes installing new basketball hoops and complexly reconstructing and paving the existing basketball court. The contract is in the amount of \$311,300.
- ***Borough of Roseland, First Aid Squad Entry Improvements*** – This community development block grant funded project was performed in order to bring the Roseland First Aid Squad Building up to current ADA guideline standards. The project included reconstructing the curb and sidewalk in order to meet the needed slopes and opening an existing wall in order to install a new automated access door. The contract amount was approximately \$50,000.
- ***Borough of Roseland, Second Avenue, Woodland Road & 2021 Road Program*** – This project included the resurfacing of five streets throughout town, totaling 3,350 tons of asphalt. In addition, drainage improvements were installed on Thackery lane, including new structures and 250 L.F. of concrete pipe. The contract amount was just over \$500,000.
- ***City-Wide Bicycle Striping, Hoboken, NJ.*** The scope of services included the project management responsibilities for the City's new bicycle roadway sharing striping standards. This federally funded project provided for the design associated with roadway striping and pavement markings. The basis of the design has become the standard by which the City implements bicycle road sharing strategies in all of its roadway improvement programs.
- ***Parking Lot Modifications, Hoboken, NJ.*** The project provided for the complete rehabilitation of the Police Department's deteriorated parking facility. This included the redesign of the interior concrete island and the implementation of porous concrete in lieu of traditional bituminous concrete in order to build upon the City's on-going commitment to the implementation of green technologies.



- ***Castle Point and Sinatra Park Waterfront Walkway Reconstruction, Hoboken, NJ.*** The scope of services included the overall project management associated with the design and construction of a waterfront project including a new lighted soccer facility as well as reconstruction of the waterfront promenade areas.
- ***Borough of Roseland, Town Wide Roadway Assessment*** – An assessment criterion was established to provide numerical values in regard to the conditions of existing roadways. This assessment was conducted to every public and private roadway throughout the borough. This criteria rating was used to evaluate a total score for each road. The scores were then ranked to establish a priority list for repair and resurfacing of future projects.
- ***Port Liberte' Homeowners Association, Jersey City, NJ.*** Services include the project management and coordination of the rebuilding efforts of the Port Liberte' Community in response to Hurricane Sandy. The massive reconstruction effort involved: the replacement of the failed sheetpile bulkhead sections along the Hudson River; remediation of various hardscape, landscape components and irrigation systems; investigation of underwater conditions of the remaining bulkhead structures; restoration of the marina; and, coordination of follow-up inspections of the association owned bridges and infrastructure. In addition, responsible for coordination with the Association's insurance carrier to assist in streamlining the claims process in order to complete the repairs in an efficient and cost-effective manner.
- ***City Hall Landscape and Drainage Improvements, Hoboken, NJ.*** The scope of service included the overall project management and construction administration of a "green infrastructure" project at the Hoboken City Hall facility. The project involved various interactions with State Agencies as the project was funded through the New Jersey Environmental Infrastructure Trust.
- ***Municipal Engineering Services, Hoboken, NJ.*** Services include project management on a variety of capital project throughout the City of Hoboken. Projects include roadway and infrastructure rehabilitation project, public park renovations, City owned building renovations, waterfront reconstruction projects and emergency response services as required. Given the complexities of City government, Mr. Pomante's ability to work for and between the various departments of the Administration provides a continuity which is a benefit to the City and its residents.
- ***Municipal Engineering Services, Roseland, NJ.*** Services include project management of all municipal roadway projects, investigation and remediation of Borough-wide drainage issues at the direction of the Mayor and Council, advise the governing body with regard to long range capital improvement planning, prepare monthly status reports of on-going projects and provide presentations for the public regarding the Borough's capital planning and on-going projects. Mr. Pomante also serves as Roseland's Planning Board and Zoning Board of Adjustment Engineer.
- ***Municipal Engineering Services, North Haledon, NJ.*** Services include project management of all municipal roadway projects, investigation and remediation of Borough-wide drainage issues at the direction of the Mayor and Council, advise the governing body with regard to long range capital improvement planning, prepare monthly status reports of on-going projects and provide presentations to the general public regarding the Borough's capital planning and on-going projects. Mr. Pomante also serves as North Haledon's Planning Board Engineer.
- ***Municipal Engineering Services, Woodland Park, NJ.*** Services include project management of all municipal roadway projects, investigation and remediation of Borough-wide drainage issues at the direction of the Mayor and Council, advise the governing body with regard to long range capital improvement planning, prepare monthly status reports of on-going projects and provide



presentations to the general public regarding the Borough's capital planning and on-going projects.

- ***Municipal Engineering Services, Little Falls, NJ.*** Services include project management of all municipal roadway projects, investigation and remediation of Borough-wide drainage issues at the direction of the Mayor and Council, advise the governing body with regard to long range capital improvement planning, prepare monthly status reports of on-going projects and provide presentations to the general public regarding the Borough's capital planning and on-going projects.
- ***Water System Improvements, Okmulgee County RWD #1, Schuler, OK.*** The scope of services included on-site construction management of the installation and rehabilitation of 32 miles of PVC water main, the construction of one booster pump station and a chlorination facility in rural Oklahoma.
- ***FirstEnergy Corporation, Akron, OH.*** Project management associated with the design and construction of high voltage overhead electrical transmission wiring. The project management services include design and construction related issues and environmental permitting, in order to facilitate the implementation of large scale infrastructure projects.
- ***Water Resource Engineering, North Jersey District Water Supply Commission (NJDWSC), Wanaque, NJ.*** Services included water resource engineering as well as overall project management for various capital projects. In addition, Mr. Pomante served as the Emergency Response Team Coordinator for the NJDWSC. In this position he was in responsible charge for responding to emergency chemical release incidents and with many aspects of regulatory compliance.
- ***Renovations to Public Housing, Lodi Housing Authority, Lodi, NJ.*** Served as Surety consultant involved in the closeout of the renovation of public housing which included both interior and exterior rehabilitation work.
- ***Montgomery Township Stage II Wastewater Treatment Plant.*** The scope of services for this multi-million-dollar project included shop drawing review and approval, on-site construction administration and inspection.
- ***Water System Inspection, Essex County Utilities Authority (ECUA).*** The scope of services included a detailed inspection of the entire water system including the operation of all valving, one booster pump station and three elevated water storage tanks. Also included was the collection and evaluation of in-situ piping samples, report preparation and presentation to the ECUA Board. Presentation included rehabilitation cost estimates and a prioritized rehabilitation schedule.
- ***Well Repairs and Redevelopment Work, Well #1 and Well #4, Marlboro Municipal Utilities Authority (MUA).*** The scope of services included specification and contract drawing generation and project management. Work included the removal and replacement of well screen and casing; pump rehabilitation and well redevelopment for increased safe yield.
- ***Repair and Repainting of 10 million-gallon water storage tank, Marlboro MUA.*** The scope of services for the project included the generation of the plans and specifications, public bidding coordination, on-site contract administration and inspection and financial control of the project.
- ***Contract #530 Filter Rehabilitation of Filter Nos. 1, 3, 4 & 5 and Contract #515 Filter Rehabilitation of Filter Nos. 6 & 7.*** The scope services for the project consisted of the removal and replacement of vitrified clay underdrain tile and reinforcing steel and the removal and replacement of filter media.



- ***Contract #569 Backwash - Header Rehabilitation.*** The scope of services included the installation of a bypass piping system to the existing filter backwash system. The project included the fabrication and installation of 24 and 42 inch steel pipe with specialty fittings, the installation of 2 – 24 inch AWWA butterfly valves, 1 – 24 inch knife gate valve, 1 – 42 inch AWWA butterfly valve, two of which were required to be electronically actuated. The actual installation work was performed in one 24-hour shift due to treatment plant constraints.
- ***Contract #434 Soil and Groundwater Remediation at Balancing Reservoir.*** The scope of services included the supervision of all groundwater monitoring well installations, soil sampling, contaminated soil excavation and removal to a certified soil reclamation facility, the review of all technical reports submitted to NJDEP and the review and approval of all invoicing and payment of same.
- ***Renovation of 1st and 2nd floors of Existing Filter Building.*** The scope of services included utilizing in-house construction personnel to complete the renovation of areas to support in-house technical personnel, workshops and office spaces currently not being utilized.
- ***Sodium Hypochlorite Conversion at Old Treatment Plant and Lower Gate House.*** The scope of services consisted of the layout and design of an alternate chlorination system to replace the existing gaseous/liquid chlorination system.
- ***Parking Facility at Headworks Facility.*** The scope of services included the design and construction of an employee parking facility.
- ***Filter Rehabilitation Program.*** The scope of services included the preparation of plans and specifications, contract documents and cost estimates for a 10-filter rehabilitation program with duration of four years.

AFFILIATIONS:

New Jersey Society of Municipal Engineers, President, Executive Committee
American Society of Municipal Engineers

YEARS OF EXPERIENCE: 42 Years

EDUCATION:

M.S. Engineering Management, University of Pittsburgh, 1986
B.S. Engineering, United States Military Academy, 1981

REGISTRATION:

Professional Engineer – New Jersey (also CO, DE, FL, GA, MD, NC, PA, SC, VA)
Professional Planner – New Jersey
Certified Municipal Engineer
LEED Accredited Professional
Certified Floodplain Manager

EXPERIENCE:

- ***Boswell Engineering, South Hackensack, New Jersey - Vice President Municipal Services.*** Responsible for all aspects of municipal consulting, design for subdivisions, site plans and capital construction projects. Prepared drainage analysis reports for stormwater management basins and floodway designs. Provided expert testimony and reports for land use hearings and court proceedings. Prepared environmental and traffic impact reports. Coordinated with the NJDEP and the US Army Corps of Engineers to secure stream encroachment and wetland permits. (January 2024 – Present)
- ***Ferriero Engineering, Inc., Chester, New Jersey – President.*** Responsible for all aspects of municipal consulting, design for subdivisions, site plans and capital construction projects. Prepared drainage analysis reports for stormwater management basins and floodway designs. Provided expert testimony and reports for land use hearings and court proceedings. Prepared environmental and traffic impact reports. Coordinated with the NJDEP and the US Army Corps of Engineers to secure stream encroachment and wetland permits. (December 1992 – December 2023)

1/91 - Present	TOWNSHIP ENGINEER - Bedminster Township, Somerset County
1/95 - Present	BOROUGH ENGINEER - Far Hills Borough, Somerset County
3/99 - Present	BOROUGH ENGINEER - Mendham Borough, Morris County
1/00 - Present	BOROUGH ENGINEER - Lebanon Borough, Hunterdon County
7/09 - Present	TOWNSHIP ENGINEER - West Milford Township, Passaic County
5/19 - Present	BOROUGH ENGINEER - North Caldwell Borough, Essex County
1/21 - Present	BOROUGH ENGINEER - Glen Ridge Borough, Essex County
4/21 - Present	TOWNSHIP ENGINEER - Mansfield Township, Warren County

Consulting Municipal Engineer responsible for Township engineering services including application review for the Planning Board, Board of Adjustment, Environmental Commission and Board of Health, design of municipal infrastructure improvements, tax map preparation, sanitary sewer map updating, field inspection of ongoing construction projects and preparation of plans and specifications for municipal contracts.

- ***Yannaccone Associates, Chester, New Jersey - Chief Of Engineering Services.*** Responsible for subdivision and site plan design, grading plans, and subsurface sewage disposal system design. Prepared environmental and traffic impact reports. Managed engineering staff of seven professional engineers, junior engineers and draftsmen. Provided expert testimony at Planning Board, Zoning Board of Adjustment and Board of Health meetings. (April 1988 – December 1992)
- ***Landmark Design Builders, Blairstown, New Jersey - Project Manager/Engineer.*** Responsible for all phases of construction management for projects valued to \$1.5 million. Negotiated with customers for general construction contracts. Estimated project costs and negotiated with subcontractors. (September 1986 – April 1988)



- ***US Army Corps of Engineers, Pittsburgh, Pennsylvania - Contract/Construction Management Engineer.*** Managed a team of engineers, landscape architects, biologists, economists and draftsmen to complete a production and utility capability analysis for a 22,000-acre army facility. Chaired the District Value Engineering Committee. (December 1983 – August 1986)
- ***39th Engineer Battalion, Fort Devens, Massachusetts - Construction Officer/Platoon Leader.*** Responsible for a construction platoon of 35 carpenters, electricians and plumbers. Developed training and equipment maintenance programs. Designed building and roadway construction projects. Managed construction personnel and performed quality control inspections. (October 1981 – December 1983)

Representative Projects:

Toys "R" Us Warehouse/Distribution Facility
Mount Olive Township - 800,000 SF and 500,000 SF expansion

Bedminster Hike/Bikeway, Bedminster Township

Black Oak Golf Course, Washington Township, Morris County

Harry Dunham Park, Bernards Township

River Road Park, Bedminster Township

Johnson Pond Dam Rehabilitation, Byram Township

Fox Lake Dam Rehabilitation, Rockaway Borough

Sunset Lake Dam Rehabilitation, Mountain Lakes Borough

Pluckemin School Park, Bedminster Township

Mountain Valley Park Dam Dredging and Rehab., Mendham Borough

Knox Avenue Park, Bedminster Township

Recreation Facility Rehabilitation Projects - Bedminster Township, Chester Borough, North Caldwell Borough, Bernardsville Borough

AFFILIATIONS:

American Society of Civil Engineers
New Jersey Society of Municipal Engineers
Association of State Floodplain Managers

YEARS OF EXPERIENCE: 52 Years

EDUCATION:

B.S. Civil Engineering, Rutgers University
M.S. Business Management, Fairleigh Dickinson University

REGISTRATION:

Professional Engineer – New Jersey
Professional Planner – New Jersey
Certified Municipal Engineer – New Jersey
Certified Public Works Manager – New Jersey

EXPERIENCE:

Mr. Ten Kate has more than 52-years of diverse experience in the fields of civil engineering and as a construction contractor. For the last 25 years, Mr. Ten Kate has functioned as the Vice President of the firm's Municipal Engineering Division and currently serves as the firm's representative for the Borough of Dumont, Township of Verona, as the Consulting Engineer and Sewer Engineer for the Township of Wyckoff and as the Special Projects Engineer to the Township of Rockaway.

Mr. Ten Kate's professional engineering experience combined with his in-depth construction experience enables him to review plans and specifications for constructability and quality assurance with an extremely high degree of proficiency. He also assists clients in acquiring the necessary approvals and permits for construction projects as well as guiding them through both the bidding and construction phases. Mr. Ten Kate has assisted municipalities with his expertise in preparing and reviewing municipal land use ordinances including regulating stone quarries and asphalt plants and has provided expert testimony and written documentation for the justification of municipal regulation of quarry operations.

Mr. Ten Kate has served as the Project Manager for a new 6.5-mile 230kV transmission line planned to be constructed by Jersey Central Power & Light (JCP&L), a First Energy Company. Boswell is presently providing project management, siting evaluation, surveying, environmental permitting, and civil engineering services to JCP&L on a wide array of projects.

Relevant project experience includes:

- ***Borough of Paramus, NJ.*** Responsible charge of the review of Valley Hospital's application to the Planning Board to construct a new \$800 Million, 890,000 square foot, Health and Wellness facility on a 42-acre campus. His responsibilities further entailed coordinating with Bergen County Engineering and Planning Departments, the Paramus PD, EMS and Fire Department needs and concerns, utilities and traffic signalization systems and road alignments. Currently he is the Borough's lead professional in coordinating the site construction inspection of the new infrastructure and site construction.
- ***Borough of Paramus, NJ.*** Coordinated with the Borough Planner and administration to rezone the Route 4 and Route 17 highway properties to a new Highway Commercial Corridor Zone, including new ordinances to the Borough Zoning Code and Zoning Map. Assisted the Borough in creating a Billboard Overlay Zone on Route 4.
- ***City of Hackensack, NJ.*** Led the design team in coordinating with the City and Bergen County to convert Main Street and State Street from one-way traffic to two-way traffic. Coordinated with NJ Transit, Bus Division, NJDOT Diagnostic Team Region 8, Rail Road Crossing, Upper Main Street Alliance and Bergen County Engineering Department. Acted as the City coordinator with Bergen County Department of Public Works to obtain a \$1,500,000 grant from NJTPA CMQA for an Adaptive Signal System for the new signals on State Street and Main Street.
- ***City of Hackensack, NJ.*** Led the design team in designing a \$2,500,000 sewer storm and sanitary sewer separation for the City's Designated Redevelopment District including upgrades to existing



- outfalls to the Hackensack River. He guided the project through the NJDEP Environmental Infrastructure Trust Fund financing of the project.
- ***City of Hackensack, NJ.*** Led the design team to develop Streetscape standards as well as plans and specifications for Main Street Rehabilitation and Streetscape Improvements funded by over \$2,000,000 in State and Federal grants which he assisted in obtaining.
 - ***New Jersey Transit – Third Party Team Manager for the General Design Consultant for NJ Transit's \$440 Million Southern New Jersey Light Rail Transit System between Trenton and Camden, NJ.*** Mr. Ten Kate's responsibilities included the coordination of all utility relocations required by the contractor and utility companies. He was further responsible for survey activities, preparation of all parcel maps for property acquisition, oversight of environmental permit compliance, and public relations.
 - ***Steven's Institute of Technology, Hoboken, NJ – Project Manager.*** Design and construction management of the Castle Point Parking Garage for Stevens Institute of Technology in Hoboken, New Jersey.
 - ***Principal of a Major Heavy Highway Construction Company.*** Responsible for the administration and management for the construction of major highway and bridge, underground utilities, as well as pump station and water system construction. The Hackensack based company also managed two (2) asphalt plants, a stone quarry, and a sand plant.
 - ***Construction Superintendent – In charge of road, bridge and utility projects for numerous local, county and state agencies and authorities in NJ and NY.*** Utility projects included major installations of conduit and piping for Verizon, South Jersey Gas Company, Public Service Electric and Gas Company, New Jersey American Water Company, Suez, Elizabethtown Gas Company, Elizabethtown Water Company, Columbia Gas Transmission Corp. and Rockland Electric Company.
 - ***Resident Engineer for various state, county and government agencies.*** Served with the US Army Corps of Engineers, supervising construction of roadway projects, recreational facilities, site development and building rehabilitations.
 - ***City of Hackensack, NJ*** – Led the design team in coordinating with the City and Bergen County to convert Main Street and State Street from one-way traffic to two-way traffic.

AFFILIATIONS:

Fellow, American Society of Civil Engineers (Life Member)
National Society of Professional Engineers
New Jersey Society of Municipal Engineers (Past President & Current Chairman of Legislation Committee)

YEARS OF EXPERIENCE: 30 Years

EDUCATION:

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

REGISTRATION:

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 30-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 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 subdivisions throughout northern New Jersey.

Project Management/Resident Engineer experience includes the following:

- ***New Jersey Turnpike Authority (NJTA), Contract No. T100.651, Bridge Repairs and Resurfacing NJ TPK 92 to 122 (2024) – Project Manager.*** This project includes the repairs and rehabilitation of various bridge components to 21 structures plus miscellaneous repairs, Category A extra work, and emergency work on the northern portion of the Turnpike, including the eastern spur, the western spur, and the Newark Bay - Hudson County Extension. Substructure repair items include temporary towers, laminated elastomeric bearings, various types of steel repairs, lead abatement work, steel painting, pier spall repairs, abutment repairs, reconstruct bearing areas, membrane waterproofing, and drainage improvements. Superstructure repair items include full deck, and median barrier repairs with High-Performance Concrete (HPC), existing concrete or asphalt pavement removal, polymerized joint adhesive, HMA 12.5M76 Surface Course, galvanized reinforcement steel, epoxy reinforcement steel, deck spall repairs, repairing headers, repairing approach slabs, joint reconstruction, joint seal replacements, sidewalk repairs, inlet repairs, and striping. Special items for this contract include a Weigh-In-Motion (WIM) System, polyurethane grout injections, a concrete collar and beam repair, HMA Bridge Surfacing Special Mixture with Rosphalt 50 additive. In addition, the contract further involves ten (10) High-Intensity Construction Cycles for weekend deck repair work. (02/2024 – present) Approximate Construction Cost \$24 Million Ref. Robert Higham, P.E. 732-750-5300 ext. 8291
- ***River Drive Improvements & Passaic River Bikeway (Phase 2) – Project Manager.*** This \$11.7 Million project for the City of Garfield includes the widening, realignment, and intersection improvements to River Drive from Passaic Street to Monroe Street. The improvements include the construction of new retaining walls, storm drainage, and decorative street lighting. The project also includes the construction of a park between the Passaic River and River Drive including a bike path, landscaping, and a playground. The Alternate Bid includes the installation of decorative lighting along the frontage of Calvary Baptist Church on Passaic Street. Principal items of work in the project include: 1,330 C.Y. Excavation, Unclassified, 7,35 Y. Dense-Graded Aggregate Base Course,



8" Thick, 2,815 TON Hot Mix Asphalt 19M64 Base Course, 1,670 TON Hot Mix Asphalt 9.5M64 Surface Course, 4,200 L.F. Reinforced Concrete Pipe, 38 UNIT Inlet, Type D, 3,320 L.F. 2" Rigid Nonmetallic Conduit, Furnishing Pile Driving Equipment, 165 L.F. Drill Shaft in Soil, 36" Diameter, 5,500 S.F. Sheet Pile Wall, 1,550 S.Y. Asphalt Bike Path, 1,790 S.Y. Precast Concrete Pavers, 1,500 L.F. Precast Concrete Coping, 1,800 L.F. Aluminum Cable Railing, 400 L.F. 4" Rigid Nonmetallic Conduit, 9 Unit Decorative Light Foundation. Reference Sam Garofalo (973) 418-1529.

- Garfield High School Athletic Complex Improvements – Project Manager.*** This \$9.3 Million project for the Garfield High School Athletic Complex Improvements for the City of Garfield, NJ began construction on 4/1/2023 and completion date schedule is 6/1/2024. This project includes the renovation of the athletic complex at Garfield High School in Garfield, New Jersey. Improvements include replacing the natural grass fields and cinder running track with multiuse synthetic turf facilities (over 250,000 square feet allowing for high school regulation play of football, soccer, baseball, and softball) and a paved track with a synthetic material finish, respectively. Construction of the stone sub-base for the turf fields and pavement sub-base for the running track is included in the project. Other improvements to this facility include an approximate 2,700 square foot pre-fabricated concrete field house building, significant drainage improvements, construction of new paved access roads and parking lots, installation of a 1,900-person capacity elevated grandstand bleacher and press box, construction of four (4) tennis courts, and new electric, water, and sanitary sewer services. Also included will be significant fence construction, new concrete sidewalks, retaining wall construction, below grade electrical improvements including conduit and lighting foundations, ornamental lighting, and the installation of various sports amenities. The installation of protective ball safety netting, lightning detection system, Renovations two (2) sets of existing elevated metal stairs attached to the existing high school building, The installation of sports field light poles, fixtures, and wiring (foundations to be included in the Base Bid) for the stadium track and field, the installation of various track and field equipment and other auxiliary sports equipment, The installation of an addition to the pre-fabricated concrete field house building to be installed under the Base Bid. This addition shall include a 25-foot covered pavilion among other ancillary improvements, and the construction of borders and surfacing for the shot-put landing area. Principal items of work in the project include: 7,000 C.Y. Excavation, Unclassified 3,100 L.F., Concrete Turf Footing, 6,700 C.Y. 3/4" Clean Stone, 18,000 S.Y. Dense-Graded Aggregate Base Course, 4" Thick, 3,700 Ton Hot Mix Asphalt 19M64 Base Course, 2,800 Ton Hot Mix Asphalt 9.5M64 Surface Course, 5,200 S.Y. Concrete Sidewalk, 4" Thick, 3,400 L.F. 9" x 18" Concrete Vertical Curb, 1,650 L.F. Chain-Link Fence, PVC-Coated Steel, 8' High, 1,800 L.F. Chain-Link Fence, PVC-Coated Steel, 10' High, Grandstand Bleachers and Press Box, Field House Building, Below Grade Electrical Improvements, Stadium Field Sports Field Lighting (Foundations Only), 530 L.F. Protective Netting, 20' High, Lightning Detection System, Stair Renovations, Stadium Field Sports Field Lighting (Poles and Fixtures), Unit High Jump Pad, 1 Unit Pole Vault Landing System, 1 Unit Discus Cage, 1 Unit Portable Pitcher's Mound, 2 Unit Regulation Soccer Goals (Set of 2), Covered Pavilion Addition to Field House Building, 250 S.Y. Shot Put Borders and Surfacing. Reference Tony Lio (B.O.E Director) (201) 580-1261.
- Superstructure Replacement of Patriots Way Bridge Over Ramapo River – Project Manager.*** This \$4.8 Million project for the for the Borough of Oakland began construction on 2/6/2024 and scheduled completion date is 1/6/2026. This project includes the removal and replacement of the existing bridge superstructure and deck. Work will include fabrication of a steel truss bridge and assembly of the bridge on site. Work shall also include repairs to the existing bridge substructure. Also included will be various approach roadway improvements. The contractor will be required to temporarily support and maintain function of various utilities during construction. Principal items of work in the project include: Mobilization, Prefabricated Bridge Superstructure, Prefabricated Bridge Superstructure – Furnish/Installation, 1,200 S.Y. Dense Graded Aggregate Base Course, 6" Thick, 50,000 LBS. Reinforcement Steel Epoxy Coated, 48 Unit Structural Bearing Assembly – Stringer, 1,000 S.F. Concrete Repair, Type 1 & Type 2, 650 L.F. Belgian Block Curb, 280 L.F. 12" Ductile Iron Water Pipe Bridge Class 52, 520 L.F. Temporary 12" Polyvinyl Chloride Water Pipe, 526 L.F. Concrete Bridge Parapet, 3,792 Unit Shear Connector, Temporary Utility Support Structure. Reference Richard Kunze (Administrator) (201) 927-2467.
- Veolia North America, Lead Service Line Removals – Project Manager.*** This project included investigations completed by Contractor to identify and replace lead service lines in various municipalities including Ridgefield Park, Cliffside Park, Fort Lee, North Bergen, West New York,



Cresskill, Weehawken, Hackensack, Englewood, Palisades Park and Dumont. Lead service lines were removed and replaced with new copper service lines, including new corporation taps at main and new curbstops. Resident approvals via Opt-In notices were obtained in order to perform joint replacements for both the utility side and customer side water service lines. Excavations for service replacements were restored to existing conditions. Coordination provided with residents, municipalities, counties and Veolia for logistics and customer interactions, including providing informative literature to residents. Responsibilities included inspection staff scheduling, monthly billing accruals to client, monthly contractor invoice review for each municipality, QA/QC for daily reports, and customer interactions for project troubleshooting. (January 2023 – present) Reference: Eric Vitale, 201-634-4246 (or Hetal Mistry 201-986-2707)

- ***Borough of Oakland, 2023 Water Treatment Improvements – Project Manager.*** Project includes the installation of treatment for removal of PFAS at three (3) points of entry within the Water Department service area. Project scope includes installation of Dual GAC Adsorption treatment vessels, chlorine contact piping, chlorine injection, site grading, generator installation, new vertical turbine well pump, and the insulation and heat tracing of all above grade piping. Total construction cost of \$3.5 million. Reference: Richard Kunze, Borough Administrator, (201) 337-8111 ext. 2004.
- ***Borough of Waldwick, 2023 Water Treatment Improvements – Project Manager.*** Project includes the installation of treatment for removal of PFAS at six (6) points of entry within the Water Department service area. Project scope includes installation of Dual GAC Adsorption treatment vessels, chlorine contact piping, chlorine injection, site grading, installation of approximately 1,500LF of force main through a utility easement in a flood hazard area, and the insulation and heat tracing of all above grade piping. Total construction cost of \$5.16 million. Project funded by New Jersey Infrastructure Bank and Bipartisan Infrastructure Act. Reference: Steve Neale, Borough Administrator, (201) 652-5300 ext. 236.
- ***Borough of Oakland, 2023 River Road Watermain Improvements – Project Manager.*** Project includes the installation of approximately 650LF of 8" DIP watermain including service transfer, tapping sleeve and valves, hydrant assemblies, and chlorination sampling stations. Total Construction cost of \$210,000. Project Funded by the Bergen County Community Development Block Grant. Reference: Richard Kunze, Borough Administrator, (201) 337-8111 ext. 2004.
- ***Borough of Ho-Ho-Kus, 2023 Water Treatment Improvements – Project Manager.*** Project includes the installation of treatment for removal of PFAS at four (4) points of entry within the Water Department service area. Project scope includes installation of Dual Ion Exchange treatment vessels, site grading, and manual transfer switches, new electrical services, and the insulation and heat tracing of all above grade piping. Total construction cost of \$2.78 million. Project funded by New Jersey Infrastructure Bank and Bipartisan Infrastructure Act. Reference: Bill Jones, Borough Administrator, (201) 652-4400 ext. 231.
- ***New Jersey Turnpike Authority (NJTA), Contract No. P200.712, Roadway Resurfacing Garden State Parkway (GSP) MP 0 to 126 Section 4 (2023) – Project Manager.*** This project involves pavement removal, 2.5" depth at 1,633,000 SY and resurfacing with 241,000 tons Warm Mix Asphalt 12.5L76 Surface Course along the GSP mainline roadway, ramps, and shoulders along the NB roadway between MP 41.7 to MP 63.6 and SB roadway between MP 63.25 to MP 41.7, and other incidental work at various locations. Due to Subsoil Settlement Areas low vibratory treatment was required between MP 49.0 to MP 51.5 along both the NB and SB roadway to prevent liquification of subsoils resulting in roadway pavement settlement. (05/23 – present) Approximate construction cost \$34 Million. Reference: John Ernst 732-750-5300 ext. 8238.
- ***NJTA Contract No. P200.714, Roadway Resurfacing GSP MP 126-172 Section 14 (2023). Project Manager.*** This project involves pavement removal and resurfacing with Warm Mix Asphalt Surface Course Pavement (WMA) along Garden State Parkway mainline roadways, ramps, shoulders, toll plazas, and other incidental work at various locations from MP 126 to 172 (Section 14) in Middlesex, Union, Essex, Passaic, and Bergen Counties, New Jersey. The majority of work is from MP 148 to 161. Also, the contract required extensive maintenance and protection of traffic for the resurfacing of 20 Interchanges between MP 126 and 172. The major items of work include 148,000 tons of WMA and 1,000,000 SY of 2 ½" depth of pavement removal. Approximate construction cost of \$24.0 Million. (3/23 – Present). Reference, John Ernst 732-750-5300 ext. 8238.



- New Jersey Turnpike Authority (NJTA), Contract No. T100.599, Bridge Repairs and Resurfacing NJ Turnpike Milepost 92 to 122 – Project Manager.*** This project includes the repairs and rehabilitation of various bridge components to 41 structures on the northern portion of the Turnpike. Major work consisted of structural steel repairs and 435 CY of High-Performance Concrete (HPC) for parapet and full deck replacement. Additional repairs and rehabilitations throughout the project limits included 13,220 SY of existing concrete or asphalt pavement removal, 13,100 SY of membrane waterproofing, 17,500 LF of polymerized joint adhesive, 1,800 tons of HMA 12.5M76 Surface Course, 152,500 LBs of Galvanized Reinforcement Steel, 25,000 LBs of Epoxy Coated Reinforcement Steel, 18,000 SF of concrete deck spall repairs, pier and abutment spall repairs, concrete deck replacements, repairing headers and approach slabs, joint reconstruction, joint seal replacements, 141 EA structural steel repairs, 59 EA laminated elastomeric bearings, drainage improvements, and temporary and permanent lighting improvements. Eight (8) High-Intensity Construction Cycles are proposed including four (4) on the Newark Bay-Hudson County Extension and four (4) on the western spur. (February 2023 – present) Approximate Construction Cost \$17.8 Million. Reference Christopher Jordan, P.E. 732-750-5300 ext. 8230
- NJTA, Contract No. T100.559, Bridge Repairs and Resurfacing NJ Turnpike Milepost 92 to 122 – Project Manager.*** This project includes the repairs and rehabilitation of various bridge components to 23 structures on the northern portion of the Turnpike. Major work consisted of structural steel stiffening and 249 CY of High-Performance Concrete (HPC) for parapet and full deck replacement. Structure 92.65NO included a three-stage, 590 SY hydrodemolition of the top half of the existing concrete deck, and placement of reinforcement steel and 63 CY of HPC. Additional repairs and rehabilitations throughout the project limits included 42,100 SY of existing concrete or asphalt pavement removal, 13,000 SY of membrane waterproofing, 40,600 LF of polymerized joint adhesive, 4,800 tons of HMA 12.5M76 Surface Course, 192,700 LBs of Epoxy Coated Reinforcement Steel, 19,900 SF of concrete deck spall repairs, pier and abutment spall repairs, concrete deck replacements, repairing headers and approach slabs, joint reconstruction, joint seal replacements, 142 EA structural steel repairs, 23 EA laminated elastomeric bearings, drainage improvements, and temporary and permanent lighting improvements. Seven (7) High-Intensity Construction Cycles were completed including four (4) on the Newark Bay-Hudson County Extension, two (2) at the western spur southern mixing bowl and one (1) near the northern mixing bowl. (February 2022 – present) Approximate Construction Cost \$15.2 Million. Reference Christopher Jordan, P.E. 732-750-5300 ext. 8230
- NJTA, Miscellaneous Garage and Vehicle Wash Upgrades – Project Manager.*** This project involves miscellaneous garage and vehicle wash upgrades at: Parkway Maintenance District PMD6 at Garden State Parkway Milepost 136.7 SB in Clark, New Jersey; Cranbury State Police Station at Garden State Parkway Milepost 71.0 SB in Cranbury, New Jersey; Turnpike Maintenance District TMD10 at New Jersey Turnpike Western Spur Exit 16W, Milepost 112.9W in East Rutherford, New Jersey; and Turnpike Maintenance District TMD7 at New Jersey Turnpike Milepost 104.9 SB in Newark, New Jersey. Proposed upgrades include: construction of replacement lubrication distribution systems, upgrades to the fluid management systems, replacement of existing air compressors and installation of backup compressors, installation of new carbon monoxide detectors with retroactive monitoring equipment, and relocation/replacement of vehicle exhaust removal reels at the maintenance garages. New IT rooms shall be constructed to support the lubrication distribution system upgrades. PMD6 at Clark shall include installation of a platform for manual washing of trucks, automatic undercarriage wash system with a new hot water pressure washer, new radiant heaters, gas piping, and lighting at the existing vehicle wash bays. (July 2022 – Present) Approximate Construction Cost \$4.5 Million. Reference Robert Womelsdorf 732-750-5300 Ext. 8596.
- NJTA, Demolition of Former Turnpike Administration Building – Project Manager.*** This project involves the demolition of the Former Turnpike Administration Building at Milepost 83.2 in East Brunswick, New Jersey. The purpose of this project is to demolish the former Turnpike Administration Building and redevelop the site with impervious surface. The building has been unoccupied since the amalgamation of the New Jersey Turnpike Authority and New Jersey Highway Authority in 2004. The only remaining use of the facility is the radio tower. Utility services to the building will be disconnected prior to construction. The building must be abated of hazardous materials prior to demolition. Known hazardous materials include asbestos, lead, mold, and universal waste. Supporting site work for the building demolition includes the relocation of utilities, site



grading, installation of storm drainage structures, and paving. (September 2022 – Present) Approximate Construction Cost \$4.4 Million. Reference Ian Cooper 732-750-5300.

- ***Veolia North America, Lead Service Line Removals.*** This project included investigations completed by Contractor to identify the replace lead service lines in various municipalities. Lead service lines were removed and replaced with new copper service lines, including corporation taps at main and new curbstops. Coordination provided with residents, municipalities, counties and Veolia for logistics and customer interactions, including providing informative literature to residents. (March 2022 – present) Reference: Eric Vitale, 201-634-4246
- ***NJTA, Contract No. P200.635, Roadway Resurfacing GSP MP 0 to 126 Section 1 (2022).*** This project involves pavement removal, 2.5" depth at 430,000 SY and resurfacing with 65,000 tons Warm Mix Asphalt 12.5L76 Surface Course along the GSP mainline roadways, ramp shoulder, toll plazas along the NB roadway between MP 0.0 and 7.7 SB from MP 7.75 to 0.0, and other incidental work at various locations. This contract also includes the resurfacing of the Asbury Toll North Express E-Z Pass Lanes. In addition, the Contract includes GSP Change-of-Plan work such as resurfacing of the NB roadway MP 20.76 to 20.81. (March 2022 – Present) Approximate construction cost \$10 Million. Reference: John Ernst 732-750-5300 ext. 8238.
- ***NJTA, Contract No. P200.636, Roadway Resurfacing GSP MP 0-126 Section 6 (2022) - Project Manager.*** This project involves pavement removal and resurfacing with Warm Mix Asphalt Surface Course Pavement (WMA) and Asphalt Rubber Open Graded Friction Course Pavement (AR-OGFC) along the GSP mainline roadways, ramps, shoulders and toll plazas along with other incidental work at various locations from MP 0 to 126 (Section 6) in Cape May, Atlantic, Burlington, Ocean, Monmouth, and Middlesex Counties, New Jersey. The majority of work is from MP 80 to 92. The project was further sub-divided into eight alternating sections of WMA and AR-OGFC surface course pavements within the limits of the contract. Also, extensive maintenance and protection of traffic was required for the resurfacing of six (6) interchanges within the project limits. The principal items of work include 80,000 tons of WMA, 55,000 tons of AR-OGFC, 541,000 SY of 2 ½" depth of pavement removal, and 500,000 SY of 2" depth pavement removal. (4/2022 - Present) Approximate construction cost \$20.5 Million. Reference, John Ernst 732-750-5300 ext. 8238
- ***NJTA, Contract No. P200.667, Emergency Repair Contract, Garden State Parkway Emergency Drainage and Culvert Repairs (MP 92.9) – Project Manager.*** This project involved the emergency repair of a fire damaged 300' long 66" diameter reinforced concrete culvert, two (2) Manufactured Treatment Devices, and processing of associated cost-plus estimates. The culvert was relined with a 54" HOBAS piper lining in 20' sections, pulled into place and connected to the existing inflow and outflow structures and lateral drainage system. The upstream and downstream concrete headwalls, wingwalls, cutoff walls and aprons were also repaired due to the damage caused by the fire. In order to replace the internal components of the existing 8' diameter and 14' diameter MTD's, long-term work zones were created in the center median and along the 91SBX Ramp. The GSP northbound lanes were shifted approximately 12' to the east and the existing center median was removed to create space for a crane to remove the MTD lid, remove fired damaged components and set the new MTD components. After the MTD repair the center median was reconstructed and the GSP northbound lanes were resurfaced with WMA. This project also included slope protection, rip-rap, green gabion baskets, trash racks, guiderail, rumble strip, reflectors, striping, and chain-link fence construction. (January 2022 – May 2022) Approximate Construction Cost \$2.6 Million. Reference Ian Cooper 732-750-5300 ext. 8616
- ***NJTA Contract No. A500.611 Maintenance Storage Buildings.*** This project included the construction of maintenance storage buildings at the Clark Maintenance Yard on the Garden State parkway and Elizabeth Maintenance Yard on The NJ Turnpike. Work at the Clark facility included the demolition of an exist storage building and the construction of a new equipment storage building with concrete walls and a ClearSpan enclosure. This site also included utility relocations and the construction of Bin Block walls for material storage areas. The Elizabeth Facility included the retrofitting of an existing truck storage area which included a new structural rear wall and the additional of the rear wall ClearSpan enclosure. This also required the removal and installation of 7 block heater locations and the installation of electrical for lighting for the ClearSpan Structure. This site also included the construction of a new ClearSpan structure using new concrete footings and walls and the installation of electric for lighting inside the structure. The



site had low soil bearing capacity which required ground improvements for the footing which were improved by the use of helical piles. Estimated Construction Cost \$2.0 Mil. Contact Edward Helberg 732-750-5300

- ***Suez Water Company, 2021 Lead Service Line Removal Program – Resident Engineer.*** This project was a continuation of the 2020 Lead Service Line Removal Program and included investigations completed by Contractor to identify and replace lead service lines. Lead service lines were removed and replaced 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 residents. Additional tasks included consolidating information from team of five (5) field inspectors for data tracking, payment and delivery to client. Delivery to client included weekly progress reports and updating Suez Water's INFOR database for tracking completed work and planning for future replacement target locations. 900+ locations completed across Cliffside Park, North Bergen, Ridgefield Park, Englewood, and West New York.
- ***Suez Water Company, Lead Service Line Removals (2020).*** Performed inspections of investigations completed by Contractor to identify lead service lines. Lead service lines were removed and replaced 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 residents. 850+ locations will be completed in North Bergen for an estimated cost of \$2.7 million
- ***Borough of Roseland, Borough Tennis and Basketball Court Improvements (2022).*** This project consists of replacing the existing tennis court nets, installing new pickle ball netting, installation of new fencing, and resurfacing the tennis courts at Harrison Park. The work at Tedesco Park includes installing new basketball hops and complexly reconstructing and paving the existing basketball court. The contract is in the amount of \$311,300.
- ***City of Clifton, 2021 Road Resurfacing Program (HUD-CD).*** Project includes 238,270 S.Y. of roadway milling and 34,230 Tons HMA9.5M64 resurfacing of various roads throughout the City of Clifton. The project further includes replacement of 175 non-conforming ADA curb ramps, 11,245 L.F. of line striping along with 1,760 S.Y. concrete sidewalks, 2,300 L.F. of concrete vertical curb, maintenance and protection of traffic, and the reconstruction of approximately 100 inlets with new frames and grates. Approximate Construction Cost of \$4.6 Million. (2021-2022)
- ***Village of Ridgefield Park, Improvements to Various Street.*** Project includes 29,800 S.Y. of roadway milling and 4,380 Tons HMA12.5M64 resurfacing along various roads throughout the Village of Ridgefield Park. The project further includes installation of guide rails, installing bi-directional lens RPM, tree removal, replacement of all non-conforming ADA curb ramps, reconstruction of 26 new/reconstructed inlets with new frames and grates, line striping along with 1,475 S.Y. concrete sidewalks, 5,440 L.F. concrete vertical curbs and replacement of 395 S.Y. concrete driveway aprons. Approximate Construction Cost of \$1.1Million. (2021-2022)
- ***Borough of Roseland, First Aid Squad Entry Improvements (2021).*** This Community Development Block Grant funded project was performed in order to bring the Roseland First Aid Squad Building up to current ADA guideline standards. The project included reconstructing the curb and sidewalk in order to meet the needed slopes and opening an existing wall in order to install a new automated access door. The contract amount was approximately \$50,000.
- ***Borough of Roseland, Second Avenue, Woodland Road & 2021 Road Program (2021).*** This project included the resurfacing of five streets throughout town, totaling 3,350 tons of asphalt. In addition, drainage improvements were installed on Thackery lane, including new structures and 250 L.F. of concrete pipe. The contract amount was just over \$500,000.
- ***Township of Wayne, Jacobus Water Station Rehabilitation (2021) –*** This project consisted of the modification of existing domestic water pump station including the installation of three 200 HP pump motors, VFDs, piping, vales, and other appurtenances. In addition, the installation of a new generator, window, doorways, lighting, heaters and improvements to the roof was performed. This \$1,100,000 project was completed under budget.



- ***Township of Wayne, Rehabilitation of Lower Preakness Pump Station (2021).*** This project included the full rehabilitation of an existing waste water pump station. The items of work consisted, but not limited to the replacement of three sewage pumps, drives, control panel, level controls, eight slide gates, two sewage grinders, heaters, valves, pipe in addition to building modifications. Modifications of the building included replacement of the lighting, doors, and windows along with the replacement of the façade with new brick facing. Bypass pumping was required for 6 weeks using an array of pumps from 6" to 14".
- ***NJTA, Contract No. P200.571, Roadway Resurfacing Garden State Parkway (GSP) Milepost 0 to 126 – Project Manager.*** This project along the Garden State Parkway (GSP) involved the removal of 880,000 SY of pavement at a depth of 2.5" and 195,000 SY of pavement at a depth of 2", and resurfacing with 131,000 tons of Warm Mix Asphalt 12.5L76 and 22,000 tons of Asphalt Rubber Open Graded Friction Course (AR-OGFC) along the GSP SB inner/outer mainline roadways and ramps from Milepost 104.5 to 125.3. All work locations are in Atlantic, Burlington, Cape May, Middlesex, Monmouth and Ocean Counties. The Contract further consisted of GSP Change-of-Plan work which includes resurfacing of the NB inner/outer mainline roadways from Milepost 127.8 to 128.75. (May 2021 – present) Approximate Construction Cost \$20 Million. Reference John Ernst 732-750-5300 ext. 8238
- ***NJTA, Contract No. T100.517, Bridge Repairs and Resurfacing TPK Milepost 92 to 122 – Project Manager.*** This project included the repairs and rehabilitation of various bridge components of roughly 32 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, repairing headers and approach slabs, 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 18,600 SY of existing concrete or asphalt pavement removal, 10,000 SY of membrane waterproofing, 11,000 LF of polymerized joint adhesive, 2,350 Tons of Hot Mix Asphalt 12.5M76 Surface Course, 76 EA Laminated Elastomeric Bearings of varying types, 55,000 LBs of Reinforcement Steel, Epoxy Coated and 18,260 SF of Spall Repair of various types. 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. (March 2021 – present) Approximate Construction Cost \$12.5 Million. Reference Jason Massa, P.E. 732-750-5300 ext. 8448
- ***NJTA, OPS No. A3802 Supervision of Construction Services for On-Call Inspection Services, (2020) – Present – Project Manager.*** This project includes three (3) Task Orders for electrical and lighting Inspections, and drainage improvements on the Garden State Parkway. Some of the electrical repairs for this task order included the replacement and/or relocation of underground and bridge mounted facilities such as conduit, roadway junction boxes, bridge deck junction boxes, junction box foundations, light standard foundations and load center foundations. Other services included troubleshooting, relamping of existing roadway lighting; repair and installation of emergency backup power systems at service areas and toll plazas was also performed under this on-call contract. The drainage improvements for this on-call contract includes contract P200.555 and emergency repairs to the culvert at Interchange 91 that was damaged due to a fire. (October 2020 - Present) Reference Ken McGoldrick 732-750-5300
- ***Borough of Roseland, Harrison Avenue Recreation Improvements (2020).*** This project consisted of the installation of new playground equipment, site amenities and the resurfacing and striping of a multi-purpose use court. The old playground was removed, along with the existing mulch surface, and replaced with a poured in place rubberized surface, purchased and installed under state contract. The contract was \$194,922 and with the addition of some extra site improvements, the final contract was just over \$200,000.
- ***NJTA, Contract No. T200.549, Roadway Resurfacing, Milepost 83 to 122 – Project Manager.*** This project consisted of 1,000,000 SY of milling and the placement of 149,000 Tons of WMA12.5M76 pavement along the easterly alignment at Turnpike Interchange 15E and 15X and the northbound and southbound roadways from milepost 116 to 122. This project further includes



ramps, shoulders, maintenance U-turns, Z-turns and other incidental work. (July 2020 – Present) Approximate Construction Cost \$23.3 Million. Reference: John Ernst 732-750-5300 ext. 8238

- ***NJTA, OPS No. T3703, Contract No. T200.497, Concrete Roadway Repairs and Resurfacing – Project Manager.*** This construction project involved full depth concrete pavement repairs, shoulder rehabilitation with geogrid reinforcement and roadway resurfacing on NJDOT I-78 from milepost 57.7 to 58.6 (Interchange 14 Toll Plaza) in the City of Newark. The principal items of work include 25,000 SY of concrete roadway repairs using Warm Mix Asphalt (WMA) 25M64 base course, 75,000 S.Y. of both concrete milling and surface milling, placement of 20,000 tons of WMA of various types, geogrid placement for shoulder reconstruction, concrete joint repairs at existing concrete pavement interfaces, sawing and sealing of joints in asphalt overlays, and maintenance and protection of traffic. This project also involved significant toll plaza lane coordination at Interchange 14, which is heavily travelled due to the vicinity of Newark Liberty International Airport and NJDOT Route 1 & 9 NB and SB. Additionally, the contract included a NJTA issued Change-of-Plan work for the removal of three (3) lines of existing trench drains and installation of three (3) new lines. The drains were located west of interchange 14 with one drain on I-78 EB, and two on I-78 WB. Due to the proposed drain location with respect to the interchange, the drain installation required extensive maintenance and protection of traffic to complete the change of plan work. Approximate construction cost of \$13 Million. (6/2020 – Present). Reference John Ernst 732-750-5300 ext. 8238
- ***NJTA, Contract No. T100.465, Bridge Repairs and Resurfacing TPK Milepost 92 to 122 – 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 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. Reference Jason Massa, P.E. 732-750-5300 ext. 8448
- ***NJTA, OPS No. A3712 Supervision of Construction Services for On-Call Inspection Services, (2019) – Present – Project Manager.*** This project included ten (10) Task Orders for electrical and lighting Inspections, Category A Inspections, building commissioning and testing services, the installation of guide rail and non-vegetative surfacing. Some of the electrical repairs for this task order included the repair, replacement and/or relocation of underground and bridge mounted facilities such as conduit, roadway junction boxes, bridge deck junction boxes, junction box foundations, light standard foundations and load center foundations. Other services included troubleshooting, revamping of existing roadway lighting and signs, toll plaza and parking area lighting systems; repair and/or replacement of parapet mounted light standards (anchor bolts, bases, collars); repair and/or replacement of high mast lighting systems; repair and installation of emergency backup power systems at service areas and toll plazas was also performed under this on-call contract. (February 2019 - Present) Reference Ken McGoldrick 732-750-5300
- ***NJTA, OPS No. T3716 Supervision of Construction Services for Contracts T200.502, Roadway Resurfacing and Interchange 11 Ramp TNO Improvements, and T200.506, Roadway Resurfacing MP 83 to 122 (2019)– Project Manager.*** This OPS consisted of two (2) Paving Contracts (T200.502 and T200.506) along the northern portion of the New Jersey Turnpike. This project included 1.5M SY of pavement removal, 220,000 tons of HMA-12.5M76, 4,700 RPM's, 232,000 LF of Rumble Strip Installation, and 860,000 LF of Pavement Striping. Approximate Construction Cost of \$34 Million (April 19 – August 2020) Reference John Ernst 732-750-5300 ext. 8238



- ***NJTA OPS No. 3659 Contract Nos. P200.454, Roadway Resurfacing, MP 0 to 126 (2018) T200.457, Roadway Resurfacing, MP 0 to 122 (2018) and P200.478, Roadway Resurfacing MP 0 to 172 (2018) Garden State Parkway (GSP) – Project Manager.*** This OPS consisted of three (3) Paving Contracts (T200.478, T200.457 and P200.454) along both Authority roadways. This project included 2.3M SY of pavement removal, 280,000 tons HMA-12.5M64 and Asphalt Rubber Open-Grade Friction Course, 18,000 RPM's, 613,000 LF of Rumble Strip Installation, and 1.7M LF of Pavement Striping. Approximate Construction Cost of \$50 Million (April 18 – June 2020) Reference John Ernst 732-750-5300 ext. 8238
- ***NJTA, Contract No. P.200.490, Garden State Parkway Culvert Cleaning Milepost 111.5. Project Manager.*** This project consists of heavy cleaning and video inspection of the twin 132-inch corrugated metal pipe (CMP) culverts crossing below the Southbound and Northbound Local and Express lanes of the Garden State Parkway at Milepost 111.5. This project also includes the construction of two (2) access roadways in order to install cofferdams to divert the Nut Swamp Brook for heavy cleaning of the 1,350 L.F. of culverts. Work will take place within New Jersey Department of Environmental Protection (NJDEP) regulated areas, in accordance with the Wetland Permit and Soil Conservations Permit with special provisions implemented during construction. Work includes coordination of lane closings with the New Jersey State Police and the NJTA. Approximate construction cost of \$2.0 Million (September 2018 – June 2019) Reference: Meri Hom, 732-750-5300, ext. 8218
- ***Suez Water Company, 2019 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 curb stops. Coordination provided with residents, municipalities, counties and Suez for logistics and customer interactions, including providing informative literature to 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. Reference: Eric Vitale, 201-634-4246
- ***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 water main linings. Approximate construction cost of \$700,000. Reference: Christopher Coke 973-266-5330
- ***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.
- ***County of Essex – Four Traffic Signals and Roadway Improvements, City of Newark – Project Manager.*** This project consists of construction of four (4) new traffic signals and roadway improvements such as; wiring of traffic signal cables No. 5 & 10 conductors and ground and service wires No. 6 & 8 AWG (20,592 LF), 2" & 4" rigid metallic and nonmetallic conduit (1,708 LF), 4" thick concrete sidewalk (6,307 SY), concrete curb (5,685 LF), ADA compliant handicap ramps, maintenance and protection of traffic, traffic signals, foundations, type ECS-std (8" – 12"), pedestrian signals, 12 phase controllers, camera & video detection mounting system image detectors, 12" polycarbonate signal heads and 8" – 12" poles. The project also consists of installation of junction boxes, construction signage, drainage inlets type b, milling (14,548 SY), paving (2,493



Tons HMA), thermoplastic striping (20,895 LF), and thermoplastic markings (560 SF). The project is federally funded and under the supervision of the NJDOT and the Essex County Engineer. Reference: Luis Rodriguez 973-226-8500

- ***NJTA Contract No. P300.271, Improvements to Interchange 105 Wayside Road Connection – Project Manager.*** This \$21 Million project includes construction of a new exit ramp from GSP southbound local roadway to Wayside Road, construction of new GSP southbound ramp superstructure over Pine Brook Road and the NJ Transit/ Conrail tracks, widening of northbound and southbound GSP local roadways to accommodate additional auxiliary lanes, widening and signalization of the Wayside Road/Pine Brook Road intersection, construction of 10 new overhead sign structures, asphalt milling and paving, drainage system improvements, signage, traffic striping, roadway lighting, utility work, and a high level of maintenance and protection of traffic. Reference John Ernst 732-750-5300 ext. 8238 (10/2015 – 12/2017)
- ***City of Hoboken. Sprayground at Legion Park - Project Manager.*** This project consisted of the installation of playground and sprayground equipment and a poured in place rubber safety surface for both areas. (Approximate construction cost of \$150,000)
- ***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. Reference: Eric Vitale 201-634-4246
- ***Old Mill Pond Municipal Pool, Woodcliff Lake, N.J.*** Situated on a 10.4-acre tree-lined site, this 750,000-gallon swimming pool with a 26,000-square foot swimming area is one of the largest in the state. The major features of this facility include a zero depth entry area, a new water slide, an eight-lane competitive swim area, and diving area. Located within the zero depth entry area are several spray park water features. These amenities run off an eco-friendly recirculating filter system. The facility is outfitted with several other site amenities to create a full-service recreation center.
- ***NJTA, Contract No. P200.407, Culvert Rehabilitation Milepost 123.8, Borough of Sayreville, Middlesex County – Project Manager.*** This project involved the repair of a 142 x 102 inch corrugated metal pipe (CMP) arch culvert with pneumatically applied concrete (1100 CY), reinforcement steel, and structural steel. The work included the diversion of an existing creek by constructing a cofferdam with a temporary flow diversion system. Culvert repairs consisted of heavy pipe cleaning, installation of structural steel, reinforcement steel, and pneumatically placed concrete. The project required adherence to New Jersey Department of Environmental Protection (NJDEP) and soil conservation permits. The work was performed in a confined space environment that extended approximately 1000 feet under the southbound roadway 40 feet below grade. The culvert was supported by temporary shoring for the removal of inverts and installation of structural steel. Also, the contract included NJTA issued change-of-plan for the rehabilitation of existing 36" and 42" CMP pipes located under the Cheesequake Service Area. Approximately 777 LF of 36" CMP was repaired by spin casting with Geopolymer mortar. In addition, approximately 137 LF of the 42" CMP storm pipe was slip lined with a 36" Hobas lining system and angular space grouting. The repair area spanned the full width of the highway from north to south and terminated at the rehabilitated culvert pipe. The proposed work also required locating a buried storm manhole to be reset to grade and point repair on an existing 36" CMP 35-feet below grade along with the installation of a P-1 storm manhole using temporary sheeting to remain in place. All work required long term lane closures and detours using precast concrete construction barrier. Approximate construction cost of \$5 million. (10/2016 – 7/2018) Reference John Ernst 732-750-5300 ext. 8238
- ***County of Essex, Superstructure Replacement of Lyons Avenue Bridge Over Elizabeth River – Project Manager.*** Project includes the removal of existing poured concrete superstructure and installation of new pre-tensioned precast concrete beams, poured HPC concrete bridge deck, sidewalks, curbing and parapets as well as traffic detours and MPT coordination. This project also included the coordination and relocation of the gas, water and telephone utilities, milling, paving and the installation of striping. (Approximate project cost of \$389,000) Reference: Luis Rodriguez 973-226-8500.



- ***County of Essex, Replacement of Hoover Ave Bridge Over Third River – Project Manager.*** This project includes the removal of the existing structure and installation of a temporary coffer dam for the construction of a new arch culvert on poured in place concrete footings. The project also included major utility relocation, temporary support systems for PSE&G gas main and electrical duct bank during construction. The project also includes involved MPT and traffic detours, cut, cap and restoration of existing water main; coordination with utilities; ADA handicap ramps, curbing, and sidewalks; asphalt paving; and traffic striping. Approximate construction cost \$744,000.
- ***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.
- ***Paramus Municipal Pool, Paramus, N.J.*** This Municipal Pool Complex situated on an 8.5-acre tree-lined site offers three (3) separate pools. Highlights of the project include a technologically advanced chlorination system, a new water slide, zero-depth entry, a competitive swim area, and various amenities in the kiddie pool area. The water features run off an eco-friendly recirculating water filter pump. Management work included close coordination with the pool sub-consultant to ensure both deadlines were met and the final product exceeded client expectations.
- ***Emergency Replacement of the Glen Gray Road Bridge, Township of Mahwah / Borough of Oakland NJ – Project Manager.*** The major items associated with the replacement of the Bridge include: the demolition and removal of the existing steel truss bridge, deck, and sidewalk; demolition of the old stone abutments and reuse of the stone as rip rap for the remaining existing abutments; the construction of a new identical galvanized truss bridge; the construction of asphalt surfacing on the bridge deck and sidewalk. This project also included a 21 consecutive calendar day limit for closure time. Approximate construction cost of \$1 Million.
- ***Borough of Fairview. Improvements to Columbus Park. – Project Manager.*** This project consisted of the construction of a children's water park, including spray features, associated pumps, and plumbing. The project also included park improvements such as new shaded picnic tables, bocce courts, acrylic basketball court resurfacing, re-sodding of existing 3,400 S.F. baseball field, new sprinkler system, replacement of all site fencing and construction of 2 ADA accessible handicap ramps and associated block retaining walls. (Approximate construction cost of \$1.1 million)
- ***Witfield Recreation Complex, Englewood Cliffs, NJ – Design Engineer.*** The project included the design of three (3) baseball/softball fields, a soccer field, a concession stand with restrooms, a tot lot, volleyball court, tennis courts and walking paths. The complex is located on a seven (7) acre site. Environmental permits were required for stream encroachment, wetlands and water quality.
- ***Stevens Institute of Technology, Hoboken, NJ – Design Engineer and Inspector.*** Project included the design and inspection services of a combination soccer, lacrosse and baseball/softball field. Permits were required for soil erosion and sediment control.
- ***JFK Field Design, Hoboken, NJ – Engineer.*** Project included the design of a combination football, soccer and baseball/softball synthetic-turf field. The project also included resurfacing of the existing track. Permits were required for soil erosion and sediment control.
- ***Fieldstone Athletic Fields, Montvale, NJ – Inspector.*** Project included the design of two (2) baseball/softball fields, two (2) soccer fields and a 50-car parking lot. The complex is located on a 23-acre site. Environmental permits were required for wetlands and water quality.



- ***Memorial Park Improvements, Montvale, NJ – Inspector.*** Project included the design of a roller hockey rink, two (2) basketball courts and a 75-car parking lot. The complex is located on a 24-acre site. Environmental permits were required for stream encroachment, wetlands and water quality.

YEARS OF EXPERIENCE: 43 Years

EDUCATION:

BSEE, Newark College of Engineering (NJIT)
MBA, Monmouth University

REGISTRATION:

Professional Engineer: Fifty-One U.S. Jurisdictions
Certified Power Quality Professional (CPQ) – Association of Energy Engineers
Certified Co-Generation Professional (CCP) – Association of Energy Engineers (Inactive)
Continuing Education Provider (ECSP) – NJ EC Board – Instructor #174; Sponsor #191
Certified Electrical Safety Compliance Professional (CESCP) – National Fire Protection Association

EXPERIENCE:

Bruce Rockwell, with more than 40 years of in-depth experience in the energy sector, serves as the Vice President of Boswell Engineering's Power & Energy Design Division. His myriad of experience includes electrical transmission and distribution, HV substation design and field operations, power plants and railroads mission critical, and industrial facilities. Mr. Rockwell's experience further includes engagements as an Engineering Expert, Engineering Expert Witness, Peer Reviewer, Owner's Engineer, Oversight Engineer, Insurance Claim Support, Staff Augmentation Manager, and Electrical Inspector.

Relevant project experience includes:

- ***NJ TRANSIT: Design Build Project Lead:*** Replacement of (161) 69 kV Circuit Breakers at (16) Substations on the Morris & Essex Rail Line.
- ***TC Electric / Judlau: Commissioning Engineer:*** Thirty-three (33) Mile Replacement and Cutover of the Hudson Rail Line - Signal Power Distribution System.
- ***PSEG: Principal Engineer / Program Manager:*** Developed Substation Condition Assessment Program. Led the Execution of Assessments at (25) Substations.
- ***BG&E: Owner's Engineer:*** Review of New 115 kV GIS Substation Design.
- ***BG&E: Owner's Engineer:*** Review of New 230 kV GIS Substation Design.
- ***BG&E:*** Prepare Owner's Detailed Construction Cost Estimate for 115 - 230 kV Substation including 60 MVA STATCOM
- ***NJ TRANSIT: Damage Assessment:*** Provide site inspection and repair/replacement recommendations for 69 kV Traction Power Substation and 2.4 kV Signal Substation that suffered extensive damage during a storm event.
- ***NJ TRANSIT: Arc Flash Hazard Analysis:*** Perform Gap Assessment of Bus and Rail Facilities. Merck Design Build Project Lead: Replace T9-2 Transformer, 10 MVA, 34.5 - 4.16 kV
- ***LIRR: Design Lead:*** Install Temporary Metering for Simultaneously Measuring Load Demand at (35) Traction Power Rectifier Substations.
- ***Columbia University:*** Protection & Coordination Study for Manhattanville Campus - 13 kV Medium Voltage Power System
- ***Illinois Power:*** Design of 4.16 kV Reserve and Emergency Reserve Auxiliary Transformer Systems - Static Var Compensator (SVC) Substation (Clinton Nuclear Power Station).



- **MESA:** Battery Design of 3 MW-Hr. Battery Energy Storage System.
- **NJ TRANSIT:** Design of Standby Generator for NJ TRANSIT Police Annex
- **Com Ed:** Design of 138 kV Substation Upgrades (Northwest Substation)
- **Com Ed:** Design of New 138 kV Substation (Diversey Substation)
- **Com Ed:** Design of New 138 kV GIS Substation (Kingsbury Substation)
- **Com Ed:** Design of New 138 kV GIS Substation (Ohio Substation)
- **East Michigan University:** Design of New 46 kV AIS Substation
- **Utah Power & Light:** Design of Several Shunt Capacitor Banks (138 kV, 230 kV and 345 kV)
- **JCP&L:** Design of Expansion of 230 kV Ring Bus (4 to 7 Breakers - Lakewood Co Gen)
- **Con Ed:** Design of 230 kV Collector Bus Substation (Ocean Peaking Power)
- **JCP&L:** Design Build Project: Replace Bank 15 (2) x 150 MVA Transformer at Sayreville Station.
- **Gen On:** Design Build Project: Replace Bank 2 - 300 MVA Transformer at Portland Station
- **Roseton:** Design Build Project: Replace Bank 1 - 660 MVA Transformer at Roseton Station

AFFILIATIONS:

Association of Energy Engineers – Sr. Member

Construction Specification Institute (CSI)

Council on Large Electric Systems (CIGRE) – US National Committee – Member

Doble Engineering – Transformer Committee (TX) Member

Doble Engineering – Asset Maintenance Management (AMM) Committee Member

Doble Engineering – Insulating Materials (IM) Committee Member

Human Performance Association (HPA) – Charter Member

International Association of Electrical Inspectors (IAEI) – Member

Institute of Electrical & Electronic Engineers (IEEE) – Senior Member:

- Power Engineering Society
- Industry Applications Society
- Standards Association (Substation Standards Committee)

National Fire Protection Association:

- NFPA 70 (NEC) – Code Making Panel 10 – Alternate (Retired) Member
- American Council of Engineering Companies (ACEC) of New Jersey- Committee Member

PUBLICATIONS/PAPERS/CONFERENCE PRESENTATION:

Maintaining Market Share in Spite of Deregulation: Enhancing Quality & Value of Electric Utility Service,
Monmouth University, West Long Branch, NJ, November 29, 1992.

Customization of Power Quality Analysis Software to the Characteristics of a Local Utility Distribution System,
EPRI 4th International Conference of Power Quality, New York, NY, May 1995.



Conditioned Power Sales Guide for Commercial and Residential Electric Utility Representatives, JCP&L, Morristown, NJ, November 20, 1995.

NERC – Protection System Maintenance & Testing Requirements, NETA Power Test Conference, Washington D.C., February 2011.

Fundamentals of Power Quality Diagnostics & Case Studies, NETA Power Test Conference, Ft. Worth, TX, February 2012.

Power Quality Diagnostics & Case Studies, 4-Hour Seminar, Power Test 2013, Denver, CO.

Benefits of Using Online Dew Point Monitoring During Transformer Vacuum Processing, 81st International Conference of Doble Clients, Boston, MA, April 2014.

Field Testing Techniques for Low Voltage Circuit Breakers, NETA WORLD, Spring, 2014.

Asset Management of Transportation Agency Substation Assets, 2022 Doble Client Committee Meetings Conference, Indianapolis, IN, October 3-6, 2022.

Interconnection – Power System Instability and Protective Relaying, co-authoring this Book with Mr. Tom Baker – under contract with Taylor & Francis Publishing – expected completion 2023.

YEARS OF EXPERIENCE: 30 Years

EDUCATION:

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

REGISTRATION:

Professional Engineer - New Jersey
Electrical Contracting - New Jersey
PSE&G Substation Training
First Energy Substation & Manual of Operations Training

EXPERIENCE:

Mr. Post, a licensed Professional Engineer and licensed electrical contractor, has more than 30-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:

- **Iroquois Ave Pump Station, Oakland NJ** – Designed Electrical System Replacement including electrical service upgrade, backup generator & replacement of VFD controlled pump motors.
- **Lake Street Sports Field Complex, Upper Saddle River NJ** – New sports field complex with sports field and parking lighting, field house and press box.
- **Garfield High School Field Upgrades Garfield NJ** – New sports field lighting and field house with electrical service upgrades.
- **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

Mr. Post also provides project management services for First Energy's Transmission Project Management Group. Projects he as managed include:

- T-5020 500kV relay and carrier equipment upgrade (**Smithburg Switching Station**)
- Line relays and carrier set replacement on the East Windsor-Smithburg (#2005) 230kV line terminals with Ametek UPLC-II (**East Windsor and Smithburg Substations**)



- 230kv yard rebuild and Bank 5 transformer installation (**Windsor Substation**)
- Six wire to two three wire 230kv line reconfiguration (**Windsor – East Windsor**)
- Operational meter CT, adaptive relaying, and RTU upgrades (**Readington Substation**)
- 230kv Circuit Switcher Replacement (**Cookstown Substation**)
- **JCP&L Priority Pole Replacement** project management.
- Conversion to a five-breaker ring bus (**Pequest River 115kV substation**)
- 230kV line relaying and terminal upgrade due to mis-operations and reliability (**Chester - Glen Gardner**)
- E5 34.5 kV line rebuild (**Gillette – Green Village**)
- P2016 230kV breaker, bus and switch upgrades for de-rate of line (**Gilbert Station**)
- **JCP&L Tx Condition Repair Program Management.** Repair work associated with transmission priority conditions.
- 34.5kv A703 Breaker Replacement (**Franklin Substation**)
- Replace Bank #1 230-34.5kv transformer & associated 34.5kV equipment & bus upgrades (**Windsor Substation**)
- **JCP&L Transmission RTU Program.** Replacement of RTUs in 23 Stations in the JCP&L Opco.
- Provide Interconnection Facilities for **Viridity Energy Solutions** 20 MW inverter based storage. Installation of 34.5kV load break air switches with SCADA control; upgrade of end terminal relay settings.
- 115kV Breaker and a Half station conversion. Addition of a control house and two 115-34.5kV transformers (**Franklin Substation**)

YEARS OF EXPERIENCE: 45 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 and Delineation
Advanced Wetland Delineation
Freshwater Wetland Construction Techniques
Onsite Wastewater Disposal Systems – Design, Inspection, O&M
Dam Design, Rehabilitation, and Inspection
Pond Design, Management and Maintenance
Soil Erosion and Sediment Control Design and Inspection

REGISTRATIONS:

NJDEP Licensed Site Remediation Professional (LSRP)

CERTIFICATIONS:

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

EXPERIENCE:

Mr. Rossi has over 45 years of experience as a Project Manager/Senior Environmental and Chemical Engineer. He has a solid and diverse background in chemical, civil and environmental engineering. He has specialized in State and Federal permit acquisition, wetlands delineation, as well as coastal and waterfront development projects for numerous public and private sector clients. 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. Mr. Rossi has experience in many areas of coastal design projects including the preparation of State and Federal environmental permits for the New Jersey Department of Environmental Protection (NJDEP), including Coastal Area Facility Review Act (CAFRA), Waterfront Development, Coastal and Freshwater Wetlands, Treatment Works Approval (TWA), New Jersey Pollution Discharge Elimination System (NJPDES), and the U.S. Army Corps of Engineers (ACOE) Nationwide Permits, NJDEP Fish, Game and Wildlife Permits, and NJDEP Dam Permits and Inspections.

Mr. Rossi's extensive experience further involves environmental investigations and cleanups including, Preliminary Assessments (PA), Site/Remedial Investigations (SI/RI), underground storage tank (UST) removals and installations, and Remedial Actions (RA). Mr. Rossi's chemical engineering background makes him uniquely qualified in evaluating various soil and groundwater remedial options at contaminated sites.



Specific experience includes:

REGULATORY PERMITTING

- ***Goffle Brook Bank Stabilization and Restoration, Hawthorne, NJ.*** Project Manager for the Goffle Brook Bank Stabilization project that involved the ecological restoration and rehabilitation of a 2.5-mile stretch of the Goffle Brook within the 103-acre Goffle Brook Park. The park was designed in the early 1930s by the renowned Olmsted Brothers, whose other notable achievements included New York's Central and Prospect Parks. The project's goal was to restore the park as closely as possible to its original design using modern techniques. The damaged, riparian corridor displayed evidence of progressive erosion at numerous locations, including eroded banks that had exposed the root systems of nearby vegetation. Additionally, the on-stream duck pond was exhibiting degradation due to siltation and sedimentation. The scope of services included: stream bank stabilization; riparian corridor restoration; NJDEP Freshwater Wetlands Individual Permitting; NJDEP Flood Hazard Area Individual Permitting; and State Historic Preservation Office (SHPO) approval. To implement bioengineering bank stabilization methods, all work was closely coordinated with the NJDEP. The methods which were utilized included a vegetated brush mattress, tiered boulder walls, and vegetated boulder walls. Another component of the project involved dredging large sediment deposits that had formed along the river banks and installing vegetated gabion baskets to prevent future erosion. The final phase of the ecological restoration provided for naturally occurring ground cover by re-vegetating the bank slopes.
- ***Dundee Island Park, Passaic, NJ.*** Project Manager for the investigation, remediation, environmental permitting, and construction oversight revitalizing a neglected urban riverfront park into a modern recreational area. Formerly, the park was home to a worn natural turf soccer field and dilapidated playground. Environmental work included a Preliminary Assessment (PA), Site and Remedial Investigations (SI/RI), Remedial Action (RA), and Deed Notice Preparation. Permitting included US ACOE Nationwide Permit No. 7, NJDEP Waterfront Development Individual Permit (Upland and In-Water) and an FHA Hardship Exemption. The park now boasts an outdoor amphitheater, a significantly larger modern playground, concession stand, and two (2) turf soccer fields providing diverse recreational opportunities for City residents.
- ***Historic Dundee Dam Pedestrian Way & Preserve, Garfield, NJ*** Project manager for the City's acquisition of $\pm$ 12 properties under New Jersey's Green Acres Program. The properties included used car lots, former gasoline stations, abandoned warehouses and residential properties. Work included site/remedial investigation activities including geophysical surveys to locate possible USTs, soil borings and test pits. Provided oversight during the removal of USTs and ASTs at the former service stations and prepared bid specifications for asbestos abatement and demolition of the site structures. Also prepared an Individual Flood Hazard Area Permit and a Freshwater Wetlands General Permit for the proposed widening, realignment, and intersection improvements necessary to upgrade the adjacent county road and improve driver safety. Since the road widening significantly increased the impervious coverage on-site, the project required detailed stormwater management calculations to design the various drainage improvements. Worked closely with NJDEP Green Acres during the acquisition process to ensure all requirements were met. This included preparation of the necessary documentation to obtain a "Diversion of Use" from the State of New Jersey for the road-widening.
- ***Southern New Jersey Light Rail (SNJLR) Design/Build/Operate/Maintain, New Jersey Transit, NJ.*** Project Manager for the environmental permitting portion of the SNJLR DBOM project. The project involved the construction of a 35-mile section of railroad between Camden and Trenton, New Jersey. The light rail alignment passed through numerous environmentally sensitive wetland areas requiring Mr. Rossi's expertise in identifying the various State and Federal permits required for construction. The permitting effort involved the collaboration of various design firms and required a comprehensive understanding of the project's goals and objectives. The acquisition of all necessary permits in conjunction with constant negotiations with the NJDEP Division of Land Use Regulation was critical to the success of the SNJLR. Some of the permits obtained for this project included NJDEP Freshwater Wetlands Letter of Interpretation, Mitigation Plan, ACOE Coastal Wetlands and U.S.
- ***Windsor Substation, FirstEnergy/JCP&L, NJ.*** Boswell Engineering, on behalf of Jersey Central Power & Light/FirstEnergy Corporation, performed a 3.5-mile water resource delineation along an



- existing ROW between the Windsor and East Windsor Substations for the establishment of a new fiber optic transmission line. This field delineation included identification of wetland boundaries, riparian zones, and threatened and endangered species habitats. The delineation was utilized in the siting study to minimize environmental impacts and determine permitting requirements. Boswell also applied for New Jersey Department of Environmental Protection (NJDEP) Division of Land Use Regulation for improvements at Windsor Substation. The project involved the replacement of two (2) lattice electrical towers with steel monopoles and the installation of three (3) additional monopoles to support improvements to Windsor Substation I in the Township of Robbinsville, Mercer County, New Jersey. The purpose of the submission was to provide the Department with the necessary documentation required for a Freshwater Wetlands General Permit No. 21, a Flood Hazard Area (FHA) Individual Permit, a FHA Hardship Exemption and a FHA Verification.
- ***Smithburg Substation, Freehold, NJ.*** Project Manager for the permitting associated with the emergency replacement of electrical transformers. A Freshwater Wetlands Emergency Authorization and a Soil Erosion and Sediment Control Certification was obtained for this project. The substation's primary 500kV transformer had failed and its secondary "backup" was experiencing problems. To ensure a reliable power grid, a new 500kV system spare was ordered and installed. Additionally, 180-linear feet of gabion retaining wall was constructed along the northern corner of the site due to the steep slope present in this area. To allow the stormwater runoff from this slope to recharge onsite, a 20' wide Cultec system was installed. The system consists of a honeycomb structure providing rigidity and support for heavier vehicular traffic along the northern fence-line
 - ***Ramapo River Bank Stabilization, Oakland, NJ.*** Project Manager for the emergency bank stabilization design, regulatory permitting and construction inspection for a severely eroded 800 linear foot, 75' high portion of riverbank. The erosion was caused by a combination of unusual storm events (including Superstorm Sandy), erodible soils and changing stream dynamics. The erosion was jeopardizing the safety and welfare of the adjacent residential properties and creating flow blockages downstream. Also, the excessive accumulation of sediment within the channel began to alter the geomorphology and dynamics of the watercourse, adversely affecting the river's water quality and disrupting downstream aquatic biota. Due to the project's size and scope, it qualified for a community grant from the National Resource Conservation Service (NRCS). Worked closely with the NRCS and the NJDEP Division of Land Use to design, bid and construct the project on an emergency basis to prevent the loss of additional property. Immediately after the project's award, the contractor was able to quickly establish the toe of the slope using rip rap stone providing the necessary level of protection for seasonal storm events and flash floods. The remainder of the project was then successfully completed in less than 4-months. A photograph of the completed project was featured on the cover of the NJDEP's Soil Erosion and Sediment Control Manual.
 - ***Hudson River Waterfront Walkway, Hoboken, NJ.*** As Project Manager prepared a site plan, Individual Waterfront Development Permit and ACOE Individual Permit for the construction of an 840 linear feet section of the Hudson River Waterfront Walkway and the installation of an 8' public fishing pier and dock in the City of Hoboken. The walkway's installation eliminated a known "gap area" creating a contiguous riverwalk from Castle Point Park to Sinatra Park. The riverfront walkway extension was constructed as a free-standing structure supported by 14" steel shell piles for maximum durability. This design was necessary since the existing on-site pier was not structurally sound and portions of the bulkhead had already collapsed. The project's goals and objectives were to; redevelop the existing waterfront; reestablish the public's right of access; provide the public with recreational facilities; and decrease traffic congestion.
 - ***Villa Marie Claire, Saddle River, NJ.*** Project manager for the design and permitting required for the expansion of an existing hospice facility associated with Holy Name Hospital. The improvements included several facility upgrades such as a 5,200 square foot horse barn, 4,400 linear foot natural trail, 150 linear feet of bank stream stabilization, and reconstructing 500 linear feet of an existing retaining wall which was damaged during Tropical Storm Ida. Prepared or personally oversaw all necessary project components including designs, drawings, and details. Once the design was finalized, applied to the NJDEP for a FHA Individual Permit, Freshwater Wetlands General Permits No. 1, 17, 20, a Transition Area Averaging Plan, and Special Activity Redevelopment Transition Area Waiver.



- ***Kuiken Brothers Lumber, Newark, NJ.*** Project Manager for the design, permitting, and redevelopment of an existing deteriorated 60' x 100' wharf located on the Newark Bay. The property lies in a heavily developed industrial area along Doremus Avenue, bordering the Newark Bay. The site currently serves as Kuiken Brothers Lumber primary material storage yard. Currently the yard has both truck and rail access. However, Kuiken Brothers desired to add marine access to expand their operations. The wharf reconstruction includes the installation of 76 hollow steel piles, 100 linear feet of steel sheet piling, as well as a concrete decking system having a retaining wall. Prepared or personally reviewed all necessary documentation, drawings, details, and designs required for a Freshwater Wetlands Individual Permit – Commercial/Industrial Public (Landward and Waterward MHWL).
- ***Riverview Club and Towers, East Rutherford and 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 New Jersey Meadowlands Commission (NJMC), ACOE, NJDEP, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA).
- ***Yaohan Shopping Plaza, Edgewater, NJ.*** Project Manager for this project that 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 application in compliance with the NJDEP coastal zone policies. Also, prepared an ACOE Section 404 B 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.

SITE INVESTIGATION AND REMEDIATION

- ***Eastern Concrete Materials Quarry, Glen Gardner, NJ.*** After a significant rock fine release at the quarry, served as a Project Manager to restore a 2-mile Category 1 (C-1) watercourse that outlets to the Spruce Run Reservoir. Installed floating turbidity barriers at the mouth of the reservoir to capture the sediment in the forebay. During stream channel cleaning, temporary driveways were installed to enable manpower and equipment to be readily available for the cleanup. Temporary stone filters were installed at seven (7) accessible downstream locations. The channel was then washed down using a patented Sand Wand technology and accumulated silt was collected by Vactor trucks. All pumped material was then transported back to the quarry thus eliminating disposal cost. Throughout the project, surface water samples were regularly collected and analyzed in accordance with NJDEP requirements.
- ***Port Authority of NY and NJ, Jersey City, NJ to World Trade Center, NY.*** Project Manager for the initial SI/RI of the Port Authority's PATH tunnels following 9/11. Managed two (2) assessment teams traveling through the PATH tunnels from Jersey City (Exchange Place), beneath the Hudson River, to the former World Trade Center station at Ground Zero. The project's purpose was to investigate the tunnels for polychlorinated biphenyls (PCB) 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.
- ***Bridge Reconstruction over the Hirschfeld Brook, New Milford, NJ.*** As Project Manager, Mr. Rossi's 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, designed a groundwater treatment system 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 directly to the brook. The treatment system, and subsequent discharge approval, provided a significant cost savings and minimized serious project overruns and delays.

- ***Greystone Psychiatric Hospital, Morris Plains, NJ.*** As Project Manager, performed a thorough and detailed PA 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 SI at the facility's former manufactured gas plant (MGP).
- ***Former Nike Missile Site, Mahwah, NJ.*** Project Manager for the decommissioning and demolition of a former Nike missile site. 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 RA 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.
- ***Department of Public Works, Municipal Building and Pump Stations, Elmwood Park, NJ.*** Project Manager for the UST removal and UST/AST installation at several municipal sites. Work included preparing comprehensive plans and specifications; evaluating contractor bids and awarding the contract; provided site supervision at many of the projects; performed SI/RI (soil and 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 RI/RA at four (4) of the sites including the Municipal Building and Department of Public Works.

AFFILIATIONS:

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

YEARS OF EXPERIENCE: 30 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 30 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), Receptor Evaluations (RE), and Remedial Actions (RA), as well as asbestos containing material (ACM) and lead-based paint (LBP) surveys/abatement. 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:

- ***Enor Plastics, Northvale, NJ – Project Engineer.*** Project engineer for the Industrial Site Recovery Act (ISRA) transaction of a former plastics manufacturer in Northvale, New Jersey. This half million-dollar project, completed under the purview of the NJDEP's ISRA Program, involved a comprehensive environmental investigation including a PA, SI, RI, RE, and RA. Identified several AOCs, including four (4) septic systems, one (1) in which chlorinated volatile organic contaminants (CVOC) were emptied by former building owners. Removed the building's floor drain system and excavated the septic systems during the structure's demolition. Delineated the groundwater contamination through a network of onsite and offsite monitoring wells. Prepared offsite access agreements and completed the necessary vapor intrusion (VI) surveys. Developed detailed remedial cost estimates and worked closely with a prospective property purchaser, TD Bank, as well as their attorneys and environmental professionals in establishing a mutually agreeable Remediation Funding Source (RFS) amount that eventually allowed for the property's sale and redevelopment into a self-storage facility. Currently overseeing the RFS and preparing the quarterly disbursements to finish the remediation.
- ***Passaic River Historic Park Acquisition, Garfield, NJ – Project Engineer.*** Project engineer for the City of Garfield's acquisition of approximately 20 Brownfield properties along River Drive. The City purchased the properties using NJDEP Green Acres Program funding with the eventual goal of redeveloping the entire west side of River Drive into a park and riverfront walkway. The properties included filling stations, auto repair garages, used car dealerships, small industrial manufacturing facilities, single-family housing and vacant lots. Completed the entire range of investigation and remediation activities depending upon the property, including PA, SI, RI, RA, UST removals, asbestos surveys, building demolitions, eventually culminating in RAOs for all of the sites. Since most sites were topographically raised with historic fill material, completed historic fill investigations, prepared deed notices, remedial action permit applications and designed engineering controls that were incorporated into the park's overall improvements including



asphalt paved parking lots, bike and walking paths, playgrounds and grass covered lawns.

- ***James J. 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 PA identifying that a portion of the site was once a low-lying wetland where dredge spoils, 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 RA including the excavation of 4,500-tons of contaminated material. Delineated the extent of the groundwater contamination, prepared the property's deed notice, RAP, and authored all necessary reports following the work. Subsequently issued the site an RAO under the NJDEP's LSRP program.
- ***Liberty Optical, Newark, NJ – Project Engineer.*** Project engineer for the ISRA transaction of a former eyeglass frame manufacturer. Prepared 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 CVOs, floor drain integrity testing (dye and video), horizontal and vertical delineation of soil and groundwater contamination, and borehole geophysical survey in bedrock monitoring wells.
- ***Port Authority of NY & NJ PATH Tunnel Investigation Following 9/11 – Project Engineer.*** Led two (2) assessment teams through the PATH tunnels from Jersey City (Exchange Place), beneath the Hudson River, to the former World Trade Center station at Ground Zero. The project's purpose was 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.
- ***Shared-Services Department of Public Works (DPW) Complex, Cliffside Park & Fairview, NJ – Project Engineer.*** Prepared a PA identifying the various environmental AOCs and estimated the potential remediation costs allowing for the property's purchase by the municipalities. Performed SI/RI delineating the contaminant's extent. Prepared plans and specifications for the site's remediation including the demolition of two (2) existing structures, UST removal, excavation of contaminated soil and removal of contaminated groundwater. Performed onsite supervision during remediation, including the 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 an RAO under the NJDEP's LSRP program.
- ***River Oil Passaic, NJ – Project Engineer.*** Participated in the Brownfield redevelopment of a 3.5-acre former bulk oil/gasoline storage terminal. 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 (NJPDES) permitting; and, the design and retro-fit of the former oil/water separator into a free phase petroleum product recovery system.
- ***Tri-Star Motors, South Hackensack, NJ – Project Engineer.*** Prior to the sale of this former Getty filling station, Boswell Engineering was retained by the owner to investigate the site's potential environmental AOCs including former USTs, hydraulic lifts, floor drain system and historic fill. Supervised the excavation and disposal of 5,000-tons of petroleum contaminated soil as well as three (3) undocumented USTs encountered during the work. Authored all necessary reports including the PA, SI, RI, and RA, designed the site's engineering control and prepared the property's RAP and deed notice. Subsequently issued the site an RAO under the NJDEP's LSRP program.
- ***Naughter's Mobil, Albany, NY – Project Engineer.*** Removed the USTs and several thousand tons of contaminated soil at this former gasoline station. 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.



- ***Witco Chemical, Newark, NJ – Project Engineer.*** The project involved the Passaic Valley Sewerage Commissioner's (PVSC) acquisition of a former 17-acre, 100-year-old, manufacturing facility adjacent to their existing treatment plant. 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 found beneath the building's floor slabs. The project subsequently received a Distinguished Service Award from the Consulting Engineers Council of New Jersey.
- ***Emergency UST Removal, Fairview 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 U.S. 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 EPA and the U.S. Coast Guard during recovery operations of a 50,000-gallon diesel fuel spill in Lindburgh Bay.
- ***Elmwood Park DPW, Municipal Building and Pump Stations, Elmwood Park, NJ – Project Engineer.*** Prepared comprehensive plans and specifications for the UST removal and UST/AST installation at the DPW, Municipal Building and five (5) pump stations; 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 the SIR/RIR for submission to the NJDEP; and, designed future groundwater remedial investigation at four (4) of the remaining sites.
- ***National Lead (NL) Industries Pedricktown, NJ – Project Manager.*** Performed a detailed investigation for the USEPA's Superfund program at a former battery breaker and lead smelter. 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.
- ***Techem, New Hyde Park, NY – Project Manager.*** Performed a detailed investigation and remediation for the USEPA's Superfund program of an electroplating chemical facility. 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 XRF; performed feasibility study of remedial options; and, coordinated the transportation and disposal for all hazardous waste and contaminated soil.
- ***Fairleigh Dickinson University, Rutherford, NJ – Project Engineer.*** Prior to the property's purchase by Felician College, performed a detailed PA/SI of the 11.5-acre college campus comprising 13 buildings, including housing offices, auditoriums, classrooms, laboratories and residence halls.
- ***Standard Tank Cleaning Corporation, Bayonne, NJ – Environmental Engineer.*** The site's 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 250,000-gallons of contaminated wash/rain water prior to discharge to the PVSC treatment plant.

- ***Hudson Coal Tar, Hudson, NY – Environmental Engineer.*** Performed the initial soil, groundwater, waste pile and river sediment sampling of an abandoned manufactured coal gas plant (MGP). The sampling's results qualified the site for an emergency removal action under the EPA's Superfund program. Prior to the contaminant's delineation, surveyed in a sampling grid system and collected soil samples from the site and sediment samples from the immediately adjacent Hudson River. Following the contaminant's delineation and waste characterization, participated in the removal of coal tar waste piles, as well as the design and pilot testing of a proposed groundwater treatment system.
- ***Cambalache National Forest Site, Arecibo, Puerto Rico – Project Manager.*** Led a site assessment team to a pentachlorophenol (PCP) contaminated wood treatment plant located within the boundaries of a national forest. Performed multi-media sampling in order to qualify the site for Superfund emergency response cleanup.
- ***New Department of Public Works (DPW) Garage, Cliffside Park, NJ – Project Engineer.*** Prior to the Borough's purchase of a former industrial property, prepared a detailed PA identifying a number of environmental AOCs, including an abandoned UST previously located on site but, due to previous subdivision, 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 an RAO under the NJDEP's LSRP program.

PUBLICATIONS:

Ninth International Conference on Solid Waste, 10/93 - Presented Master's Project, "A Model for Estimating Landfill Settlement Due to Biodegradation."

AFFILIATIONS:

New Jersey Licensed Site Remediation Professionals Association
American Society of Civil Engineers
Tau Beta Pi - National Engineering Honor Society
Chi Epsilon - Civil Engineering Honor Society

YEARS OF EXPERIENCE: 11 Years

EDUCATION:

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

ACCREDITATIONS / CERTIFICATIONS:

UAS Drone Pilot (License No. 4162069)
Rutgers University: Wetland Delineation Certificate Series
Rutgers University: ArcGIS Editing and Data Development
ESRI Field Data Collection Management Using ArcGIS
ESRI ArcGIS IV: Sharing Content on the Web
ESRI Migrating from ArcMap to ArcGIS Pro
OSHA 10-Hour Construction Safety
OSHA Confined Space Entry

EXPERIENCE:

Mr. Woodward has over 11-years of experience in the field of environmental science during which he has performed a broad range of environmental services such as the acquisition of local, County, State and Federal regulatory permits, environmental guidance, wetland delineations, and Geographic Information Systems (GIS) mapping services. Mr. Woodward has extensive experience utilizing GIS including the creation and implementation of public infrastructure asset data, geospatial analytics, evaluating environmental constraints including the preparation of figures for permit applications, and generating and 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.*** Field verification and location of all individual assets along the Ramapo Force Main, Wanaque North and South Aqueducts, and Wanaque Headworks facility. The assets collected across the 37-miles of pipeline included vent stacks, low lift pumps, high lift pumps, balancing reservoirs, pumping stations, interconnections, and manholes. The data was collected using a Trimble Geo-7x GPS and incorporated into a geodatabase designed to organize all NJDWSC's assets including georeferenced as-built drawings.
- ***East Orange Water Commission (EOWC), East Orange, NJ.*** Development of system-wide geodatabase containing the Supply and Distribution assets with the entirety of the EOWC's facilities. Utilizing ArcGIS Online and a handheld GPS unit, field verified and located all individual assets within the EOWC well field, White Oak Ridge Pumping Station, Wyoming Reservoir, and along both 24" high-lift/low-lift water mains supplying water to the City of East Orange.
- ***Passaic Valley Sewerage Commission (PVSC) Plant/Interceptor Asset Inventory. Various Municipalities, NJ.*** Preparation of a survey-grade geodatabase containing the assets within the PVSC plant, each ancillary facility, and along both the 22-mile main and 15-mile branch interceptors. The asset inventory included locating over 580 manholes, 46 active combined sewer overflow regulator chambers, 20 deactivated CSO regulator chambers, 5.5-miles of outfall line with 3 shafts, and 2 pump stations.
- ***Veolia Lead Service Line Replacement Program, Various Municipalities, NJ.*** Created a web application and digital survey to consolidate and integrate data collected from a team of inspectors and contractors replacing lead service lines across multiple municipalities. The data was then exported within progress reports and utilized to update the existing Veolia INFOR database.
- ***Eastern Concrete Quarry Reclamation, Glen Gardner, NJ.*** Development of 3D Models and detailed renders of the viable reclamation options to determine the optimal reclamation plan for the proposed



quarry expansion. Created a presentation containing video clips from the different models and discussed the findings within a formal report.

- ***MS4 Stormwater Outfall Survey, Various Municipalities, NJ.*** Collecting and inspecting the physical location and condition, respectively, of all stormwater outfalls that discharge into municipal waterways. Outfall locations were documented within a web application linking the GPS point data to condition assessment data, including photographs of the entire structure. A summarized condition assessment and location map was created for the Department of Public Works (DPW) in order to comply with each municipality's Statewide Basic Requirements (SBR). Digital geodatabases were created containing town-wide GPS verified stormwater discharge points within the Boroughs of Oakland, Emerson, Westwood, North Haledon, Rochelle Park, Paramus, Teterboro, Upper Saddle River, Moonachie, Closter, and Waldwick; the Townships of North Bergen, Washington, and Wyckoff; and the Cities of Garfield and Passaic.
- ***Transmission Line Reinforcement Route Selection Study, Various Municipalities, NJ.*** Quantitative and statistical analysis regarding several potential transmission line routes within Morris and Essex counties. Utilizing ArcGIS, a matrix was developed identifying environmental and regulatory constraints along multiple proposed corridors. These variables were analyzed utilizing weighted averaging and normalization to determine the preferred route. A report was developed regarding criteria, route segment analysis, qualitative and quantitative results, alternatives, and recommendations developed from the study's conclusions.

ENVIRONMENTAL PERMITTING AND REPORTS

- ***Rochelle Park Sanitary Pump Station Improvements, Rochelle Park, NJ.*** Preparation of a Level 1 Environmental Review for the decommissioning of the existing sanitary pump station and the installation of an upgraded pump station located outside of the FEMA Floodway.
- ***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.
- ***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 were damaged by Superstorm Sandy. Permits obtained included a NYSDEC Tidal Wetlands Permit and an Army Corps of Engineers Nationwide Permit.
- ***PVSC Skimmer Vessel Facility Dredging, North Arlington, NJ.*** Dredging plan and regulatory permitting for the dredging and disposal of sediment from a waterfront dock along the Passaic River. Permits obtained for the project include Army Corps of Engineers Individual Permit and NJDEP Waterfront Development Permit.

WETLAND DELINEATION

- ***Great Oak Park, Oakland, NJ.*** Wetland delineation at a 39-acre site for the purpose of converting an abandoned swim club and recreation facility into a public park with various hiking trails.
- ***Crestmont Country Club, West Orange, NJ.*** Wetland delineation at a 74-acre golf course for the purpose of identifying the ideal position for a minor subdivision along the eastern boundary of the property.
- ***Former NIKE Missile Base, Wayne, NJ.*** Wetland delineation at a 34-acre site associated with the proposed construction of a new County of Passaic Department of Public Works Facility.
- ***Parson's Pond Park Nature Trail, Franklin Lakes, NJ.*** Wetland Delineation and 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.



- ***Ridgefield Park Nature Preserve, Ridgefield Park, NJ.*** Wetland delineation and regulatory permitting for the construction of a 2,200 L.F. nature trail and boardwalk within the 11.75-acre Nature Preserve.
- ***East Windsor to Windsor Substation Fiber Route, East Windsor, NJ.*** Wetland delineation within the immediate vicinity of two (2) existing substations and the 3.9-miles of roadway corridors proposed for a new fiber route.

UNMANNED AIRCRAFT SYSTEMS (UAS) PILOT

- ***Musquapsink Brook Condition Assessment, Washington Township, NJ.*** Captured aerial imagery and video to determine the locations of obstructions and erosion along the watercourse. Utilizing a L1 lidar payload, collected elevation data of the severe washout areas.
- ***Kinderkamack Road Improvements, Emerson, NJ.*** Captured drone images of the completed roadway widening and realignment project. Utilizing the images to create 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.
- ***Dundee Island Park, Passaic, NJ.*** Captured drone images throughout the redevelopment project. Orthomosaic imagery was generated at multiple stages of completion to document the project and display the work done while restoring the park.
- ***Meadowlands Conservation Trust, North Bergen, NJ.*** Captured drone images across a 40-acre property that was physically inaccessible due to the surrounding wetlands to complete the site inspection portion of a Phase I Environmental Site Assessment.
- ***Peckman River – Emergency Storm Response, Little Falls, NJ.*** Captured drone images and video across 0.75 miles of the Peckman River to document areas damaged by Hurricane Ida. Collected additional information during the emergency restoration work within the channel.

AFFILIATIONS:

Brownfield Coalition of the Northeast

YEARS OF EXPERIENCE: 24 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 and New Jersey

EXPERIENCE:

Dr. Gonzalez more than 24 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. He has authored and coauthored eight peer-reviewed papers in different scientific journals on topics that range from hydrology to wastewater treatment.

Dr. Gonzalez's background further includes his tenure 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:

- ***CSO Separation Plan, Fort Lee, NJ.*** H&H task leader. Preliminary hydrologic and hydraulic analysis to assess existing hydraulic capacity of the existing sewer system discharging into Bluff Road Pumping Station. Alternatives analysis.
- ***Elmwood Park Well Field, Garfield/Elmwood, NJ.*** Project coordinator. Vertical pumps replacement. Hydraulic analysis for the new system curve conditions. Design and selection of all associated components.
- ***Main Sanitary Pumping Station, Rochelle Park, NJ.*** Project coordinator. Design of a new pumping station out of the flood way. Hydraulic component, which included development of system curve, pump selection and all associated components.
- ***Howard Ave Flood Mitigation, Rochelle Park, NJ.*** H&H task leader. Preparation of the Hydrological and Hydraulic component, which included modeling, resizing and redesign of the existing storm sewer along Howard Ave.
- ***Homestead Sanitary Pumping Station, Newton, NJ.*** Project manager of the design of a new 55-gpm pumping station and its associated infrastructure to replace the existing wastewater treatment plant.
- ***Gibbsboro Sewer Improvements, Gibbsboro, NJ.*** Project manager of the design of a new 125-gpm sanitary pumping station on United States Ave and the upgrade of the existing 600-gpm sanitary pumping station located on Berlin Rd. The improvements include all the associated infrastructure (force main, gravity pipes, valve, etc.).
- ***Evaluation of Singac Sanitary Pumping Station, Little Falls, NJ.*** Assessment of the hydraulic capacity of the pumping station system for future improvements. Engineer's report and budget preparation.



- ***Prefeasibility Study for the Combined Sewer System Separation, Village of Ridgefield Park, NJ.*** Responsible of the preparation of different alternatives for the stormwater pipe system in order to reduce the existing combined sewer overflow. Preliminary design and budget preparation.
- ***Wastewater Pumping Station Assessment, Borough of Paramus, NJ.*** Evaluation of the structural, electrical and hydraulic components of the six existing sewage pumping stations. Performed pumps (and associated components) selection and sizing. Engineer's report and budget preparation.
- ***Flood Mitigation Study at Oakdene Ave, Township of Cliffside Park, NJ.*** Designed of a new stormwater pipe system to mitigate reported floods on Oakdene Avenue. H&H modeling, storm pipe system design, Engineer's report and budget preparation.
- ***Molly Ann Pumping Station Upgrade, Borough of North Haledon, NJ.*** Project Manager for the sewage pumping station upgrade of the hydraulic, structural, and electrical components.
- ***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 preparation.
- ***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).
- ***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. Preparation 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-Rottron 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.*** Preparation 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 preparation 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:

Sensitivity of peak flow response to imperviousness increase in a tropical Caribbean ungauged urban catchment
<https://doi.org/10.1080/1573062X.2022.2044864>

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/w1122453>

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>

YEARS OF EXPERIENCE: 20 Years

EDUCATION:

Ph.D. in Hydrology & Water Resources, University of Arizona, Tucson, AZ - 2006
M.Sc. in Hydrology & Water Resources University of Arizona, Tucson, AZ -1998
B.Sc. in Civil Engineering, Water, Drainage & Irrigation, Ferdowsi University of Mashhad, Iran – 1995

REGISTRATION/CERTIFICATION:

Engineer in Training - New Jersey
Association of State Floodplain Managers (ASFPM - CFM Certificate)
SoloLearn Certificate for Data Science and Python Core

EXPERIENCE:

Mr. Farid has over 20 years of experience in Hydrology (models such as HEC-HMS), Open Channel Hydraulics (HEC-RAS), analyzing stormwater and drainage processes and procedures, documenting process flows, and evaluating water cycle and drainage structures. Mr. Farid's experience also includes communications and recommendations to stakeholders for smooth implementation processes and upgrading system applications to ensure adherence to Change Water Management. His strong background in data analysis tools includes MS Office, programming: Python, C/C++, MATLAB, and IDL. Technical skills include the following; Software: AutoCAD, MS. Excel, MS. PowerPoint, MS. Word, Geographical Information Systems (ARCGIS); Remote Sensing Analysis: ENVI, SURFER; Surface-Water Modeling: HEC-RAS, HEC-HMS, Flo-2D, Flow Master, Culvert Master; Water Distribution Modeling: WaterGEMS; Water Resources Management Modeling: WEAP; and Programming: Python, C/C++, MATLAB, IDL.

Professional experience includes:

- ***Michael Baker International, Phoenix, AZ (Remote) - Drainage Engineer.*** Managed a range of urban hydrological and drainage projects, and using computer programs (HEC-HMS) for surface Hydrology and drainage Projects. Federal Emergency Management Agency (FEMA), Digital Flood Insurance Rate Maps (DFIRMS) and Flood Insurance Studies (FIS) provided by engineering support to all aspects, including hydrologic and hydraulic analyses using HEC-RAS-1D & 2D, preparation of digital floodplain mapping, public outreach and coordination, preliminary research, and field surveys/reconnaissance. Managed a range of urban hydrological and drainage projects, and using computer programs (Flo-2D, ArcMap, QGIS) for surface Hydrology and drainage Projects (December 2023 – September 2024)
- ***DuBois & King Inc., Randolph, VT - Senior Water Resource Engineer.*** Federal Emergency Management Agency (FEMA), Digital Flood Insurance Rate Maps (DFIRMS), and Flood Insurance Studies (FIS) provided by engineering support to all aspects of the studies including hydrologic and hydraulic analyses using HEC-RAS and other models, preparation of digital floodplain mapping, public outreach and coordination, preliminary research, field surveys and reconnaissance, and quality control. Performed scoping activities, developed cost estimates for future task orders, simulated preliminary hydraulic modeling for Levee Flood Protection Zones, estimated existing channel capacities for streams with project levees, and coordinated other engineering and GIS work necessary for planning activities. Responded to customer complaints, inspected streams, culverts, storm detention and retention ponds for debris, structural integrity and hydraulic performance. Worked on Stream Restoration Project by supporting hydrologic and hydraulic model study phase for the open stream channels and culverted streams in the study area using ARCGIS, HEC-RAS and from the collected field data and available LIDAR data. Used Airborne LIDAR data for hydrology and hydraulic projects, such as making Digital Elevation Model (DEM) for detail contours and deriving cross-sections for HEC-RAS-2D model in the river system. (March 2022 – December 2023)
- ***Symmetrys Structural & Civil Engineers Co., London - Civil Engineer.*** Prepared and delivered Flood Risk Assessments (Zones 1 & 2), outlined and detailed drainage strategies to support planning applications for private sector clients, commercial, housing developers, and local authorities. Developed a strong drainage capability (storm and foul) with a good understanding of drainage design and knowledge of Sewers for Adoption 7th Edition and SuDS (CIRIA C753) and a thorough understanding of national planning policy and relevant legislation with regard to flood risk and drainage (such as NPPF)



in addition have knowledge of hydraulic modelling techniques, Flow, AutoCAD and Bluebeam. Experienced dealing with adoption agreements (S106: Connect to the Public Sewer, Pre-planning Application for Thames Water, Asset location search plan, and build over the existing sewer pipe plan application). Conducted site visits and client meetings. (May 2019 – July 2019)

- **TOOSS-AB Consulting Engineering Co., Iran - Senior Hydrologist.** Delineated watershed boundaries with AutoCAD and ARCGIS. Analyzed the runoff within watershed by modeling its drainage system through construction of a US-Army Corps of Engineers surface water/rainfall-runoff model (HEC-HMS model). Planned, designed, and prepared technical plans of channel, gates, weirs, and small dams for water transportation (Haested softwares such as CulvertMaster and HEC-RAS). Measured and maintained quantitative specification of urban water network by analyzing the water pressure/head as related to the water demand and water loss for the network by using WaterGEMS software model, and presented results through technical reports and presentations. Hydrographer/Water Resource Analyst: Collected, analyzed, recorded hydrographic data pertinent to streams, rivers, and reservoirs for water resource management purposes (using models such as WEAP); Measured and tracked water levels and flows; Calibrated, and maintained metering instruments; Produced pre-planning reports complete with charts and graphs illustrating water trends/ patterns; Collected, analyzed, interpreted, and compiled stream gage records using HEC-RAS and FLO-2D models; Produced floodplain limit map and final report of river flow. Water Quality Assessment: Inspected water source intakes, treatment plants, storage and distribution facilities and gathered data from computer databases to track water quality sampling and reporting compliance; and performed HEC-RAS daily and monthly temperature models for the existing conditions and no project/no plan alternative conditions. Attended technical workshops and conferences to keep up to speed on latest in the industry. (February 2010 – September 2018)
- **CED Engineering Co., Tucson, AZ - Senior Hydrologist.** Managed a range of urban hydrological and drainage projects. Used computer programs (HEC-HMS, PC-Hydro, Flow Master) for surface Hydrology and drainage Projects (design of Detention/Retention basin and pond in a Development Plans). Developed erosion and sedimentation control and storm water management plans. (May 2020 – November 2021)

Teaching experience includes:

- **Ferdowsi University of Mashhad, Iran - Associate Professor.** On faculty, full-time in the Water Department of Civil Engineering teaching Fundamentals of Remote Sensing, Surface Hydrology, Fundamentals of Soil Physics, and Fluid Mechanics for undergraduate and graduate levels. Also, supervised M.Sc. & Ph.D. thesis and dissertation projects. (2006 – 2009)

Various Visiting Professor roles at universities in the United Kingdom, Italy & S. Korea

Research experience includes:

- **University of Exeter, United Kingdom.** Writing research proposals for flood risk assessment and NEXUS (food-water-energy) and doing research on flood inundation map using hydraulic models (1-D, 2-D), morphological information and Unmanned Aerial Systems (UAS) approaches, and flood depth and flood damage assessment. (September 2018 – May 2020)
- **Graduate Research Assistant, University of Arizona.** Using Lidar data for Canopy 3-D structure over riparian area. (Jan 2002 – May 2006)

YEARS OF EXPERIENCE: 48 Years

EDUCATION:

B.S. Civil Engineering, New Jersey Institute of Technology, 1983

REGISTRATION/CERTIFICATION:

New Jersey Professional Engineer

EXPERIENCE:

- ***Boswell Engineering, Inc., Chester, New Jersey - Professional Engineer.*** Responsible for design aspects for private sector site plan projects. Responsibilities include the design of grading and utility plans, stormwater management plans, preparation of project reports and expert testimony at Board of Adjustment and Planning Board hearings. Senior level design responsibilities for capital improvement projects prepared for Pompton Lakes, Mountain Lakes and West Milford. Also serves as the municipal engineer's representative for the Planning Boards and Boards of Adjustment for Roxbury, Randolph and Mansfield Townships as needed. Services include the review of development applications, stormwater management review and testimony at hearings. (December 2023 – Present)
- ***Ferriero Engineering, Inc., Chester, New Jersey - Professional Engineer.*** Responsible for design aspects for private sector site plan projects. Responsibilities include the design of grading and utility plans, stormwater management plans, preparation of project reports and expert testimony at Board of Adjustment and Planning Board hearings. Senior level design responsibilities for capital improvement projects prepared for Liberty Township, Pompton Lakes and Rockaway Borough. Also serves as the municipal engineer's representative for the Planning Board and Board of Adjustment for Scotch Plains and Borough of Chester as needed. Services include the review of development applications and testimony at hearings. (April 2018 – December 2023)
- ***Biggs Engineering, Associates, PA, Washington, New Jersey - Owner/President.*** Consulting Engineer responsible for design aspects for private sector soil investigations, major subdivisions, sewer extensions, on-site disposal systems and site plan projects. Services included the design of roadways, site grading, site layout, stormwater plans and testimony at public hearings. Provided Consulting and Project Management services to the County of Warren for roadway design, construction inspection on roadways, bridges, water main extensions, pavement overlays, roadway reconstruction and guiderail reconstruction projects. Conflict Engineer for Lebanon Township 2006 to 2018. (January 1991 – April 2018)
- ***Biggs Engineering Associates, PA, Washington, NJ.*** Designed, major subdivisions, sewer extensions, on-site disposal systems and site plan projects. Attended meetings, performed project reviews, prepared review letters, construction inspection and Municipal Project Design on an as needed basis when Biggs Engineering Associates was Municipal Engineer for the following towns: Township of Lebanon, Township of Washington, Township of Independence, Town of Belvidere and Planning Board Engineer Liberty Township. (March 1975 – January 1991)

YEARS OF EXPERIENCE: 27 Years

EDUCATION:

Stormwater Management Rules & BMP Manual, Cook College, 2005
Onsite Wastewater Disposal Systems, Cook College, 2004
Internet and Business Programming, CHUBB, 2002
Municipal Engineering Construction Inspection, Cook College, 1999
B.A., Geological Sciences, Rutgers University, 1996

REGISTRATION/CERTIFICATION:

Certified Floodplain Manager, 2014 – Present
Licensed Professional Geologist, State of Tennessee, 2005 – Present
Leadership in Energy and Environmental Design Professional (LEED AP), 2008 - Present

EXPERIENCE:

- ***Boswell, Inc., Chester, New Jersey - Department Head Site/Civil.*** Supervises departmental operations including project planning, proposal preparation, resource allocation, and performance management. Responsible for company-wide planning, design, and execution of civil engineering projects. Manages and coordinates multiple engineering projects from conception through completion, ensuring adherence to project specifications, budgets, and timelines. Responsible for strategic leadership, project management, and coordination with various stakeholders to ensure that all projects are completed on time, within budget, and to the highest standards of quality. Provide technical guidance and support to engineering staff to ensure all projects adhere to industry standards, codes, and best practices. Conduct performance evaluations, provide feedback, and develop professional growth plans for team members. (September 2024 – Present)
- ***Boswell Engineering, Chester, New Jersey - Assistant Department Head Site/Civil.*** Assistant Department Head responsibilities include the preparation of budgets, proposals, technical direction, quality assurance review, value engineering, scoping, feasibility studies, drainage, constructability, estimates and specifications. Responsible for the management and direct supervision of all design associated with Boswell's Site/Civil Department in the Chester, NJ office. Responsible for the supervision and performance of various field and subsurface investigations for the design of sanitary wastewater and stormwater runoff management systems; provide expert testimony and reports on behalf of various municipal boards and private sector clients for compliance with municipal ordinance, state, and federal regulations; design and inspection of civil & land development engineering projects for various municipal, residential and commercial site plan, roadway, stormwater management, and onsite disposal system improvements; construction manager for various municipal infrastructure and private site plan projects; manage NFIP CRS certifications, cycle applications, and credit development on behalf of municipal clients; maintains proficiency with land development mapping and design software including AutoCAD, ArcView GIS, subsurface modeling, and stormwater design systems. Provide guidance and support to junior level staff towards their professional development. (January 2024 – September 2024)
- ***Ferriero Engineering, Inc., Chester, New Jersey - Senior Project Manager/Geologist.*** Senior project manager responsible for all aspects of business development and client relations including budgeting, preparing proposals and securing contracts. Responsible for leading and training engineering staff, project designers, specialty outside consultants, and construction inspectors. Actively supervises subsurface suitability investigations for the onsite disposal of sanitary wastewater and stormwater runoff management systems; provide expert testimony and reports on behalf of various municipal boards and private sector clients for compliance with municipal ordinance, state, and federal regulations; design of civil & land development engineering projects for various municipal, residential and



commercial site plan, roadway, stormwater management, and septic system improvements; municipal witness for onsite soil suitability testing and inspector of septic system construction; construction manager for various municipal infrastructure and private site plan projects; development of analytical software for business applications and internet platforms; maintain proficiency with land development mapping and design software including AutoCAD, ArcView GIS, HEC-RAS, subsurface modeling, and stormwater design systems, maintain proficiency with NJDEP Rules and Regulations. Prepared permit applications to NJDEP for Dam Safety permits, NJPDES and TWA permits, Highlands, Wetlands and Flood Hazard Area permits. (March 1999 – December 2023)

- ***CF Kaiser Engineers Inc., Maryland and New Jersey Regional Offices - Geologist/Project Manager.*** Responsible for field inspection and reporting on various USEPA Superfund projects under federal Assessment and Remediation of Contaminated Soils Contracts (ARCS); development, implementation, and management of subsurface investigations for various U.S. Army Corps of Engineers Total Environmental Remediation Contracts (TERC); private sector work plan development for the characterization of various soil, bedrock, and groundwater conditions; design, installation, operation, and maintenance of soil vapor extraction and pump & treat systems for the remediation of impacted soil and groundwater; preparation of health and safety plans, budgets, proposals and reports issued to private sector clients. (July 1996 – March 1999)

AFFILIATIONS:

Member - Association of Engineering Geologists, 2003 – Present
Member - Association of State Flood Plain Managers, 2014 - Present

YEARS OF EXPERIENCE: 40 Years

EDUCATION:

B.S. Civil Engineering, Rutgers University, College of Engineering, 1983

REGISTRATION/CERTIFICATION:

New Jersey Professional Engineer
New Jersey Professional Planner
Certified Municipal Engineer

EXPERIENCE:

Boswell Engineering, Chester, New Jersey – Principle. Responsible for all design aspects for private sector site plan and subdivision projects. Responsibilities include the design of roadways, grading and utility plans, stormwater management plans, preparation of project reports and expert testimony at Planning Board and Board of Adjustment hearings. Senior level design responsibilities for all capital improvement projects prepared for Bedminster Township, Far Hills Borough, Mendham Borough, Lebanon Borough, Bernardsville Borough and Chester Borough. Also serve as the municipal engineer's representative for the Planning Board and Board of Adjustment for the Borough of Bernardsville and Borough of Lebanon as well as the Board Engineer for the Planning Board and Board of Adjustment of Chatham as needed. Services include the review of development applications and testimony at hearings. (January 2024 – Present)

Ferriero Engineering, Inc., Chester, New Jersey – Principle. Responsible for all design aspects for private sector site plan and subdivision projects. Responsibilities include the design of roadways, grading and utility plans, stormwater management plans, preparation of project reports and expert testimony at Planning Board and Board of Adjustment hearings. Senior level design responsibilities for all capital improvement projects prepared for Bedminster Township, Far Hills Borough, Mendham Borough, Lebanon Borough, Bernardsville Borough and Chester Borough. Also serve as the municipal engineer's representative for the Planning Board and Board of Adjustment for the Borough of Bernardsville and Borough of Lebanon as well as the Board Engineer for the Planning Board and Board of Adjustment of Chatham as needed. Services include the review of development applications and testimony at hearings. (October 1993 – December 2023)

Boswell Engineering, Inc. South Hackensack, New Jersey – Project Manager. Consulting Municipal Engineer for two municipalities responsible for the planning, budgeting, design and construction supervision of capital improvement projects. Provided expert testimony and engineering review for local Planning Boards. Responsible for construction supervision of site development projects. Designed drainage facilities, sanitary sewers, force mains and pump stations for various municipal and site development projects. Worked as resident engineer on multi-million-dollar sewer project. Analyzed construction claims and prepared counter-claim reports. (August 1983 – October 1993)

YEARS OF EXPERIENCE: 33 Years

EDUCATION:

B.S. Civil Engineering, New Jersey Institute of Technology, 1991

REGISTRATION/CERTIFICATION:

New Jersey Professional Engineer
Certified Municipal Engineer
NJPDES MS4 General Permit Training Certification

EXPERIENCE:

- ***Boswell Engineering, Inc., Chester, New Jersey - Project Manager.*** Serve as the municipal engineer's representative for the Land Use Board in the Borough of Far Hills and as the Roxbury Township Board of Adjustment Engineer. Services include the review of development applications, the preparation of technical reports, and providing testimony at hearings. Responsible for the review of stormwater developments for various municipal Boards and preparing technical stormwater review comments. (January 2024-Present)
- ***Boswell Engineering, Inc., Chester, New Jersey - Project Manager.*** Responsible for the design and management of capital improvements projects in Chester Borough and Far Hills Borough. Also served as the municipal engineer's representative for the Land Use Board for the Borough of Chester, and the Land Use Board in the Borough of Far Hills. Services include the review of development applications, the preparation of technical reports and providing testimony at hearings. Responsible for the review of stormwater developments for various municipal Boards and preparing technical stormwater review comments. (September 2023 – December 2023)
- ***Ferriero Engineering, Inc., Chester, New Jersey - Project Manager.*** Responsible for all aspects of design including subdivision and site plan layout, horizontal and vertical road alignment, drainage and detention basin design, sanitary sewers, grading and utility plans. Prepared environmental and stormwater management reports and provided expert testimony at Planning Board and Zoning Board of Adjustment meetings. Responsible for the design and management of capital improvements projects in Chester Borough, Far Hills Borough, and Mendham Borough. Also served as the municipal engineer's representative for the Planning Board, the Board of Adjustment, and the Land Use Board (after the Boards merged) for the Borough of Chester, and the Land Use Board in the Borough of Far Hills (since March 2007). Services include the review of development applications and providing testimony at hearings. Responsible for the review of stormwater developments for various municipal Boards and preparing technical stormwater review comments. (July 2005 – August 2023)
- ***Yannaccone, Villa and Aldrich, Chester, New Jersey - Project Manager.*** Responsible for all aspects of design including subdivision and site plan layout, horizontal and vertical road alignment, drainage and detention basin design, sanitary sewers, grading and utility plans. Prepared environmental and Stormwater management reports and provided expert testimony at Planning Board, Zoning Board of Adjustment meetings. Coordinated and prepared applications with Approving Authorities including NJDEP, local Soil Conservation Districts, and various Counties on obtaining regulatory permits. (August 1996 – June 2005)
- ***Yannaccone Associates, Chester, New Jersey - Project Engineer/EIT.*** Designed subdivision and site plan layouts, horizontal and vertical road alignment, drainage and detention basin design, sanitary sewers, grading plans, and retaining wall design. Helped prepare environmental and Stormwater management reports. Coordinated and prepared applications with Approving Authorities including NJDEP, local Soil Conservation Districts, and various Counties on obtaining regulatory permits. Responsible for running a soil laboratory for determining the soil characteristics for soils and select fill utilized in the design and construction of individual underground septic systems (October 1991 – August 1996)

YEARS OF EXPERIENCE: 44 Years

EDUCATION:

B.S. Civil Engineering, Lehigh University

REGISTRATION:

Professional Engineer - New Jersey
Professional Land Surveyor - New Jersey
Professional Planner - New Jersey
Certified Municipal Engineer - New Jersey

EXPERIENCE:

Mr. Morris has over 44-years of experience in land development, civil and municipal engineering, planning and construction oversight. He presently heads the firm's Land Development Division and is actively involved with all the aspects of site design and civil engineering involving residential, commercial, office complexes, institutional and educational facility projects. He has been accepted as an expert in the fields of engineering, land surveying and planning by Land Use Boards across the state as well as New Jersey Superior Court and Federal Tax Court. In addition, he is involved with all phases of municipal engineering. Mr. Morris has contributed his many talents to the design and construction of numerous public works projects, including roadways, drainage facilities, sanitary sewer systems, water distribution systems and recreation facilities.

A sampling of Mr. Morris' experience includes:

- ***Lewis F. Cole Middle School Addition, Fort Lee NJ.*** This project consisted of the design of a 27-classroom addition to the existing school. The design of the school addition included new sanitary, water and electrical services plus a comprehensive stormwater management system. Space limitations required that the adjacent athletic field be relocated with a new artificial turf.
- ***Passaic County Department of Public Works, Wayne, NJ.*** This project included the design, permitting and construction administration of a new consolidated public works facility on a 20-acre site. The project included new offices and mechanical facilities for the County Road Department as well as a new salt shed.
- ***Verdana Luxury Townhomes, Howell NJ.*** Principal engineer responsible for site plan sanitary sewer and stormwater management design for the 240+ unit residential development. The project included a clubhouse, fitness center, pool, tennis courts, and playground. Verdana received the 2014 Community of the Year Award from the NJ Builder's Association.
- ***NJ Transit \$400 Million Southern New Jersey Light Rail Transit System between Trenton and Camden, NJ.*** Mr. Morris' responsibilities included the park 'n ride site plan design. He was further responsible for survey activities, preparation of all parcel maps for property acquisition, oversight of environmental permit compliance and public relations.
- ***Hackensack University Medical Center, Hackensack, NJ.*** Design of the 190,000-square-foot woman and children's pavilion including three (3) stories of parking, stormwater management, sanitary sewer, water and traffic designs.
- ***Pascack Valley Board of Education, Pascack Hills High School, Montvale, NJ.*** This project consists of the construction of approximately 16,000 square feet of building addition in the back of the existing gym of the Pascack Valley High School and a 44-stall parking lot in front of the existing school building along Grand Avenue West. The project included a site plan, boundary and topographic survey, drainage system, retaining walls and off-site road and intersection



improvements. Additionally, he designed and reconstructed the athletic field and track, including new artificial turf and lights.

- ***Fairleigh Dickinson University, New Resident Hall and Pedestrian Bridge, Teaneck/Hackensack Campus, Hackensack, NJ.*** Site engineering for a new residence hall on the Hackensack portion of its Teaneck/Hackensack Campus. This project consists of a 320-bed structure approximately 77,000 sq. ft. with a 28,000 to 30,000 sq. ft. footprint. The project included the reconfiguration of the remaining parking and utilities in the building's vicinity and the relocation of the Kotte Place cul-de-sac. This project further included the design of a 420-foot long pedestrian bridge over the Hackensack River.
- ***Stevens Institute of Technology, Castle Point Parking Facility, Hoboken, NJ.*** This project consists of an approximately four level, 725 parking space garage. This project included a site plan, boundary and topographic survey, road realignment, traffic study and mechanical and electrical design for the parking facility.
- ***Montgomery Township Municipal Complex.*** This project consists of a new municipal complex including police headquarters, municipal offices and library. The site engineering for the project included off-site sanitary sewer connection, stormwater management, site grading, landscaping and site utilities.
- ***Wyckoff Community Park, Wyckoff, NJ.*** Design, preparation of contract documents, permit acquisition and construction supervision for an athletic facility which includes four (4) baseball fields, a soccer field, picnic area, refreshment stand and associated parking.
- ***Avalon Bay Montville, NJ.*** Design and permit acquisition for a 350-unit planned residential development including the design of roadways, stormwater management systems, sanitary sewer collection and pumping facilities, landscaping and grading.
- ***Mediplex, Oradell, NJ.*** Design, permit acquisition and construction coordination for a 150-bed assisted care facility which included the design of a sanitary metering facility and utility crossing under New Jersey Transit rail facilities.
- ***Bergen County Administration Building, Hackensack, NJ.*** This project consists of the development of a new 5-story County office building (approximately 263,500 SF) and a new 5-story parking structure (approximately 410,000 SF). The work involved site design, permit acquisition and construction coordination of this 6-acre site.
- ***Wyckoff Family YMCA, Wyckoff, NJ.*** This project includes the design and construction administration of a 42,000-square-foot recreation and day-care facility and a 52,000-square-foot addition to the building. The final facility will contain a full-size gymnasium and assembly room, two (2) regulation swimming pools as well as exercise rooms, day care and outdoor recreation and swimming areas.
- ***Clifton Stadium, Clifton, NJ.*** Design of the reconstruction of the Clifton High School Athletic Stadium including new lights, eight lane track, artificial turf field, retaining walls and event areas.

AFFILIATIONS:

New Jersey Society of Professional Engineers
New Jersey Society of Municipal Engineers
Bergen County Society of Professional Engineers (Past President)
New Jersey Society of Professional Land Surveyors
National Society of Professional Land Surveyors

YEARS OF EXPERIENCE: 24 Years

EDUCATION:

B.S. Civil Engineering, Rutgers University, 1997
M.S. Civil & Environmental Engineering, Rutgers University, 2004

REGISTRATION/CERTIFICATION:

New Jersey Professional Engineer
New Jersey Certified Municipal Engineer
NJPDES MS4 General Permit Training Certification

EXPERIENCE:

- ***Boswell, Inc., Chester, New Jersey - Project Manager.*** Responsible for design and overseeing of municipal capital improvements including preparation of plans and specifications, bidding and contract administration. Responsible for design of private residential and commercial site plans that included zoning analyses, stormwater management design, grading, parking and access, lighting, planting buffer, gravity sanitary sewer connections or individual septic systems and utility design plans. Prepared engineering and environmental reports, construction specifications, service agreements, stormwater operations and maintenance manuals, municipal ordinance drafts and easements as required. Prepared drainage analysis reports for stormwater management designs and hydrologic and hydraulic analysis for floodplain studies. Prepared application narratives and provided professional testimony at Planning Board, Zoning and Board of Adjustment meetings as needed. Coordinated and prepared applications to Approving Authorities including NJDEP (Land Use, Highlands, Green Acres, CAFRA), NJDOT, Soil Conservation Districts, Municipal Utility Authorities and County and Local reviewing agencies and Boards to obtain regulatory permits, approvals and resolution compliance. (January 2024 - Present).
- ***Ferriero Engineering, Inc., Chester, New Jersey - Project Engineer.*** Responsible for all aspects of design for site plans that included zoning analyses, stormwater management design, grading, parking and access, lighting, planting buffer, gravity sanitary sewer connections or individual septic systems and utility design plans. Prepared engineering and environmental reports, construction specifications, service agreements, stormwater operations and maintenance manuals and easements as required. Prepared drainage analysis reports for stormwater management designs and floodplain analysis. Prepared application narratives and provided expert testimony at Planning Board, Zoning and Board of Adjustment meetings. Coordinated and prepared applications to Approving Authorities including NJDEP, NJDOT, Soil Conservation Districts, Municipal Utility Authorities and County reviewing agencies to obtain regulatory permits, approvals and resolution compliance. (February 2023 – December 2023).
- ***Yannaccone, Villa and Aldrich LLC., Chester, NJ - Project Engineer.*** Responsible for all aspects of design for subdivision and site plans that included zoning analyses, stormwater management design, grading, parking and access, lighting, planting buffer, gravity sanitary sewer connections or individual septic systems and utility design plans. Prepared engineering and environmental reports, construction specifications, service agreements, stormwater operations and maintenance manuals and easements as required. Coordinated and prepared applications to Approving Authorities including NJDEP, NJDOT, Soil Conservation Districts, Municipal Utility Authorities and County reviewing agencies to obtain regulatory permits, approvals and resolution compliance. (January 2000- February 2023).

AFFILIATIONS:

American Society of Civil Engineers
New Jersey Society of Municipal Engineers

YEARS OF EXPERIENCE: 35 Years

EDUCATION:

Bachelor of Civil Engineering, Villanova University

REGISTRATION/CERTIFICATION:

Professional Engineer - New Jersey
Professional Engineer - New York
Professional Planner - New Jersey
Certified Public Works Manager - New Jersey
Certified Municipal Engineer - New Jersey
Certified Floodplain Manager
NJDOT Value Engineering
Confined Space Entry Certified
NJDOT Context Sensitive Design
Rutgers, Guidelines for Guiderail and Median Barrier Design

EXPERIENCE:

Mr. DeNicola has over 35 years of experience in the transportation and municipal engineering fields. He has in-depth experience in the scoping, design and construction administration of numerous public works improvement projects.

Mr. DeNicola has managed and designed numerous roadway improvement projects at the municipal, county, and state levels of government. These public-sector agencies include: the New Jersey Turnpike Authority (NJTA); New Jersey Department of Transportation (NJDOT); New Jersey Transit; New York State Thruway Authority (NYSTA); Connecticut Department of Transportation; Pennsylvania Turnpike Commission; Bergen, Hudson, Morris, Mercer, Passaic and Sussex Counties in New Jersey; as well as numerous municipalities throughout northern New Jersey.

His experience further includes geometric design, roadside safety design and inspection, maintenance and protection of traffic, construction staging and sequencing, pavement design, drainage and utility design, preparation of contract documents and technical specifications, construction cost estimates, construction support services, shop drawing review, and value engineering. Mr. DeNicola is familiar with a broad range of design standards having worked with various agencies and authorities. In addition, he has experience in computer-aided design including both "hands-on" experience as well as from a supervisory position.

A sampling of the significant engineering projects Mr. DeNicola has been involved with includes the following:

- ***Shoulder Erosion Improvements, Milepost 154 to 156, P200.808, NJTA.*** Project Manager responsible for the southbound shoulder widening and drainage design as well as addressing the adjacent left shoulder deteriorating pavement condition erosion condition. Services also included the replacement and upgrade of concrete median barrier and guiderail within the project limits in conformance with the Authority's MASH standards.
- ***On-Call Engineering Services A4221, NJT.*** Design Project Manager for the Authority's Engineering 2-year On-Call Services Contract valued at \$2 Million. Responsibilities included accessing and defining the scope of various problem areas on the Authority's roadways, managing and overseeing the design of the required improvements and coordinating with and managing the subconsultants.
- ***Roadway Stabilization and Reprofilling Improvements, Milepost 97.0 to 98.0 NSI, NSO, SNI and 102.0 to 104.5 SNO, Construction Contract Nos. T200.608, NJTA.*** Project Manager responsible for the replacement and upgrade of concrete median barrier and guiderail within the project limits in conformance with the Authority's MASH standards.
- ***River Drive Improvements, Phase 2, Garfield, NJ.*** Project Manager for the scoping, preliminary and final design, and construction for the re-alignment and widening of River Drive from Passaic Avenue north to Monroe Street, which included improvements to the horizontal and vertical alignment of the roadway, widening of the roadway from 2-lanes to 4-lanes, the design of traffic



signals at two (2) signalized intersections, roadway drainage upgrades, and extensive utility relocations, and environmental permitting. The project also included riverside bikeway along the Passaic River. Total project cost of \$10 Million.

- ***Dundee Island Park, Phase 2, Passaic County, NJ.*** Project Manager for the design of the Pulaski Park Extension on the abandoned railroad bed and North Pulaski Park inclusive of the reconstruction/rehabilitation of the existing railroad bridge over the Passaic River into a pedestrian bridge. The joint Passaic County and City of Passaic project, known as Dundee Island Park, Phase 2, provided connectivity not only to Pulaski Park Extension and North Pulaski Park, but also to Dundee Island Phase 1 Improvements to the south, Pulaski Park to the west, and Garfield's River Drive Bikeway along the east side of the Passaic River. This \$9 million park project included the design of park walkways and boardwalks, rain gardens, the repair of the Passaic River retaining wall and a mid-block pedestrian crossing of Monroe Street with a RRFB. The design required extensive environmental permitting including a Flood Hazard Individual Permit, Wetlands Individual Permit, L.S.R.P. services for the treatment and disposal of Historic Fill, Soil Erosion and Sediment Control Plan Certification and Army Corps of Engineer permits.
- ***Annual NJDOT Local Aid Roadway Projects & Borough Funded Resurfacing Projects.*** Supervised the design of the improvements, managing schedules and personnel, and coordination with both the NJDOT and municipalities, as required. These projects total approximately \$10 Million in construction annually, and range from barrier free ramp installations and resurfacing to complete road reconstruction with new drainage, curbs, sidewalks, and utility relocations, along with the related construction support services during the construction phase.
- ***Rehabilitation of Concrete Median Barrier, MP 129 to 140, Construction Contract Nos. P200.598 and P200.522, NJTA,*** Senior Project Engineer for the replacement of existing concrete median barrier including drainage modifications and upgrades due to the replacement of the median barrier, reconstruction of the right shoulders and roadside safety features to accommodate the shifting of traffic onto the shoulder during the various construction stages, and Maintenance and Protection of Traffic design for the proposed improvements. The project required an aggressive design schedule to meet Authority commitments. The project was bifurcated to accommodate adjacent Authority work.
- ***Culvert Repairs MP 112 to 113, Construction Contract No. P200.545, NJTA.*** Senior Project Engineer for the rehabilitation of two (2) – 120-inch CMP culverts under the Parkway northbound inner/outer roadways (MP 112.42N) and the southbound inner/outer roadways (MP 112.51S). The recommended alternative was a steel liner pipe. Responsible for the Alternative Analysis Report, plan preparation and permit coordination. The project scope of work included surveying, laser scanning of the culverts, culvert inspection and reporting utilizing InspecTech, wetlands delineation, hydrologic and hydraulic analysis, soil erosion plans, MPT/construction access plans, construction plans, structural plans, environmental permitting, estimating and specifications. Also included in the project was the rehabilitation of a 66-inch CMP culvert under the Parkway northbound and southbound inner/outer roadways at MP 112.17. The recommended alternative was a 66-inch steel pipe (jack and bore method) parallel to the existing culvert with a reduced pipe opening at the upstream headwall to maintain the hydraulic characteristics of the existing culvert.
- ***Dundee Island Park, Passaic County, NJ.*** Project Manager for the design and improvement of Dundee Island Park located in Passaic, NJ adjacent to the Passaic River. This \$10 million park project included the design of a park entrance driveway, park pathways/sidewalks, a playground, a spray park, elevated concession building, a soccer field, work-out stations, and amphitheater. The design required extensive environmental permitting including a Flood Hazard Individual Permit, Wetlands Individual Permit, L.S.R.P. services for the treatment and disposal of Historic Fill and Soil Erosion and Sediment Control Plan Certification.
- ***Improvements to Weasel Brook Culvert, Section 8, Phases I and II, City of Clifton.*** Project Manager for the improvements to the Weasel Brook Culvert, an existing 4,100 L.F. of 96" and 108" corrugated metal pipe (CMP), which required a centrifugally cast concrete pipe liner to rehabilitate the aging pipe along with the invert repair of the existing pipe. Both physical and video inspections of the pipe were conducted to ascertain the correct rehabilitation technique to be utilized. The pipe conveys the Weasel Brook beneath the City and County streets.
- ***Rustic Guide Rail Replacement, Westchester County, NY.*** Project Manager for the design and replacement of rustic guiderail along the Bronx River Parkway and several roadways. The scope of services includes site inspections and surveys, design of replacement guiderail conforming to



current standards, maintenance and protection of traffic, development of contract documents, and construction services.

- ***New Park Drive, Parsippany-Troy Hills, Morris County, NJ.*** Project Manager for the design of New Park Drive. This new roadway will provide direct access to Morris County's Central Park. The project included the design of a new horizontal and vertical alignment, cross-section design, signalization, drainage and detention basin design, utility relocations, environmental permitting, coordination with local and County officials and construction support services.
- ***Electrical Substation and Transmission Projects, Jersey Central Power & Light.*** Managed and responsible for electrical substation and transmission projects including rehabilitation/expansion of substations as well as new substations and transmission facilities. Responsibilities include overall project management, scheduling, budgeting, permitting, and day-to-day project coordination with team members and public officials.
- ***Rivervale Road Slope Stabilization, Rivervale NJ.*** Project Manager for this \$6 Million Bergen County federal aid project for the installation of a 60-foot sheeting retaining wall to stabilize the eroding/settling roadway embankment slope leading to the Hackensack River. The project also included roadway drainage and guide rail design, extensive utility coordination, permitting, and construction support services.
- ***Borough of Closter, NJ.*** Borough Engineer for Closter (2001 – present) and Planning Board Engineer (1998 – present). Managed and designed large county intersection projects, multi-million dollar resurfacing and roadway improvement projects, federal aid streetscape and Safe Streets to School projects, drainage and sanitary sewer improvement projects, and various field & recreation improvement projects. Also, responsible for the day-to-day interaction with the Mayor & Council, public officials, and residents/business owners as well as the construction coordination of all municipal projects.
- ***River Drive Improvements, Garfield, NJ.*** Project Manager for the scoping, preliminary and final design, and construction for the re-alignment and widening of River Drive, which included improvements to the horizontal and vertical alignment of the roadway, widening of the roadway from 2-lanes to 3-lanes, the design of new traffic signals at two (2) signalized intersections, roadway drainage upgrades, and extensive utility relocations, and environmental permitting.
- ***Inspection & Design on Garden State Parkway (GSP), NJTA.*** Field inspection of and final design for guide rail improvements from milepost 0 to 126 of the GSP. Coordinated and responsible for the field inspection of 240 miles of roadside and the subsequent guiderail improvements to upgrade the guide rail in conformance with current design standards. Also, responsible for construction support and shop drawing review services.
- ***GSP Interchange 98 Widening, NJTA.*** Final design for widening of both the NB and SB GSP at Interchange 98. Coordinated and responsible for the overall highway design, drainage and detention basin design, Soil Erosion and Sediment Control Plan Certification, utility orders, roadside safety design, construction staging, and maintenance and protection of traffic. The project required an aggressive design schedule to meet NJTA commitments. Also, was responsible for construction support and shop drawing review services.
- ***Final Design for SB Interchange 89 on the GSP, NJTA.*** The project included final design for the overhead signing at SB Interchange 89 and the widening of the mainline to connect the SB acceleration lane from Int. 90 to the deceleration lane at Int. 89 and connect the NB acceleration lane from Int. 89 to the deceleration lane at Int. 90. Responsible for highway design, roadside safety inspections and design, drainage design, Soil Erosion and Sediment Control Plan Certification, utility orders, staging, and maintenance and protection of traffic. The work was to accommodate the future re-design of this interchange.
- ***NJDOT, Sussex Turnpike Improvements, Randolph, NJ.*** Scoping and preliminary and final design for the reconstruction of four (4) miles of roadway, including improvements to the horizontal and vertical alignment to improve safety, improvements to three (3) signalized intersections, drainage system upgrades, culvert reconstruction, extensive utility relocation and environmental permitting.
- ***Mercer County and Middlesex County, Cranbury Station Road Bridge Replacement, East Windsor, Mercer County & Cranbury, NJ.*** Scoping and preliminary and final design; including utility relocations, horizontal and vertical realignment of the approaches, environmental permitting, and wetlands delineation.



- ***CR605 Extension, County of Sussex, NJ.*** Scoping Study for the CR 605 Extension, with the Township of Byram and Borough of Stanhope. NJTPA Scoping Study, including a large-scale Traffic Impact Report following the NJDOT scoping process. The study included counts at 22 intersections, reviewing the accident history, performing an origin/destination study, performing capacity and LOS analysis and creating computer simulated models of various study years.
- ***NJDOT, Willow Grove Road Bridge Replacement, Warren County, NJ.*** Responsibilities for this \$1.3 Million project included all aspects of highway design and construction document preparation.
- ***NJDOT, Warren Glen-Bloomsbury Road Bridge Elimination.*** Responsibilities included all aspects of highway design and construction document preparation.
- ***County of Sussex, Lake Drive Bridge over Lubbers Run, Byram, NJ.*** Bridge replacement, including scoping, coordination with the Township of Byram and design. Environmental permitting was also required.
- ***Southern NJ Light Rail, New Jersey Transit.*** Design/Build/Operate/Maintain (DBOM) project for a 38-mile section of the Southern NJ Light Rail Transit System between Camden and Trenton. Responsibilities include coordinating existing utility locations and relocations where conflicts occur (approximately \$450 Million in construction cost).
- ***NJTA, Route 92 - Section 2 (6.7-mile highway linking Exit 8A of the Turnpike to U.S. Route 1 - \$70 million construction cost).*** Responsibilities include project coordination with subconsultants and other Section Engineers, overall supervision of the highway design process and preparation of contract documents.
- ***Rehabilitation of Interchange 60 of the Wilbur Cross Parkway (Route 15 over Route 10), Hamden, CT.*** Project Manager responsible for project coordination, preparation of contract documents and design of new entrance and exit ramps, acceleration and deceleration lanes, and widening of Route 15.
- ***Road Improvements for 20-mile segment of New York State Thruway Authority (MP 140 to MP 160) – Project Engineer.*** Conducted field inspections, guiderail design, drainage modifications, and ramp realignment for Exit 21 northbound.
- ***Bridge inspection on the GSP, New Jersey Highway Authority (NJHA).*** Cycle inspection of 81 bridges on the Garden State Parkway. Experience included field inspection and documentation, photographs, reports, recommendations and construction cost estimates.
- ***Roadway Improvements for Eight Connecticut Department of Transportation (Bridge Rehabilitations – Project Engineer.*** Designs included bridge approach improvements, temporary roadways and crossovers, detour plans, maintenance and protection of traffic and construction staging.
- ***Powder Hollow, Wanaque – Project Engineer.*** Roadway design, site grading, drainage and sanitary sewer design, utilities, soil erosion and sediment control plans, and site details for a 102-multifamily unit layout.
- ***350+ multifamily unit layout Phases I-V, Glens, Pompton Plains – Project Engineer.*** Experience included project coordination, roadway design, site grading, drainage and sanitary sewer design, utilities, soil erosion and sediment control plans, and site details.
- ***Bergen County Roadway Improvement Projects – Project Manager.*** A sampling of these projects include: Piermont Road and Homans Avenue Intersection and Culvert Improvement; Bergen Turnpike Bridge Replacement; Kinderkamack Road Realignment and Widening; Market Street and Midland Avenue Intersection Improvements; Franklin Avenue and Pulis Avenue Intersection Improvement. The scope of services consisted of horizontal and vertical alignment designs, cross sections and super elevation design, hydraulic/hydrologic calculations and stream improvements, drainage and sanitary sewer design, utility relocations & design, maintenance and protection of traffic, preparation of construction bid documents, engineer's estimates, and construction support services.

AFFILIATIONS:

American Society of Civil Engineers
New Jersey Association for Floodplain Management (NJAFM)
ACEC NJDOT Design Committee

YEARS OF EXPERIENCE: 17 Years

EDUCATION:

B.S. Civil Engineering, University of Hartford

REGISTRATION/CERTIFICATION:

Professional Engineer – New Jersey, New York
Certified Municipal Engineer – New Jersey
Certified Floodplain Manager

TRAINING:

Rutgers (CAIT), Design of ADA Curb Ramps and Pedestrian Access Routes
Rutgers (CAIT), Impact Attenuator: Crash Cushions
Rutgers (CAIT), Guidelines for Guide Rails and Median Barriers
Rutgers (CAIT), Permeable Pavements
OSHA 10 Hour Occupational Safety and Health
FHWA Highway Safety Manual

EXPERIENCE:

Mr. McGinnis is responsible for the day-to-day design of various transportation projects. He has specialized in the scoping, planning and design of municipal County roadways. As a project engineer, his responsibilities include evaluating conceptual alignment schemes, horizontal and vertical alignment design, drainage design, ADA-compliant curb ramp design, traffic engineering, right-of-way and utility coordination, preparation of project plans, estimates and specifications for local state and federally funded projects as well as private clients.

Representative projects include the following:

- ***Municipal Roadway Improvement Projects.*** Design of NJDOT local aid projects in Bergenfield, Cliffside Park, Closter, Dumont, Elmwood Park, Emerson, Englewood Cliffs, Fairview, Fort Lee, Franklin Lakes, Garfield, Guttenberg, Hackensack, Hawthorne, Hoboken, Mahwah, Moonachie, New Milford, North Bergen, North Haledon, Oakland, Oradell, Paramus, Passaic, Ramsey, Ridgewood Park, Rochelle Park, Rutherford, Secaucus, South Hackensack, Summit, Teterboro, Upper Saddle River, Waldwick, West Caldwell, Westwood, Woodcliff Lake, and Wyckoff. Projects ranged from resurfacing to complete road reconstruction including drainage, curbs, sidewalks and utility relocations.
- ***Replacement of Sussex County Bridge X-48, Mudtown Road over Clove Brook, Wantage, NJ.*** This \$1.5 Million project consisted of the replacement of a single span, multi rolled-steel girders with an open steel grid deck structure originally constructed in 1915. In 2017, the bridge was classified as structurally deficient due to the condition of the superstructure and functionally obsolete due to the substandard bridge roadway width. The design included horizontal and vertical roadway realignment, upgraded storm drainage, beam guide rail, extensive overhead utility relocations, and detour plans for construction. Permanent sheeting was utilized as a scour countermeasure. This bridge replacement project required extensive coordination with adjacent private property owners to avoid impacts to residential structures.
- ***Site Improvements, Phase II (Westchester Community College), Valhalla, NY.*** This project included pavement rehabilitation of two (2) campus parking lots, Lot #3 and Lot E. The scope of work included pavement rehabilitation, replacement of curbing and sidewalks, and storm water improvements. Accessible parking stalls were added to both lots in accordance with the Americans with Disabilities Act (ADA) standards. This project also included the installation of two (2) state of the art electric vehicle charging stations. The stations installed are designated as Level 2 Chargers, which have the capability of providing a vehicle range of 10 – 20 miles per hour of charging. This installation represented a trial run for the College to be utilized for further expansion of an electric vehicle charging network on campus.



- ***Yogi Berra Drive Sidewalks (Montclair State University), Little Falls, NJ.*** This project included installation of a new 1,500-foot-long sidewalk including ADA-compliant curb ramps, modular block retaining walls, and upgrades to an existing traffic signal system related with the new sidewalk. Existing non-conforming wooden guide rail was replaced in order to meet the current NJDOT standard Manual for Assessing Safety Hardware (MASH) crash tested Midwest Guardrail System (MGS). The lighting along the new sidewalk was evaluated during the design and upgrades were made including the addition of new lights and replacement of luminaires with high lumen output.
- ***2020 Sussex County Road Resurfacing Program (ADA Design), Sussex County, NJ.*** This NJDOT funded project included the preparation of detailed curb ramp grading plans to supplement the County's resurfacing plans for eighteen (18) County Route segments, totalling approximately 50.15 miles. All curb ramps within the project limits were evaluated and detailed ADA designs were prepared in conformance with current ADA Standards and the Public Rights-of-Way Accessibility Guidelines (PROWAG). Technical infeasibilities, utilizing NJDOT standard format, were prepared for ramps that could not be designed to meet due to various existing conditions.
- ***New Jersey Turnpike Authority (NJTA), Rehabilitation of Concrete Median Barrier, GSP MP 129 to 140.*** Inspection and replacement of the existing substandard 36-inch-high concrete median barrier with 42-inch-high barrier. Design included a cost benefit analysis to reduce the width between barriers along the northbound and southbound roadways, thereby decreasing the cost of new barrier and increasing the shy line offset from the left shoulder line to the barrier. Roadway drainage within the project limits was reviewed and capacity increased, as needed, in order to adequately control limit of spread for the design storm. Unique inlet designs were developed to provide easier access for the Authority's maintenance crews. The project was broken up into five (5) separate work areas in order to maintain full traffic capacity of the five (5) lane highway, which is statistically the busiest stretch of the 170-mile-long Garden State Parkway.
- ***Site Improvements, Phase I (Westchester Community College), Valhalla, NY.*** This project included various site improvements to the southern portion of campus. Phase 1 of this campus wide improvements program consisted of the pavement rehabilitation of three (3) campus parking lots, including combining two (2) of the lots with one (1) main centrally located entry/exit way in order to simplify access for motorists by avoiding driver confusion and maximizing parking capacity. A large portion of Lot #6 was reconstructed in order to provide American's with Disabilities (ADA) compliant parking stalls. Existing parking lot lights were converted to light emitting diode (LED) type versions and new lights were installed to accompany the new expanded parking areas. This project also included the construction of a new sidewalk for emergency egress purposes at an early childhood education facility on campus, and the full reconstruction of an existing depilated, 1/2-mile-long walkway leading from the Main Campus loop to a bus stop used by commuter students. New pedestrian walkway lighting, matching the College standards, and emergency call boxes were installed along the reconstructed walkway for safety purposes. All curb ramps and sidewalks were constructed in conformance with the ADA Standards and the Public Rights-of-Way Accessibility Guidelines (PROWAG).
- ***Replacement of Orton Road Bridge over Pine Brook, West Caldwell, NJ.*** This \$2.2 Million project consisted of the replacement of the structurally deficient and functionally obsolete three-span stone masonry Orton Road Bridge over Pine Brook. Specific design elements included design of horizontal and vertical roadway geometry, upgraded storm drainage, sanitary sewer realignments, beam guide rail, underground and overhead utility relocations, and detour plans for construction. During the design phase, specific aesthetic elements were incorporated based on the NJDEP Historic Preservation Office's (HPO) identification of the structure being eligible for inclusion on the New Jersey National Registers of Historic Places (SR/NR) under Criterion C.
- ***2019 Sussex County Road Resurfacing Program (ADA Design), Sussex County, NJ.*** This project included the preparation of detailed curb ramp grading plans to supplement the County's resurfacing plans for ten (10) County Route segments, totalling approximately 32.90 miles. All non-complaint ADA curb ramps within the project limits were designed to meet current ADA Standards and the Public Rights-of-Way Accessibility Guidelines (PROWAG), including compliance with the NJDOT standard details. Technical infeasibilities were prepared for ramps that could not be designed to meet due to various existing conditions. Upgrades to pedestrian signal heads and



- push buttons, including signal timing modifications was also performed for select signalized intersections.
- ***Normal Avenue Pedestrian Improvements (Montclair State University), Montclair, NJ.*** This project included upgrades to non-complaint ADA curb ramps at three intersections, including one controlled by a traffic signal, along Normal Avenue (Essex County Route 618). The curb ramps at a mid-block crossing were also upgraded, complete with the installation of a Rectangular Rapid Flashing Beacon (RRFB) system. All reconstructed curb ramps and sidewalks were constructed in conformance with the 2010 ADA Standards and the Public Rights-of-Way Accessibility Guidelines (PROWAG). All project work was closely coordinated with the Essex County Engineering Department.
 - ***New Park Drive, Parsippany–Troy Hills, NJ.*** This \$2.5 Million project consisted of the construction of a new park entrance roadway and signalized intersection inclusive of a new detention basin as well as the enlargement of an existing, second detention basin. The scope of work included developing new horizontal and vertical alignments for New Park Drive, modifying the existing 'T' intersection and traffic signal at West Hanover Avenue (a County Road) to become a new four-way intersection with one of the roadway approaches being New Park Drive, design of a roadway drainage system complete with road side ditches, design of two storm water management detention basins, roadway cross section design, utility relocations and coordination, topographic and boundary survey, and construction services.
 - ***Pulis Field, Wyckoff, NJ.*** This multi-use recreation facility included 170,000 sq. ft. of synthetic turf with an underground drainage system. This sports complex is utilized for soccer and lacrosse. Additional improvements at the site included the expansion of the existing parking lot, a computerized field lighting system, retaining walls, and a railroad crossing to provide further access to the new parking lot. Mr. McGinnis was responsible for the layout, design, and preparation of the bidding documents for the project. He was also involved with on-site inspection and coordination of the construction phase of the project.
 - ***Winter's Park, Mahwah, NJ.*** This project came to fruition after constructive community dialogue expressing the need of upgrading an existing playground at Winter's Park. The project involved upgrading an outdated playground area with new equipment, which was both interactive and safe for the children who utilize it. Passive recreation spaces were created with the installation of new picnic tables, benches and trash receptacles. A welcoming brick paver entrance was constructed via an engraved brick fundraising campaign organized by local community residents.
 - ***Westvale Park, Westwood, NJ.*** This multi-use facility is comprised of various sports and recreation activities including soccer, football, baseball/softball fields, a sports field lighting system, a playground, dog parks with separate areas for large and small breeds, a concession stand complete with restrooms and a covered pavilion, and a large walking path around the entire park which connects to the adjacent County Pascack Brook Park. The project was unique in the fact that the complex is located on top of a 15-acre decommissioned landfill.
 - ***Kinderkamack Road Improvements, Emerson, NJ.*** This \$4.7 Million project included the redesign of the horizontal and vertical alignments of the Kinderkamack Road corridor in downtown Emerson, including roadway reconstruction, milling and resurfacing, reconstruction of curb, sidewalk, driveways, new on-street angled parking, streetscape elements, and storm sewer/drainage improvements. The project was designed in concert with County traffic signal improvements (one replacement and two new) and upgrades of two NJ Transit grade crossings to current standards, including traffic signal pre-emption.
 - ***Market Street Streetscape, Elmwood Park, NJ.*** This project involved design of streetscape type improvements for downtown Elmwood Park, including new curb, concrete and brick paver sidewalks, street furniture, street trees and decorative lighting. The project was closely coordinated with two County projects which were located within the project limits, one of which consisted of a signalized intersection re-design. Contract plans and specifications were prepared to meet the standards for Federal Aid projects.



- ***Replacement of Bridge No. 230.9 Old Mill Road over Stony Brook, Hopewell, NJ.*** This project included the horizontal and vertical realignment of Old Mill Road and the replacement of the existing bridge over Stony Brook. Specific design elements included roadway superelevation across the new bridge and designing guide rail, drainage, pavement, and detour plans for construction. Significant utility relocations to electric transmission lines and a natural gas main were also necessitated in this \$1.9 Million project.
- ***(NJTA), Guide Rail Improvements GSP MP 0 to 30 & MP 100-126.*** Guide rail inspection and field measurements for 70 miles of the Garden State Parkway, both NB and SB, daily photo capture of existing conditions, determination of existing critical slope locations, in-office design of new guide rail, length of need (LON) and clear zone determinations, preparation of construction plans and corresponding summary tables by milepost, technical specification and engineer's estimate preparation.

AFFILIATIONS:

New Jersey Association for Floodplain Management (NJAFM)
American Council of Engineering Companies (ACEC) of New Jersey – Local Government Committee
American Society of Civil Engineers (ASCE)
New Jersey Society of Asphalt Technologists (NJSAT)

YEARS OF EXPERIENCE: 26 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. 101157)
- Delaware (Lic. No. 28943)
- Connecticut (Lic. No. 0037431)

FHWA-NHI- 130055 Safety Inspection of In-Service Bridges (2019)
FHWA-NHI- 130053 Bridge Inspection Refresher Training (2024)

EXPERIENCE:

Mr. O'Fallon has over 26 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:

- ***NJTA, Culvert Repairs MP 112 to 113, Construction Contract No. P200.545.*** Senior Structural Engineer for the rehabilitation of two (2) – 120-inch CMP culverts under the Parkway northbound inner/outer roadways (MP 112.42N) and the southbound inner/outer roadways (MP 112.51S). The recommended alternative was a steel liner pipe. Responsible for the plans and specifications preparation review and providing responses to client comments. The scope of work included surveying, laser scanning of the culverts, culvert inspection and reporting using InspecTech, wetlands delineation, hydrologic and hydraulic analysis, soil erosion plans, MPT/construction access plans, construction plans, structural plans, environmental permitting, estimating and specifications. The project is currently at Phase D, waiting for the NJDEP permit to be secured. (2020-2023)
- ***NJTA, Culvert Repairs MP 112.17, Construction Contract No. P200.594.*** Senior Structural Engineer for the rehabilitation of a 66-inch CMP culvert under the Parkway northbound and southbound inner/outer roadways at MP 112.17. The recommended alternative was a 49-inch steel pipe (jack and bore method) parallel to the existing pipe. Responsible for the plans and specifications preparation review and providing responses to client comments. The scope of work included surveying, laser scanning of the culvert, culvert inspection and reporting using InspecTech, wetlands delineation, hydrologic and hydraulic analysis, soil erosion plans, MPT/construction access plans, construction plans, structural plans, environmental permitting, estimating and specifications. The Phase B was submitted; awaiting comments from NJTA. The project is on schedule. (2020-2023)
- ***NJTA, Rehabilitation of Concrete Median Barrier, MP 129 to 140 (GSP).*** Structural Project Engineer for the replacement of existing concrete median barrier including drainage modifications and upgrades due to the replacement of the median barrier. The project also includes reconstruction of the right shoulders to accommodate the shifting of traffic onto the shoulder during the various construction stages, and Maintenance and Protection of Traffic design for the proposed improvements. The project required an aggressive design schedule to meet Authority commitments. (2019-2020)



- ***NYSDOT Regions 10 and 11 Bridge Diving Inspections & Fathometer Surveys.*** Quality Control Engineer NYSDOT Bridge Diving Contracts involving routine underwater inspections, bridge structures, and fathometer surveys New York State. New York State Department of Transportation. (2022 - Present).
- ***Township of Secaucus – Structural Modifications for Firehouse Door – 150 Plaza Center Road – Hudson County, NJ.*** Senior Structural Designer to provide structural modifications for a firehouse door. Work included: plans and details in accordance with current Uniform Construction Code for New Jersey, as well as, the design of a new lintel, preparation of building framing and connection details, and the preparation of new door details. Work also included the preparation of a complete set of plans and specifications suitable for bidding and construction of the building modifications. (2019)
- ***Public Service Electric & Gas – Structural Assessment for Ten (10) Bridges at Various Locations*** – Structural Task Leader for the inspection and load ratings of ten (10) bridges owned by PSE&G. Bridges included CIP concrete slab bridge, steel stringer bridges and pipe culvert bridges. (2018)
- ***Khubani Enterprises, Inc. - In-Depth Inspection/Report for the Rehabilitation of Parking Garage – 250 Prospect Street – City of East Orange, Essex County, NJ.*** Structural Engineer for 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 for 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)
- ***City of Summit – Springfield Avenue Tier Garage – Structural Maintenance Repairs and Elevator Modernization – 444 Springfield Avenue/Maple Street, County of Union, N.J.*** Structural Engineer responsible for the inspection and rehabilitation of the tier parking garage, as well as an elevator maintenance upgrade. The scope of work included the spall and crack repairs of concrete deck, beams, columns, repair of concrete deck and wall joints. In addition, installation of waterproofing protective coat system, replacement of stair nosings and parking stripes. Replacement of the existing roof system at the elevator shaft and stair tower and the modernization of the existing elevator and machine room was also performed.(2016)
- ***City of Hackensack – Parking Garage Rehabilitation –19-41 Atlantic Street – County of Bergen, NJ.*** Structural Engineer responsible for the inspection of a four (4) tier parking garage.



Work included inspection and the preparation of plans and specifications for the concrete repairs of cracks and spalls at tops of decks and underside of decks, beams and columns. Other items of work include the application of waterproofing membrane to top deck extending down the ramp, replace deck joints, re-caulk at interface with parapet and deck, power washing of masonry facing of efflorescence, repair of exterior brick masonry, repair of damaged cable railing and repair of broken prestressed strands (if and where). (Ongoing)

- ***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. (2024)
- ***County of Passaic – Dundee Island Park, Passaic, N.J.*** – Structural Task Leader for this project which involved a preliminary inspection, design and preparation of contract plans for the design of a field house foundation which also included a circular ramp to meet ADA requirements, as well as, combined steps/seating. Also prepared preliminary assessment reports and attended meetings. (2017)
- ***County of Essex, Replacement of Hoover Ave Bridge, Structure No. 0700-086, over Third River, Township of Bloomfield, NJ.*** Structural Task Leader for the proposed project which included the replacement of an existing 50' wide x 19' clear span masonry arch structure. The structure is to be replaced with a precast arch and precast wingwalls. The design includes the reuse of the existing brownstones used in the existing parapets and fascia as veneer to maintain the original aesthetics in the park setting. The new structure will provide a 30' curb to curb roadway and 8'-4" sidewalks on both sides of the structure. (2015)
- ***County of Bergen, Interim Rehabilitation of East Anderson Street Bridge Over the Hackensack River, City of Hackensack, Township of Teaneck, NJ.*** Structural Design Engineer for the preparation of contract documents to implement priority repairs on this 300' long x 74' wide, six (6) span adjacent precast box beam bridge. Project included design services. Engineering Design Services shall include: field surveys; structural evaluation and ratings; review and analysis related traffic detours and/or lane closures necessary; identification of all permits required for the project construction; engineer's estimate of construction costs; as well as construction support. (2016)
- ***County of Warren, Reconstruction of Bridge #08001A, Charles Street Over Trout Brook, Hackettstown, NJ.*** Structural Design Engineer for the superstructure replacement of this existing 32 feet single span, pre-stressed concrete, adjacent voided slab structure. Recent inspections have identified cracking at the undersides of the slabs from possible overloading. Presently the existing structure has a concrete slab, however, original plans show the beams topped only with an asphalt overlay. The scope of services include: topographic survey, superstructure replacement design (proposed superstructure will also be pre-stressed concrete, adjacent voided slab beams with a composite concrete deck, MPT (detour), utility relocation, drainage design and environmental permitting (Flood Hazard Area Permit needed as FHE tops the structure). Special detailing will include the "wrap-around" deck at the abutments. (Design- 100% complete - 2013)
- ***William Patterson College, Wayne, NJ*** – Design of MSE retaining wall adjacent to parking lot.(2016)
- ***County of Passaic, Rehabilitation of Warburton Avenue Bridge over Goffle Brook, Borough of Hawthorne, NJ.*** Structural Design Engineer for the replacement of the existing 42 feet single span, concrete encased steel girder superstructure bridge. The scope of work included superstructure replacement with pre-stressed concrete, adjacent box beams and partial reconstruction of the abutments. The new bridge was designed for a higher load carrying capacity. One of the major objectives of this project was to ensure that the proposed bridge



- fascia, balustrade railing and lamp posts closely matched the existing bridge fascia as mandated by the Historic Preservation Office. The scope of services also included topographic survey, MPT (two (2) stage construction), road alignment (increased roadway width), utility relocation, drainage design and environmental permitting. Special detailing included the “wrap-around” deck at the abutments. (Construction ongoing – 2013)
- ***City of Summit, Rehabilitation of the Broad Street Parking Garage, Summit, NJ.*** Structural Engineer responsible for the design of repairs to existing four (4) level, 675 car parking garage. Work included the replacement of all deck joints including elastomeric joints and the waterproofing of the garage decks, as well as, the preparation of plans and specifications for all necessary repairs. All design in conformance with IBC and ACI. (2012- 2015)
 - ***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)
 - ***County of Hudson, Hoboken Firehouse Repairs and Retrofit.*** This project included the repair of masonry building walls, as well as repointing and reconstruction. This project also included repair to the apparatus room floor slab and supporting structure. Removal and replacement of a portion of the roofing system was also part of the project. (2012-2013)
 - ***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)
 - ***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)
 - ***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)
- ***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)
 - ***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)
 - ***300 Prospect Street, Prospect Towers, Garage Collapse, Hackensack, NJ.*** Structural Engineer responsible for the damage assessment inspection of this two (2)-story below grade structure which suffered a catastrophic collapse on July 10, 2010. Duties included the assessment of structural damage to the parking deck structure and determination of the structural integrity of the adjacent 18-story residential building abutting the failed structure. Duties also included the review of calculations performed by the owner's engineer for the analysis of the adjacent residential structure, as well as review of the design and contract plans for the reconstruction of the parking garage. Regular inspections were also performed during the reconstruction to ensure conformance with the design contract documents. (2010)
 - ***County of Bergen, Bergen Turnpike Bridge Rehabilitation and Widening, Ridgefield & Ridgefield Park, NJ.*** Bridge Design Engineer responsible for the inspection and structural rehabilitation of this 10 span, 400-foot bridge over Overpeck Creek. The project included replacement of the asphalt overlay deck with a reinforced concrete deck which permitted widening the roadway from 24' to 32'. Rehabilitation also included repairs to the existing prestressed beams and pile caps, as well as wrapping of the pipe piles. The pile bent piers were analyzed to confirm that the structure could be widened without the need for additional piles. (2005-2009)
 - ***City of Passaic Municipal Building – Rehabilitation of Underground Parking Garage – Passaic County, NJ.*** Structural Engineer responsible for the inspection of the concrete deck and the repair of the structural elements in the underground parking facility. Work included the preparation of structural construction drawings, technical specifications, construction observation for the repair or replacement of joint sealers, and cleaning and painting the structural steel. (2007-2009)
 - ***County of Essex, Becker Park Improvements, Roseland, NJ.*** Structural Design Engineer for the improvements to Becker Park which included the replacement of a twin concrete pipe beneath the main access road with a three (3)-sided precast concrete rigid frame structure. This project also included construction of a gazebo and an 80'x20' pavilion. Also included was the construction of roadway improvements, installation of a stabilized stone dust walking trail and installation of water service. (2011)
 - ***Rehabilitation of Sussex County Bridge P-13, Carrying Route 560 Over Little Flat Brook, Township of Sandyston, Sussex County NJ.*** Structural Design Engineer on this project which included superstructure replacement and substructure repairs. Due to the short construction



window available, replacement of the P-13 superstructure was designed using prefabricated concrete deck/steel beam panels. (2009 – 2010)

- ***New Jersey Turnpike Authority, Interchange 88/89 Signing Improvements, Lakewood, NJ, Ocean County.*** Bridge Engineer Project for the design of five (5) new overhead sign structures – three (3) bridge span type and two (2) cantilever type. Combined two sign structures from Int. 98 Improvement contract into this contract. Revised design and plans for increased span lengths to accommodate future widening, and updated plans and specifications in accordance with 2007 Construction Specification. (2009)
- ***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 Mercer, Replacement of County Bridge No. 230.9 – Old Mill Road over Stony Brook, Hopewell, NJ.*** Bridge Engineer for: The proposed project includes the replacement of an existing three (3)-span masonry bridge over Stony Brook with twin 36' arch Conspan bridge. To comply with the current AASHTO and New Jersey Department of Transportation design standards, the project will also involve realignment of Old Mill Road. The roadway will also be widened by 14 ± feet. Prepared contract plans, specifications, and estimate. (2008)
- ***Boroughs of Englewood Cliffs and Paramus, Bergen County, NJ –DPW Yard Retaining Wall Replacement, Paramus Rescue Squad Roof Replacement.*** Performed an inspection and design for retaining wall, building, as well as, roof replacements.
- ***Paramus Police Station Reconstruction of Handicap Ramp, Borough of Paramus.*** Design of ADA access ramp and stairs for Police Department entrance and various retaining walls. Retaining walls were CMU block with brick facing.
- ***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)
- ***City of Summit, Analysis of Tier Parking Garage, Summit, NJ.*** Structural Engineer. Work included the analysis of the existing 6-level parking garage. Inspection of facility for structural defects, including evaluating the areas of deterioration which included scaling, spalling and cracking. Duties also included the preliminary and final design of the parking deck structure, as well as, shop drawing review, as well as the preparation of design documents. (2006)
- ***Independence Harbor I Condominium – Hartz Mountain Industries, Inc.*** Structural Engineer for an in-depth structural analysis performed to determine the current load bearing capacity of the concrete and timber substructure and to assess the adequacy of the foundation to withstand the existing loading conditions, accounting for the measured section losses and strength properties of the materials comprising the structural elements. (2005)



- ***City of Summit, Rehabilitation of the Broad Street Parking Garage, Summit, NJ.*** Structural Engineer responsible for the design of repairs to existing four (4) level, 675 car parking garage. Work included the replacement of all deck joints including elastomeric joints and the waterproofing of the garage decks, as well as, the preparation of plans and specifications for all necessary repairs. All design was in conformance with IBC and ACI. (2005)
- ***Piers C & D Emergency Repairs - Hartz Mountain Industries, Inc.*** Structural Engineer on this project for the emergency repair of these two (2) waterfront piers in Edgewater, NJ. The scope of work consisted of an investigation of the pier structures due to signs of settlement and horizontal displacement of the waterfront sea wall at Pier C. An underwater inspection was performed which revealed severe damage to the timber piles, pile caps, and underdecking due to marine borers. Similar damage was noted at Pier D. Repair details were developed for implementation on an emergency basis. Requests to the NJDEP and ACOE regarding the necessary permits were made and obtained. The scope of work also included preparation of a preliminary design, including details for the structural jacketing of the timber piles, and development of construction cost estimates for the rehabilitation of the entire pier structures in phases. (2007).
- ***County of Bergen, Rivervale Road Slope Stabilization, Township of Hopewell, NJ.*** Structural Task Leader in charge of 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)
- ***County of Passaic, Replacement of the Belmont Avenue Bridge over Molly Ann's Brook, Haledon, NJ.*** Bridge Design Engineer for the design of a concrete box beam bridge (40 foot span) to replace a flood damaged bridge for the County of Passaic. The scope of services included topographic survey, structural design, soil borings, Maintenance and Protection of Traffic (MPT) (two stages), community involvement, road alignment, utilities, drainage design and right-of-way. (2005/2006)
- ***County of Passaic, Rehabilitation of Rea Avenue Culverts over Goffle Brook, Hawthorne, NJ.*** Bridge Engineer for the rehabilitation of two culverts along Rea Ave. Design includes replacement of sidewalks and substandard railing; and concrete repairs to deck, abutments and wingwalls. (2006)
- ***County of Passaic, Rehabilitation of Bergen County, Rehabilitation of Bear Swamp Road Bridge over the Ramapo River, Mahwah, NJ.*** Bridge Engineer for the design for the rehabilitation of the single span historic truss bridge over the Ramapo River. Design included analysis of truss bridge and retrofit necessary to increase capacity to HS-25 loading. Design also included rehabilitation of existing masonry abutments. (2006)
- ***County of Essex, Replacement of Springfield Avenue and Chancellor Avenue Culverts at Lightning Brook, Irvington & Maplewood, NJ.*** The project included a preliminary and final design of replacement of two (2) culverts. Also designed new foundations and wingwalls for new three (3)-sided culverts. Prepared plans, specifications, and estimate. (2005 - 2007)
- ***County of Passaic, Technical Institute Academic Addition, Wayne, NJ.*** This project included the design of one new building and three building extensions. The buildings are steel moment frame construction. The project also included design of prestressed concrete planks and large span gluelam beams. (2004)



- ***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)
- ***Westwood Firehouse, Westwood, NJ.*** The project involved design of three-story steel framed building with reinforced concrete basement and masonry walls. Design using CIP, Masonry, Steel Framing. Prestressed concrete planks. Composite floor system and steel roof. All design in conformance with BOCA, ACI, and AISC. (2002)
- ***County of Bergen, Replacement of the NYS&W Railroad Bridge Over River Street, Hackensack, NJ.*** The project involved design of 90' + Railroad Bridge, including steel superstructure and concrete substructure supported on CIP piles. All design in conformance with AASHTO, AREMA, and NJDOT Design Manual. (2002)
- ***NJDOT - Paterson Plank Road Grade Separation Project.*** Structural Project Engineer for this project. The project involved the design of an overpass to accommodate critical movements between Paterson Plank Road, local streets and Routes 1 and 9. Duties included the design and plan preparation of retaining walls and overhead sign structures along the project limits. (2001)

YEARS OF EXPERIENCE: 40 Years

EDUCATION:

New Jersey Institute of Technology

REGISTRATION:

Professional Land Surveyor - New Jersey 1992

EXPERIENCE:

Mr. Krupinski, over the course of his 40-year career, 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, including 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 less than 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:

- ***State of New Jersey, Department of Treasury, Division of Property Management & Construction, Boundary Surveys for Land Acquisition, Manville, N.J.*** Performed record research, boundary analysis, mapping and preparation of deliverables for the 68 properties being acquired for this Blue Acres project.
- ***State of New Jersey, Department of Treasury, Division of Property Management & Construction (DPMC), Boundary Surveys for Land Acquisition, Pemberton & Southampton, N.J.*** Performed record research, boundary analysis, mapping and preparation of deliverables for the 50 properties being acquired for this Blue Acres project.
- ***State of New Jersey, Department of Treasury, DPMC, Boundary Surveys for Land Acquisition, Pleasantville, N.J.*** Performed record research, boundary analysis, mapping and preparation of deliverables for the 24 properties being acquired for this Blue Acres project.
- ***State of New Jersey, Department of Environmental Protection (NJDEP), Bureau of Green Acres, Quarryville Brook Preserve, Wantage, N.J.*** Performed record research, boundary analysis, mapping and preparation of deliverables for the acquisition of a 6.5-acre property and partial acquisition of a 16-acre property.
- ***NJDEP, Bureau of Green Acres, Bear Creek Preserve, Allamuchy, N.J.*** Performed record research, boundary analysis, mapping and preparation of deliverables for the acquisition of a 7.7-acre property.
- ***FirstEnergy, Oceanview 230 kV Transmission Line Reinforcement Project.*** Performed all stakeout information and supervised all stakeout work of proposed pole locations and limits of transmission line right of way for vegetation clearance/maintenance for this 16-mile-long project throughout Monmouth County; performed record research and boundary analysis; prepared legal descriptions; downloaded, processed and checked all field survey data; reviewed all drafting.
- ***Jersey Central Power & Light (FirstEnergy) Martinsville Substation, Warren, N.J.*** Performed record research, boundary analysis, mapping and prepared all deliverables for three (3) areas totaling 3.6 acres to be diverted from a Township of Warren Conservation Easement and a 16.5-acre replacement parcel for both Green Acres and State House Commission approval.



- ***Port Authority of New York and New Jersey, Newark Liberty International Airport, Utility Management System, Newark, N.J.*** 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.
- ***Bergen County Department of Planning and Economic Development, Camp Tamarack, Oakland, N.J.*** Performed record research and boundary analysis for this 181-acre tract. Prepared a Perimeter Survey and a later Boundary Survey for Green Acres acquisition.
- ***NJ Department of Human Services/NJ Division of Property Management & Construction, Greystone Park Psychiatric Hospital, Morris County, N.J.*** Prepared boundary surveys and metes & bounds descriptions for three parcels totaling 199 acres to be conveyed to the County of Morris.
- ***New Jersey Department of Transportation (NJDOT), U.S. Route 30 (White Horse Pike) & Evesham Avenue Intersection Improvements, Magnolia, N.J.*** 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, N.J.*** On this four (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.
- ***NJDOT, Route 80, Section 20 Roadway Widening (Metric), Hackensack, South Hackensack & Teterboro, N.J.*** 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, N.J.*** 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, N.J.*** 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, N.J.*** 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, N.J.*** 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, N.J.*** 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.
- ***Valley Court and Gail Place Floodwall, Secaucus, N.J.*** Supervised field survey and drafting, downloaded and processed all survey data, including aerial mapping photo control, performed record research and boundary analysis for this over 37-acre boundary and topographic survey for the Town of Secaucus. This boundary survey required the establishment of boundary lines for 80 properties, calculation of mean high water and researching existing tidelands conveyances.
- ***NJDOT, Stage II Scour Evaluation, Hunterdon, Mercer and Warren Counties, N.J.*** Responsibilities included obtaining stream cross sections and preparing mapping for 29 roadway bridges. Total project length was approximately 12,500 L.F.
- ***East Orange Water Commission, Millburn, N.J.*** Performed record research, field survey and boundary analysis for this ancient property which consisted of over 255 acres. A closed survey baseline loop of three and three quarters (3.75) 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.
- ***Trust For Public Land, Dundee Island Park, Passaic, N.J.*** Supervised field survey and drafting, downloaded and processed all survey data, performed record research, including tidelands conveyances, and boundary analysis for this over 7-acre boundary and topographic survey. This complex boundary survey required reestablishing a railroad centerline from ties referenced in an 1882 deed and the mean high-water line of a branch of the Passaic River no longer in existence.
- ***Passaic Valley Sewerage Commission, Newark Bay Treatment Plant, Newark, N.J.*** Performed record research, boundary analysis for the determination of the boundary for the four (4) tracts, containing 142 acres total, that comprise this complex, as well as CAD drafting.
- ***Bergen County Health Care Center, Rockleigh, N.J.*** Responsible for the determination of the boundary on this over 50-acre tract. Since the deed of record did not close by 50 feet, it was imperative that all available mapping and adjoining property deeds be thoroughly researched. More than 20 maps were assembled from the County Clerk's Office, County Engineer's Office, the Borough of Rockleigh and other surveyors to aide in the resolution and establishment of the boundary.
- ***Hackensack University Medical Center, Pascack Valley Hospital, Westwood, NJ.*** Prepared an ALTA/ACSM Land Title Survey for this 22-acre property. Was responsible for record research, boundary analysis, preparation of metes & bounds and CAD drafting.
- ***ALTA/ACSM Land Title Survey, Piscataway, NJ.*** Performed record research and boundary analysis, and supervised field survey and mapping for the 115-acre Ericsson facility.
- ***Sourland Mountain Natural Area, West Amwell, NJ.*** Performed record research, boundary analysis, mapping and preparation of deliverables for the partial Green Acres acquisition of this 56-acre property.

YEARS OF EXPERIENCE: 40 Years

EDUCATION:

B. S., Civil Engineering, New Jersey Institute of Technology, 1988
B. A., Communications, Rutgers University, 1983

REGISTRATIONS/CERTIFICATIONS:

Professional Engineer, State of New Jersey, License # GE39919
Professional Traffic Operations Engineer (PTOE), Certificate #990, Transportation Professional Certification Board
Work Zone Safety Specialist, International Municipal Signal Association (IMSA)
Traffic Signal Technician Level III, IMSA
Certified Trainer/Course Administrator, IMSA

EXPERIENCE:

Mr. Dobiszewski has more than 40 years of in-depth experience in civil and traffic engineering. His professional expertise as a Traffic Operations Engineer and a Certified Traffic Signalization Technician ranges from intelligent transportation systems, adaptive traffic control systems, traffic signal and electrical design, centralized traffic control system Master Plans and as a certified traffic training/course administrator for public and private sector clients. Over the course of his career, Mr. Dobiszewski has worked in the public, and quasi-public sectors, amassing a unique skill set which includes design development, establishing agency standards and specifications, construction contract oversight, hands-on construction and maintenance tasks, and roadway traffic and safety investigations.

Mr. Dobiszewski's experience includes serving for ten (10) years as the Bureau Chief of Traffic Engineering, Safety and Maintenance for the County of Union, NJ. Further, he served two years as the Borough Engineer and Public Works Director for the Borough of New Providence, NJ.

As a national recognized traffic engineering expert, he co-authored the Traffic Control Signals chapter for the sixth edition of *ITE's Traffic Engineering Handbook*. He was also part of the Project Team for the re-write of ITE/IMSA's *Traffic Signal Maintenance Handbook*. Both of these publications are used extensively by the transportation community.

His professional volunteer work includes serving as a member of the National Committee on Uniform Traffic Control Devices; specifically, on the re-write team for Part VI – Work Zone Traffic Control, used in the Manual on Uniform Traffic Control Devices (MUTCD). He was also a member of the National Council of Examiners for Engineering and Surveying, helping to produce the national exam used as part of the requirements to become a registered professional engineer.

Mr. Dobiszewski's training from the New Jersey State Police in damage assessment was evident when he was called upon to serve on the Port Authority of NY & NJ (PANY & NJ) team for its downtown restoration project for the post-9/11 WTC site, assisting with infrastructure restoration in and around the site.

Current Assignments with Boswell Engineering Include:

- *Review Traffic Impact Studies, Site Circulation, and Roadway Designs Prepared by Applicants for Various Land Use Boards*
- *Providing Expert Testimony to Municipal Elected Officials on Traffic Matters*
- *Designing, Implementing and Evaluating Safe Routes to School Projects for Various Municipalities*
- *Downtown Circulation Plans*
- *Complete Streets*



- *Traffic Calming and Speed Reduction Strategies*
- *Detour and Diversion Routes*
- *On-site Traffic Signal Evaluations and Operations Assessment*
- *Develop Crash Mitigation Strategies*

Other Relevant Experience:

- Designed and implemented a perimeter warning and alert system for use during ordnance testing and effectiveness evaluation using wireless and video technologies for the U.S. Army at Picatinny Arsenal. The system was designed, deployed, and integrated into the existing operator monitoring consoles four (4) months ahead of schedule and under budget.
- Verified programmed databases, bench-tested, and installed new controllers as part of the Meadowlands Adaptive Signal System for Traffic Reduction (MASSTR) project for the New Jersey Sports and Exposition Authority.
- Coordinated efforts to upgrade the electronic toll collection system for the Delaware River Joint Toll Bridge Commission (DRJTBC), as part of the subcontractor team for TransCore (the prime contractor) for all Delaware River crossings.
- Successfully challenged existing public contract law regarding legal standing for material suppliers on public contracts (Jen Electric, Inc., Plaintiff–Appellant, V. County of Essex, Defendant–Respondent). The 2009 decision rendered by the court had national implications for how public contract specifications are written.
- Developed the Traffic Signal Master Plan for the PANY & NJ
- Performed the Communication Assessment for the ITS Early Deployment Project at John F. Kennedy International Airport
- Updated all technical performance specifications for traffic signal and ITS equipment for the PANY & NJ
- Re-designed all detail drawings for traffic signal and ITS equipment for the PANY & NJ
- Perform design analysis for vendors and suppliers of traffic signal poles and equipment. Direct and train field support staff on system deployment, controller programming, field and cabinet wiring, construction, and maintenance of signal systems
- Prepared and provided expert testimony and depositions for clients who were named defendants in potential tort liability cases
- Developed the Centralized Traffic Control System Master and Implementation Plan for the PANY & NJ at all their Hudson River Crossings and Major Airports
- Co-authored Traffic Signal Design and Drawing Preparation Guidelines for the PANY & NJ

AWARDS:

Federal Highway Administration, Administrator's Safety Award
Institute of Transportation Engineers, Outstanding Service Award, 1987-89; 1994



AFFILIATIONS:

Institute of Transportation Engineers
American Society of Civil Engineers
Chi Epsilon (National Civil Engineering Honor Society)
National Society of Professional Engineers
International Municipal Signal Association

PUBLICATIONS:

Co-author of the “Traffic Control Signals” chapter in the Sixth Edition of the ITE Traffic Engineering Handbook, 2009.

Author of chapters on “Preventative Maintenance”, “Response Maintenance”, and “Training” of ITE/IMSA Traffic Signal Maintenance Handbook, 2010.

YEARS OF EXPERIENCE: 28 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, New York, Connecticut
Certified Municipal Engineer – New Jersey
Confined Space Entry Training
OSHA 10-Hour Construction Course

EXPERIENCE:

Mrs. Diaz has 28 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 Infrastructure Bank (NJIB) funded projects and is extremely knowledgeable with the process.

Mrs. Diaz has extensive experience with varied types of conveyance and treatment 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.

Representative environmental projects include:

- ***PFAS Treatment, Borough of Hawthorne, NJ.*** This project includes the planning and design of the installation of ion exchange units at the four (4) points of entry throughout the Borough for the treatment of Per- and polyfluoroalkyl substances (PFAS). The project was funded by the New Jersey Infrastructure Bank (NJIB).
- ***Combined Sewer Overflow (CSO) Storage Tank, North Bergen Municipal Utilities Authority (NBMUA), North Bergen, NJ.*** The project included the design of a 5-million gallon Combined Sewer Overflow (CSO) storage tank, pumping station and associated piping. This project included the preparation of planning, design documents and TWA permit applications for the installation of the CSO Tank. The CSO Tank was an alternative in the Long-Term Control Plan (LTCP). The project was funded by the New Jersey Infrastructure Bank (NJIB).
- ***Lead Service Line Replacement, Phase 1 and Phase 2, Borough of Hawthorne, New Jersey.*** The project included the planning, design and construction administration of the replacement of approximately 525 galvanized water services from the main to the homes.
- ***PFAS Treatment, City of Garfield, NJ.*** This project includes the planning and design of the installation of dual granular activated carbon systems at the Elmwood Park well field for the treatment of Per- and polyfluoroalkyl substances (PFAS).
- ***Veolia Water Main Improvements, New Jersey.*** The project included the design and preparation of design documents for the replacement of approximately 28,000 linear feet of water main on various streets in Hackensack, Carlstadt, Moonachie, Washington Township, Secaucus, Paramus, Teterboro, and Rochelle Park.



- ***Doty Rd and Lakeview Terr/Grandview and Mountain View Avenues Watermain Improvements, Oakland, NJ.*** The project included the design and preparation of planning and design documents for the replacement of water main on various streets in Oakland. This included preparation of plans, specifications, and construction estimate.
- ***Design of Wastewater Pumping Stations Oakwood Knolls, Chapel Hill, and Lakeside for the Borough of Oakland, NJ.*** Preparation of all design documents for the conversion of three failing wastewater treatment plants to pumping stations to convey flow to the Northwest Bergen County Utilities Authority. The project was funded by the NJIB.
- ***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.
- ***Ridgewood Water Station Improvements, Eastside and Farview Pumping Stations, Ridgewood Water, NJ.*** Project entailed the design of the rehabilitation of the pumping stations, including installation of two (2) 150 HP pumps, variable frequency drives, electrical and HVAC upgrades. The project also included building and site modifications.
- ***Jacobus Avenue Pumping Station.*** This project entailed the design and construction support of the rehabilitation of the Jacobus Avenue Pumping Station including new pumps, piping, generator and SCADA system integration.
- ***Green, Glen and Westview Avenues Water Main Improvements, Roseland, NJ.*** The project included the design and preparation of planning and design documents for the replacement of water main on various streets in Roseland. This included preparation of plans, specifications, and construction estimate.
- ***Ridgewood Water Station Improvements, Eastside and Farview Pumping Stations, Ridgewood Water, NJ.*** Project entailed the design of the rehabilitation of the pumping stations, including installation of two (2) 150 HP pumps, variable frequency drives, electrical and HVAC upgrades. The project also included building and site modifications.
- ***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.
- ***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.
- ***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; 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.
- ***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.

AFFILIATIONS:

American Water Works Association. NJ Section Vice Chair
New Jersey Water Environment Association
Water Environment Federation

YEARS OF EXPERIENCE: 60 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. Stephen's stellar career involves more than 60 years of comprehensive engineering experience 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 Rehabilitation of the Sludge Loading Dock at the Passaic Valley Sewerage Commission, Newark, NJ.*** The project includes all new piping, a new valve chamber, and two new sludge unloading stations. It also included valve replacements in the Sludge Pumping Station.
- ***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.



- ***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.
- ***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.
- ***Co-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.

AFFILIATIONS:

American Society of Civil Engineers
Water Environmental Federation

SECTION IV



Section IV – Cost Proposal

Boswell's Calendar Year 2025 Fee Schedule for general engineering services is listed below. These hourly rates are inclusive of administrative, secretarial and clerical assistance, routine telephone and e-mails, and general correspondence.

BOSWELL
2025 RATE SCHEDULE

<u>Title</u>	<u>Hourly Rate</u>
Project Manager	\$239.00
Senior Project Engineer	\$235.00
Project Engineer	\$230.00
Senior Design Engineer	\$217.00
Design Engineer	\$203.00
Asst. Design Engineer	\$138.00
CADD Technician	\$177.00
Survey Field Crew (2 Person Team)	\$314.00
Robotic Survey Crew	\$200.00
Survey Analyst	\$230.00
Field Technician	\$84.00
Resident Engineer	\$203.00
Inspector	\$195.00
Inspector II	\$107.00
Licensed Site Remediation Professional (LSRP)	\$239.00
Senior Environmental Scientist	\$235.00
Environmental Scientist	\$97.00
Senior Environmental Specialist	\$230.00
Environmental Specialist	\$148.00
GIS Analyst	\$140.00

Note: All rates are inclusive of secretarial and clerical assistance, and routine telephone and email communications.

SECTION V





STATE OF NEW JERSEY BUSINESS REGISTRATION CERTIFICATE

Taxpayer Name:	BOSWELL, INC.
Trade Name:	
Address:	330 PHILLIPS AVE SO HACKENSACK, NJ 07606-1722
Certificate Number:	0099760
Effective Date:	July 01, 1966
Date of Issuance:	October 10, 2024

For Office Use Only:
20241010112206176

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-2025** to **15-Jun-2028**

BOSWELL INC.

330 SOUTH HACKENSACK

S. HACKENSACK

NJ

07606



Elizabeth Maher Muoio

ELIZABETH MAHER MUOIO

State Treasurer

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 CERTIFIED

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

FOR PRACTICE IN NEW JERSEY AS A(N): **Certificate of Authorization**

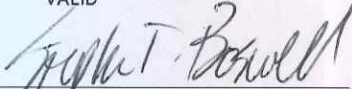
Engineering & Land Surveying

07/12/2024 TO 08/31/2026

VALID

24GA27958000

LICENSE/REGISTRATION/CERTIFICATION #



Signature of Licensee/Registrant/Certificate Holder



DIRECTOR



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Certifies That

BOSWELL INC
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



04/30/2028
EXPIRATION DATE

US00041
CERTIFICATION NUMBER

TO BE CONSPICUOUSLY DISPLAYED AT THE FACILITY

State of New Jersey
Department of Environmental Protection
Certifies That

BOSWELL, INC.
Laboratory Certification ID # 02051

having duly met the requirements of the
Regulations Governing the Certification of
Laboratories and Environmental Measurements N.J.A.C. 7:18
et. seq.

is hereby approved as a
State Certified Environmental Laboratory
to perform the analyses as indicated on the Annual Certified
Parameter List which must accompany this certificate to be valid

Expires June 30, 2026



A blue ink signature of Michele M. Potter, written in a cursive style.

Michele M. Potter
Manager

**NEW JERSEY DEPARTMENT OF TRANSPORTATION
DIVISION OF PROCUREMENT - BUREAU OF PROFESSIONAL SERVICES**

CONSULTANT PREQUALIFICATION STATUS

Company: Boswell Engineering, Inc.			Primary Contact: Christopher J. Nash, P/E.		
Address: 330 Phillips Avenue			Primary Email: marketing@boswellengineering.com		
			Phone: 201-641-0770		
			Secondary Contact: Christopher J. Nash, P.E.		
City: South Hackensack	State: NJ	Zip: 07606	Secondary Email: cnash@boswellengineering.com		

PRIMARY DISCIPLINES

B1	B	H1	B	S1	C
B4		H3	A	T1	A
C6	B	I1	A	T7	A
E3		I3			
E4	A	I5			
G2		M9	A		

PROJECT SPECIFIC DISCIPLINES

A1		C4		G1		M1		M12		S2		R2	
A3		C5		G3		M6		P2		T3		T12	
A5		C7		G4		M7		P3		T4		U2	
A6		E2		H2		M8		P4		T5		E5	
A7		E7		I6	A	M10		P6		N1			
C1		E8		L1		M11		R1		T11			

"LEVEL OF SERVICE" CODES

- A - Prequalified for Simple Projects
- B - Prequalified for Simple and Routine Projects
- C - Prequalified for Simple, Routine, and Complex Projects

OTHER STATUS CODES

- N - NOT Prequalified in requested discipline
- R - Requested Discipline Review Not Final

SUMMARY

Prequalified

☒

* Only firms with an "X" coded under Prequalified, with the proper discipline and level of service, can submit Technical Proposal(s).

Cost Basis Approval

☒

* Cost Basis Approval must be coded "X" in order to be Prequalified.

Certificate of Authorization

☒

Exempt

☐

EFFECTIVE DATES

BEGINS:

6/18/2024

EXPIRES:

6/18/2026

NOTE: Subconsultants do not need to be Prequalified, however, subconsultants must be Cost Basis Approved.

Prequalification requirements and application are available by referencing the NJDOT WEBSITE.

www.state.nj.us/transportation/business/procurement



STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY
DIVISION OF PROPERTY MANAGEMENT AND CONSTRUCTION

NOTICE OF CONSULTANT PREQUALIFICATION

FIRM: BOSWELL ENGINEERING, INC.
ADDRESS: 330 PHILLIPS AVENUE
SOUTH HACKENSACK, NJ 07606

☐ INITIAL ☐ REVISED ☒ RENEWAL

DATE OF ISSUE: AUGUST 14, 2023
EXPIRATION DATE: AUGUST 15, 2025
FEDERAL ID NUMBER: 221 896 168

☐ MBE ☐ WBE ☐ SBE ☐ VOB

The Experience Questionnaire (FORM 48A), submitted by your firm, has been reviewed. As a result of this review, your firm may be invited to submit proposals for projects involving the checked discipline(s) having a not to exceed Construction Cost Estimate (CCE) as noted. For the purposes of this form, NA = no fixed amount

☐ ARCHITECTURE		☐ ROOFING CONSULTANT	
☒ ELECTRICAL ENGINEERING	5 MILLION	☐ ACOUSTICS	
☐ HVAC ENGINEERING		☐ ASBESTOS DESIGN	
☐ PLUMBING ENGINEERING		☐ ASBESTOS SAFETY MONITORING	
☒ CIVIL ENGINEERING	10 MILLION	☒ CLAIMS ANALYSIS	NA
☐ SANITARY ENGINEERING		☐ TELECOMMUNICATIONS	
☒ STRUCTURAL ENGINEERING	10 MILLION	☐ FEASIBILITY PLANNING	
☐ ELEVATOR/CONVEYOR ENGINEERING		☐ FIRE DETECTION SYSTEMS	
☐ SOILS ENGINEERING		☐ FIRE PROTECTION SYSTEMS	
☐ FIRE PROTECTION ENGINEERING		☐ FOOD SERVICE	
☒ ENVIRONMENTAL ENGINEERING	10 MILLION	☐ HYDRAULICS/PNEUMATICS	
☒ MARINE ENGINEERING	10 MILLION	☒ HYDROLOGY	NA
☐ LANDSCAPE DESIGN		☐ SECURITY SYSTEMS	
☐ PLANNING		☒ SITE PLANNING	3 MILLION
☒ LAND SURVEYING	NA	☐ TESTING & BALANCING	
☐ AERIAL SURVEYING		☒ TRAFFIC	NA
☒ HYDROGRAPHIC SURVEYING	NA	☒ TRANSPORTATION	5 MILLION
☐ FIRE & LIFE SAFETY RENOVATIONS		☒ WASTE/WATER TREATMENT	3 MILLION
☐ BUILDING COMMISSIONING		☐ ENERGY MANAGEMENT CONTROL SYSTEM	
☐ BOILER/STEAM LINES/HIGH PRESSURE SYS.		☐ RENEWAL ENERGY CONSULTANT	
☐ DAM/LEVEE DESIGN		☒ CONSTRUCTION FIELD INSPECTION	15 MILLION
☒ BARRIER FREE/ADA DESIGN	10 MILLION	☒ PROJECT MANAGEMENT	10 MILLION
☒ ESTIMATING/COST ANALYSIS	NA	☒ ENVIRONMENTAL CONSULTANT	NA
☐ INTERIOR DESIGN/SPACE PLANNING		☐ STORAGE TANK REMOVAL	
☐ ROOFING INSPECTION		☐ STORAGE TANK INSTALLATION	
☐ CONSTRUCTION MANAGEMENT		☐ PERIMETER SECURITY FENCING	
☐ CPM		☐ INDOOR AIR QUALITY TESTING	
☐ ARCHAEOLOGY		☐ LANDFILL CLOSURE	
☐ GEOLOGY		☐ LEAD PAINT EVALUATION	
☒ VALUE ENGINEERING	NA		
☐ HISTORIC PRESERVATION/RESTORATION			

PREPARED BY:

Pamela Sullivan

PAMELA SULLIVAN
MANAGER, PREQUALIFICATION UNIT

APPROVED BY:

Richard S. Flodmand
RICHARD S. FLODMAND
DEPUTY DIRECTOR

NOTE: THIS IS AN ORIGINAL DOCUMENT AND MAY BE REQUIRED AS PROOF OF YOUR PREQUALIFICATION STATUS. PLEASE RETAIN THIS FORM FOR YOUR RECORDS.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

2/4/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Risk Strategies Company 80 West Century Road, Suite 301 Paramus, NJ 07652	CONTACT NAME: Certificate Department		
	PHONE (A/C, No, Ext): 201-837-1100 FAX (A/C, No):		
	E-MAIL ADDRESS: certificates2@risk-strategies.com		
INSURED Boswell, Inc. 330 Phillips Avenue South Hackensack NJ 07606	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: The Hanover Insurance Company		22292
	INSURER B: Great American Insurance Company		16691
	INSURER C: Manufacturers Alliance Insurance Company		36897
	INSURER D: Continental Insurance Co of New Jersey		42625
	INSURER E:		
INSURER F:			

COVERAGES**CERTIFICATE NUMBER:** 83826038**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☒ POLICY ☒ PRO-JECT ☐ LOC OTHER:			ZHY 7920144 21	12/31/2024	12/31/2025	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$100,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$3,000,000 PRODUCTS - COMP/OP AGG \$3,000,000 \$
A	☒ AUTOMOBILE LIABILITY ☒ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY			AHY-7924529-21	12/31/2024	12/31/2025	COMBINED SINGLE LIMIT (Ea accident) \$2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	☒ UMBRELLA LIAB ☒ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE DED ☒ RETENTION \$10,000			TUU 0249172-15	12/31/2024	12/31/2025	EACH OCCURRENCE \$4,000,000 AGGREGATE \$4,000,000 \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N ☒ N	N/A	202401-04-74-96-5Y	12/31/2024	12/31/2025	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
D	Professional Liability			MCH591908602	12/31/2024	12/31/2025	\$2,000,000 Per Claim \$2,000,000 Aggregate

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Evidence of Insurance

CERTIFICATE HOLDER**CANCELLATION**

SAMPLE

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

RSC Insurance Brokerage

© 1988-2015 ACORD CORPORATION. All rights reserved.

ACORD 25 (2016/03)

The ACORD name and logo are registered marks of ACORD

**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.

Before you begin. For guidance related to the purpose of Form W-9, see *Purpose of Form*, below.

Print or type. See Specific Instructions on page 3.	1 Name of entity/individual. An entry is required. (For a sole proprietor or disregarded entity, enter the owner's name on line 1, and enter the business/disregarded entity's name on line 2.) Boswell, Inc.	
	2 Business name/disregarded entity name, if different from above.	
	3a Check the appropriate box for federal tax classification of the entity/individual whose name is entered on line 1. Check only one of the following seven boxes. ☐ Individual/sole proprietor ☒ C corporation ☐ S corporation ☐ Partnership ☐ Trust/estate ☐ LLC. Enter the tax classification (C = C corporation, S = S corporation, P = Partnership) Note: Check the "LLC" box above and, in the entry space, enter the appropriate code (C, S, or P) for the tax classification of the LLC, unless it is a disregarded entity. A disregarded entity should instead check the appropriate box for the tax classification of its owner. ☐ Other (see instructions)	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from Foreign Account Tax Compliance Act (FATCA) reporting code (if any) _____ (Applies to accounts maintained outside the United States.)
	3b If on line 3a you checked "Partnership" or "Trust/estate," or checked "LLC" and entered "P" as its tax classification, and you are providing this form to a partnership, trust, or estate in which you have an ownership interest, check this box if you have any foreign partners, owners, or beneficiaries. See instructions ☐	
	5 Address (number, street, and apt. or suite no.). See instructions. 330 Phillips Avenue	6 City, state, and ZIP code South Hackensack, NJ 07606
7 List account number(s) here (optional)		

Part I 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. See also *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number	
or	
Employer identification number	

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 

Peter J. Pedalino, CFO Date **January 6, 2025**

General Instructions

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

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

What's New

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification.

New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-9 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they