TECHNO

ENGINEERS & CONSTRUCTION MANAGERS

TECHNICAL PROPOSAL



NYC EDC

CIVIL ENGINEERING RETAINER CONTRACT

QueensWay Phase 1

December 8th, 2022

Proposal Requirements

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COVER LETTER

TECHNO
ENGINEERS & CONSTRUCTION MANAGERS

*****SUBMITTED ELECTRONICALLY*****

December 8th, 2022

Attn: Brian Larsen and Hannah Huynh
New York City Economic Development Corporation
One Liberty Plaza, 14th Floor
New York, NY 1006

RE: QueensWay Phase 1 – Civil Engineering Retainer Contract

Dear Mr. Larsen and Ms. Huynh,

Techno Consult, Inc. (Techno), a certified **M/DBE** firm, is pleased to submit this proposal to provide Design Services for **QueensWay – Phase 1– Civil Engineering Retainer Contract. Techno** has a proud tradition of providing Civil Engineering Services in the New York City Metropolitan area for various City agencies including New York City Economic Development Corporation (NYCEDC), New York City Department of Design and Construction (NYCDDC), Port Authority (PANYNJ) Department of Environmental Protection (NYCDEP) and New Jersey Transit, among others over the past 15 years. During this period, **Techno** has effectively served the needs of these agencies to ensure quality project delivery, on time and within budget.

Techno along with a team of carefully selected sub-consultants will provide a seasoned group of qualified, experienced and New York City tested professionals with a deep understanding of the technical issues, challenges, and complexities of design projects within the five boroughs to work on this effort.

Our strong veteran team has extensive experience in design services ranging from civil engineering, landscape architecture, environmental engineering, geotechnical engineering, bridge design, retaining wall design, etc. **Zubia Mallick, P.E;** having over 10 years of executive experience in managing public agency infrastructure projects, will lead the design team as **Project Executive** together with **Bharat Parekh, P.E., Env. SP;** having over 43 years of experience in managing design and construction of various infrastructure projects across New York City agencies, as **Project Manager.**

Techno has assembled a team of highly qualified, strong, and veteran professionals with related support staff who possess applicable experience in all the disciplines of services required under this contract. The **Techno** will be supported by our sub-consultant partners:

- **Sasaki Architects Landscape Architects and PE, P.C.,** led by **Susannah Drake, FASLA, FAIA**, formerly of DLand Studios; will provide the landscape architecture services. Susannah was also involved in preparing landscape architecture design in Design Development Documents phase
- **Control Point Associates, Inc.** will provide the topographic survey services. Control Point Associates, Inc. has performed topographic survey for the Design Development Document phase
- **Tetra Tech Engineers, Architects & Landscape Architects, P.C.** will provide environmental engineering services
- **Arora and Associates, P.C.**, a certified MBE firm; will provide geotechnical engineering services

Techno has been very diligent in selecting the team of sub-consultants who has prior experience of working on this project. This will help us in preparing the Preliminary and Final Design Documents in an expeditious manner and result in substantial cost savings to NYCEDC. Our team has extensive experience on public agency requirements contracts, both in providing full range of design and construction administration services for different City agencies. We truly understand the need to effectively manage and deliver these demanding, schedule-driven projects, for the NYCEDC and other agencies. We are sensitive to the fact that these projects involve the assignment of qualified and dedicated project personnel, time-critical mobilization, and the availability of required resources to adequately meet the staffing needs of the project and mitigate risk.

The **Techno** team is well versed in performing Civil Engineering Services in congested urban environments. Our qualified staff has successfully addressed challenges such as severe site constraints, MPT, public communication, stakeholder coordination, and safety. We always strive to minimize the impact on existing utilities, the surrounding community's residents, businesses, and transportation infrastructure. We are committed to work in a safe, timely, responsive, and cost-effective manner and utilize the best industry practices. We will safely deliver the highest level of project quality, with focus on complete client satisfaction.

Techno is cognizant of the importance of this landmark project, QueensWay Phase 1, to the NYCEDC, the city and the community it serves at large. Together with our team, we have a history of successful project execution on work of similar type and complexity for governmental agencies, and an outstanding record of quality and safety. We are committed to providing the NYCEDC with the necessary staff resources to ensure successful completion of the mission at hand, all in the best interests of the agency and the communities it serves.

Thank you for giving us the opportunity to submit this proposal, and we look forward to continuing our partnership with the NYCEDC through this project.

For additional information, please contact Zubia Mallick, P.E. at 212.465.8100.

Sincerely,



Zubia Mallick, P.E.
Vice-President
Techno Consult, Inc.

STATEMENT OF APPROACH

After careful review of the nine supporting documents provided for QueensWay Phase 1 project, for which the completed Design Development Documents (dated 12/12/2017) form the basis of the Preliminary and Final Design, it is estimated that the Design Development Documents are estimated to be about 30% of the Construction Documents. If selected, the **Techno** team will carefully evaluate these documents, coordinate with all stakeholders for design progression and prepare Construction Documents. Based on the review of the RFP and supporting documents, **Techno** has specifically developed a streamlined Technical Approach for this project. Techno and each of our sub-consultant team members have carefully reviewed the "Civil Engineering Retainer Contract" and will provide ALL engineering design and related services in accordance with the scope of services as listed in the RFP, and in concurrence with the requirements of the Retainer contract for relevant tasks. We prefer to focus on our specific approach for the QueensWay Phase 1 project, rather than restating the contract language.

TASK 1: TECHNICAL SURVEYS AND DATA GATHERING

Techno's sub-consultant **Control Point Associates, Inc** (CPA) will lead the majority of this task. The Design Development Documents include four sheets of Topographic Survey completed in 2017 by Control Point Associates Inc., P.C. By including Control Point Associates on our team, we hope to be able to utilize a majority of the existing survey, therefore providing cost savings on the design efforts.



Data Gathering, Topographic Survey, Metes & Bounds Survey, Utility Survey & Tree Survey

- **Phase 1:** CPA will begin by reviewing existing survey records including our own and gathering additional records including available deeds, tax maps, sections maps, right of way maps, acquisition and damage maps, utility plans, and other records relevant to the site and executing the scope of this project. A field crew will also visit the site to verify the existing conditions and notate areas or features that have changes significantly since our last survey. Field crews will also take standard 3"x5" 300 DPI format photographs of the site.

- **Phase 2:** This will be followed by a UAV crew setting aerial targets around the site which will be located by RTK GPS methods. Coordinates for aerial targets will be based upon NAVD88 for vertical and NAD83 NY LI for horizontal. Once targets are set the UAV crew will then utilize a Multi-Rotor UAV to perform a low altitude flight of the site covering the original survey extents. Photos will be collected with no less than 70% overlap and will be registered together using the aerial targets in order to produce orthomosaic imagery and a colorized 3D Point Cloud which will be utilized in the preparation of other deliverables outlined in the phases below.
- **Phase 3:** Phase 2 will be followed by CPA's office updating the site mapping from our record AutoCAD drawing for the original survey extents to reflect the current existing conditions utilizing the UAV data acquired in Phase UA-0010. Areas that are obscured in the UAV data will be verified by field crews on the ground. Furthermore, CPA's office will review the records obtained in Phase 2 to verify and update property information such as owner's names, addresses, lot numbers, lots areas, and boundary.
- **Phase 4:** This phase will include utilizing the UAV data acquired in Phase UA-0010 to prepare new topographic mapping for the survey limits shown on the attached exhibit. Spot grades for the ground surface will be extracted on an approximate twenty-five to fifty (25-50) foot grid through the limits in order to generate a DTM surface with contours displayed at one (1) foot intervals. Elevations will be based upon NAVD 1988. New surface information will be compiled into the existing AutoCAD drawing and an updated plan will be issued.
- **Phase 5:** This phase will include field crews visiting the site to verify the location and size of trees (3) inches in diameter or larger within the survey limits shown on the attached exhibit. Trees that were previously shown on the record survey will have their labels update to reflect their current size and new trees, if any, will be located by offset to the center of trunk with size. New tree information will be compiled into the existing AutoCAD drawing and an updated plan will be issued.
- **Phase 6:** This phase will include field crews visiting the site to verify the location and size of trees (3) inches in diameter or larger within the survey limits shown on the attached exhibit. Trees that were previously shown on the record survey will have their labels update to reflect their current size and new trees, if any, will be located by offset to the center of trunk with size. New tree information will be compiled into the existing AutoCAD drawing and an updated plan will be issued.
- **Phase 7:** The utility survey will include the SUE team conducting a QLB investigation of the survey limits shown on the attached exhibit in order to try and verify or locate unknown utility connections not previously identified on the record survey. After a review of the available records, the SUE team will utilize ground penetrating radar (GPR) and/or an electromagnetic locators to identify possible utility lines. The location of these features and other anomalies will be marked in the field using paint and/or flags and also shown on a hand drawn sketch not to scale. This phase also includes GPS locations in the field for incorporation into base mapping.

Geotechnical Investigation

Techno's subconsultant Arora & Associates, P.C, **Arora** will be leading the effort on the Geotechnical Investigation and Report.

- **Phase 8:** Presently, there are no known geotechnical borings that meetall the requirements for the Standard Penetration Tets done at the site. Available literature and geologic maps will be researched to help develop drilling criteria for the subsurface investigations. A Subsurface Exploration Program will be put together based on the geotechnical needs obtained from the project. It is anticipated that drilling approximately 43 borings and 6 test pits will be required. The following structures and items that required geotechnical borings have been identified:
  - Retaining walls – Approximately 1000 ft. (on both sides)
  - Bridges
    - Over LIRR – Pedestrian Bridge
    - Cut into embankment (Elevated Structure) to provide access to batting cages
      - Bioretention swales – Investigation requirements to be based on Chapter 6 and Appendix D of the New York Stormwater Design Manual
      - Light Post Foundations
      - Elevated boardwalk with helical piles
      - Amphitheater seating locations
      - Viewing structure in the northern part of the project
      - Asphalt pavement locations

The borings and test pits will be subcontracted and AASHTO Certified Testing Laboratory will be subcontracted to perform laboratory testing on the samples. We anticipate laborartory testing using Sieves w/ Hydrometer, Moisture Content testing, and Consolidation & Shear Testing, in the case that compressible material is encountered. An inspector will be present to supervise this work.

From the information obtained from field explorations and laboratory test results, the following tasks will be performed:

- Relevant soil properties would be determined.
- Bearing capacity of all bridges and walls
- Slope stability analysis – The existing railroad is approximately 20 ft. high with a side slope of approximately 1 vertical to 1 ½ horizontal. Based on the plans provided, it is anticipated that there will be soil cut for the road and other structural construction. The ensuing slopes after cutting into and through the embankment will be checked for stability.
- After checking for bearing resistance and settlement of the bridges and retaining walls, a determination will be made as to the foundation type – whether shallow or deep. At the moment, we anticipate shallow foundations.
- Subgrade strengths such as coefficient of subgrade reaction and/or CBR for pavement design
- For the light pole foundations, it is anticipated to use drilled shafts.

The result will be a Geotechnical Report addressing the Bridges, Retaining Walls, Catenary Structure Foundations, Embankment Stability, Viewing Structure/Amphiteaters, Elevated Boardwalk with Helical Piles & a Permeability Report for Bioretention Design.

Sewer Investigation

- **Phase 9** (if required): This will include our SUE team conducting a Quality Level B Video Inspection Survey of the sanitary or storm pipes in within the survey limits on an as needed basis, utilizing manual or robotic video equipment. Locations of identified defects and anomalies will be painted and flagged in the field as appropriate. A condition assessment report for each pipe segment inspected will be generated, and a copy of the video files and reports in PDF format will be will be provided in electronic format. This phase will include survey locations in the field and incorporation into base mapping.

Hazardous Material Survey

- **Phase 10:** Based upon the review of the completed Phase 2 Environmental Report and the associated Findings and Recommendations, it is our understanding that the Hazardous Material Survey has already been completed in association with this project. In order to remain cost effective, the Techno team will utilize the existing Hazardous Material information as listed in the Phase 2 Environmental report and implement the Recommendations into the further design sets.

TASK 2: ENVIRONMENTAL REVIEW

Techno's sub-consultant **Tetratech** will be leading these efforts. We understand a Phase I ESA was completed in 2013 and a following Phase II was completed in 2015 on the project. These reports will be reviewed and for completeness and applicability as part of our scope of work. In addition, since the Phase I ESA was conducted over 9 years ago the team will complete a new Phase I for this section of the Queensway to verify if there are any new recognized environmental conditions. Assuming there are no new environmental concerns found, the team will start the process of preparing a Remedial Action Plan (RAP) based on the findings in the provided Phase II investigation. If new environmental concerns are found in the Phase I, the team will coordinate with DEP and OER to scope additional or updated site investigations.

The RAP will describe the remediation and mitigation activities to be implemented at the site to comply with the applicable environmental standards and criteria. Along with the RAP a Health and Safety Plan (HASP) and a Construction Health and Safety Plan (CHASP) will be prepared, which delineates and establish the procedures for environmental management and safety measures to be followed during construction. Because of the findings in the Phase II, a Community Air Monitoring Plan (CAMP) will be required to monitor VOCs and particulates downwind of the designated work area.

As it is assumed the implementation of the project will involve one or more discretionary city action, therefore a City Environmental Quality Review (CEQR) will be prepared. The main components of CEQR that will need to be addressed is the environmental condition, air, and noise. Since a Phase II has already been conducted on the site and the proposed project will unlikely generate any air impacts, the only remaining main component of CEQR that needs to be addressed will be noise impacts. Therefore, we assume a noise study will be conducted to support the CEQR process.

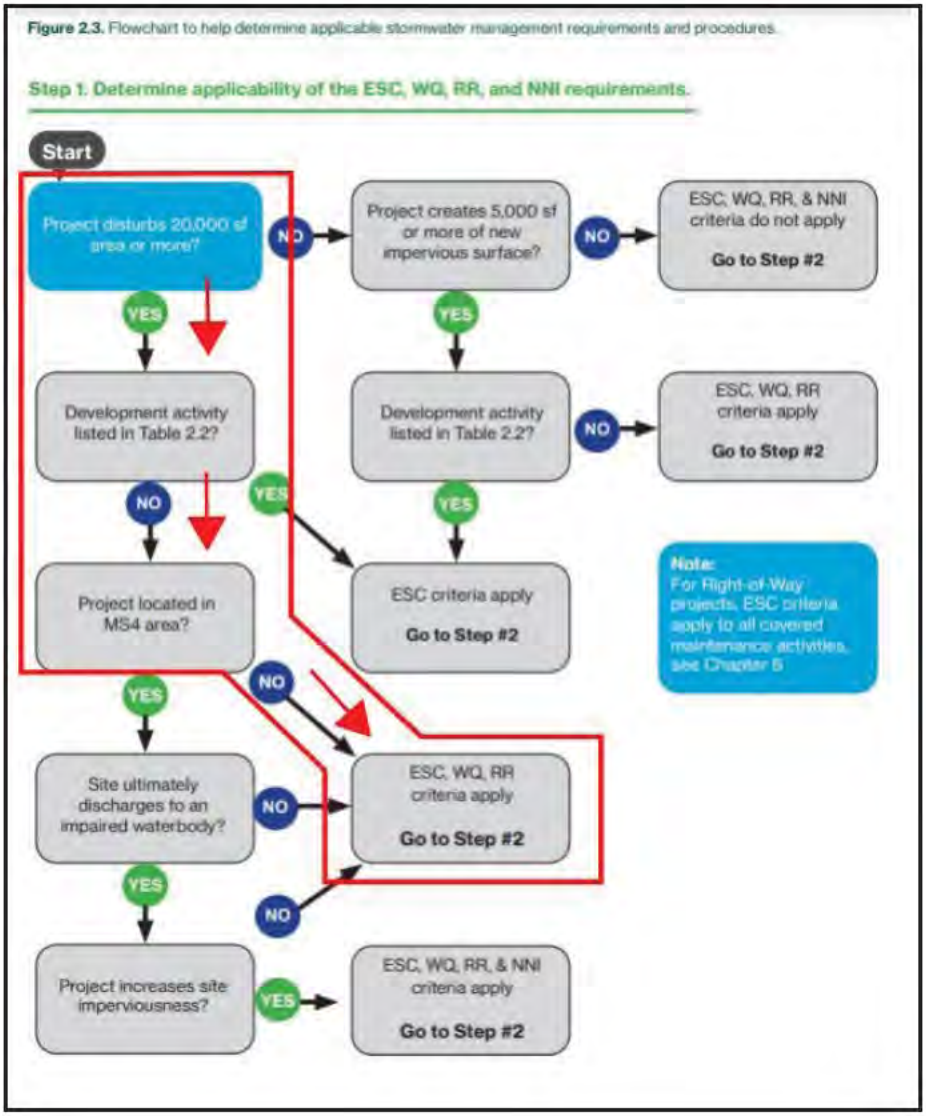
Environmental Permitting: In addition to the CERQ environmental assessment the project will be screened for any other environmental permits. This would include consultation with US Fish and Wildlife due to the proposed tree removals for the project. In addition, we have assumed consulta-tion with the State Historic Preservation Office and City Landmarks Commission will be needed to verify any potential constraints to the site.

Based on the reports provided there was no indication of the presence or absence of wetlands, there-fore we will conduct a site visit to confirm. Although railroad typical have drain swales adjacent to the track, this section of the corridor is on an embankment, so it is unlikely wetlands will be identified in the disturbed areas. As such, we don't anticipate any permitting with the US Army Corp of Engi-neers or NYS Department of Environmental Conservation for wetland impacts. As the site is located inland of any coastal waterfront areas it is not anticipated any permits or consultations will be re-quired from the US Coast Guard, Department of Small Business Services (DSBS), NYS Department of State, and National Marine Fisheries Service (NMFS). Because the project will disturb more than 20,000 square feet of area a construction stormwater permit from the NYC DEP will required. This will be submitted through the DEP Stormwater Permitting and Tracking System.

Stormwater Management: Since this project was first envisioned, NYC has updated its stormwater regulations. Most recently NYCDEP released the Unified Stormwater Rule in February 2022. As such, the proposed project will need to comply with these new regulations because there will be over 20,000 square feet of disturbance. This regulations require the preparation of Stormwater Pollution Prevention Plan (SWPPP) in accordance with NYC DEP Stormwater Manual.

The project is located in a combine sewer system (CSS) of the city, which means all the sewers drain to a wastewater resource recovery facility. Per the NYC Stormwater Manual the project is assumed to be a covered development in table 2.3, which requires the preparation of a SWPPP that includes Erosions & Sediment Control, Water Quality, and Runoff Reduction requirements. The Stormwater Manual does mention that linear bike paths may be exempt from water quality and runoff reduction requirements, however the project will also include other elements such as a dog park and other vegetative areas which alter the pre- to post- development conditions, therefore it requires coverage under table 2.3.

Below is the figure from the NYC Stormwater Manual to determine the applicability of regulations highlighted with the flow path for this project.



The water quality and runoff reduction requirements will need to be incorporated into the project by adding additional stormwater management features to the design. This includes more areas for retaining the stormwater on-site and allowing for as must infiltration as possible. In addition, we understand that NYC Parks has some concern with the proposed bioswales behind retaining walls. We will work NYC Parks to find locations that minimize impacts to adjacent structures and are easier to maintain. The team will look for opportunities locate stormwater management practices in areas that might be remediated per the RAP to minimize the earthwork on the project.

Task 3: Community Engagement

The **Techno** team's Project Manager and Landscape Architect subconsultant, **Sasaki**, will lead these efforts. Members of the **Techno** team have been working on this project and this community for over a decade and have come to know its idiosyncrasies as one of the most diverse places in the world. During Design Development Documents phase, Trust for Public Land pointed to prioritize the development of the Met Hub Section due to its potential connection to Forest Park, the Metropolitan Expeditionary Learning School (MELS) and the Queens Metropolitan High School. Meetings with the MELS Principal, teachers, and students presented tremendous opportunities for development of learning landscapes, including accessible pathways and outdoor classrooms, so that the academic community could explore the natural ecology, cultural history, and the engineered structures of the project. Having established relations with the community will help us move the 100% Design Development forward into the preliminary design and final design and develop construction documents in an expeditious manner such that it will positively contribute to the aesthetics and value of the neighborhood. We will prepare the documents, renderings and PowerPoint presentation, at each Design Milestone, for Community Board, Public Design Commission, elected officials, etc. and get it approved by NYCEDC prior to presenting to the respective entity.

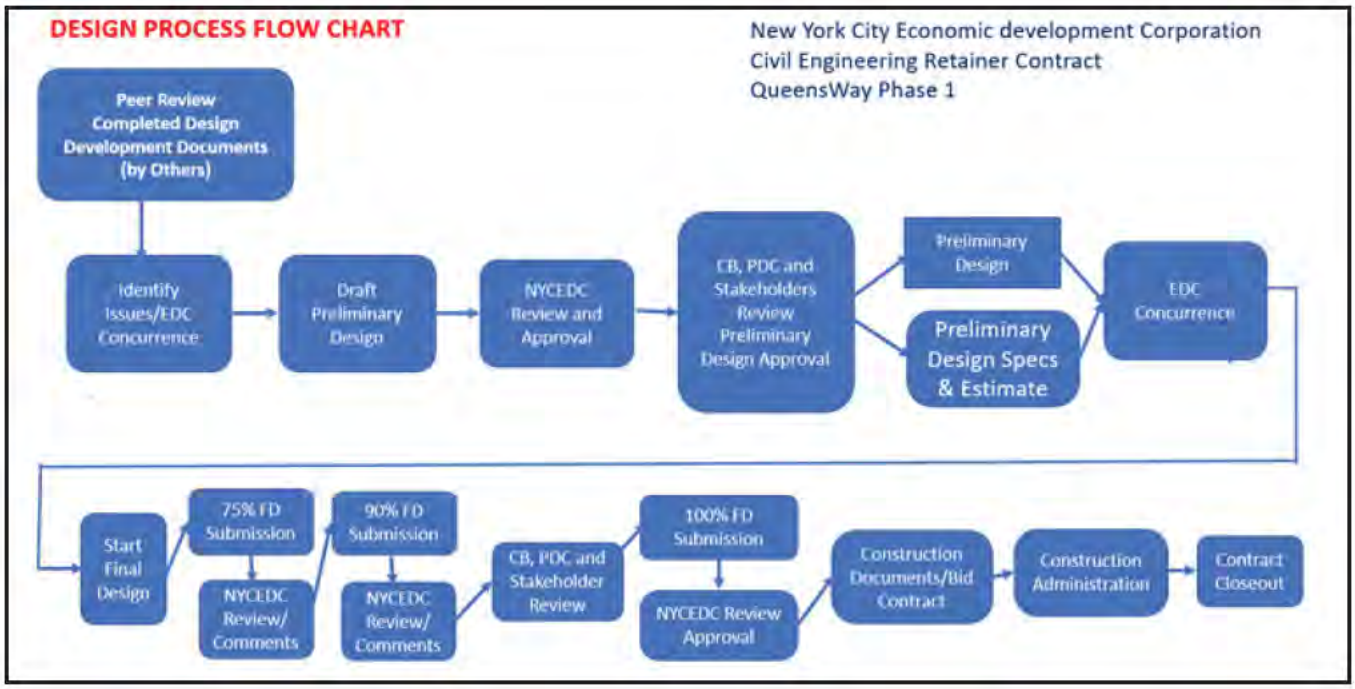


Task 4: Not Applicable

Task 5: Not Applicable

Task 6: Preliminary Design

The Design Development Documents (completed by others) will be the basis for developing the Preliminary Design, progressing the existing design from the existing ~30% contract documents to 50% contract documents. The above Flow Chart is a depiction of our streamlined Design Process. We will complete the peer review of the Design Development Documents (completed by others) and comments issued by the NYCDPR and identify issues that will require further actions and present it to NYCEDC for resolution. As directed by NYCEDC, we will develop draft preliminary design, together with draft preliminary cost estimate and specifications, and present to NYCEDC for review and comments. We will incorporate the comments as approved and then present the draft preliminary design to the Community Board, Public Design Commission and other stakeholders (if required) and obtain approvals. We will collect comments from ALL stakeholders and present it to NYCEDC. As directed by NYCEDC, we will incorporate all resolved comments in the Draft Preliminary Design, Cost Estimate and Specifications and prepare Final Preliminary Design Documents, and submit it to NYCEDC for records.



Task 7: Final Design

As directed by NYCEDC, we will further develop the preliminary design and prepare the 75% Contract Documents and , together with draft final cost estimate and specifications, and present to NYCEDC for review and comments. We will incorporate the comments as approved and then present the 75% design to the Community Board, Public Design Commission and other stakeholders (if required) and obtain approvals. We will collect comments from ALL stakeholders and present it to NYCEDC. As directed by NYCEDC, we will incorporate all resolved comments in the 90% Contract Design Documents, Cost Estimate and Specifications and prepare Final Design Documents, and submit it to NYCEDC for records. If there are any further comments from NYCEDC and other stakeholders, we will incorporate all comments and finalized Construction Documents, which will be used for competitive open bidding as per NYCEDC and PPB rules.

Task 8: Operations & Maintenance Manual

We will prepare an Operation and Maintenance Manual (O&M Manual) in accordance with the contract, to facilitate future maintenance. We will identify and list any and all elements of the design requiring maintenance. We will prepare the list of "Maintenance Items" as per FORM 4/2019 Appendix B - 48 CONTRACT NO. 93180003 PART III. The comprehensive list will include, without limitation, a list of resources for replacement parts; with all appropriate contact information, of the manufacturer and/or source for each maintenance Item; Catalog cuts, samples or other items, means and method of construction; all applicable warranties, As-built and shop drawings as , Information (from the manufacturer and based on the Consultant's experience) regarding the upkeep of Maintenance Items, such as graffiti removal, landscaping guidelines, sealants and schedule of application of sealants, and cleaning methods and schedules; Annual maintenance schedules and estimates of maintenance costs (for various levels), etc. The O&M Manual will include code/inspection and/or testing regulations necessary for proper maintenance and operation of the Project. We will prepare the O&M Manual at the commencement of the Project and submit it to NYCEDC and all Interested Parties for review at the completion of the Preliminary Design, Final Design, and Construction Administration tasks. We will resolve and incorporate all comments. We will submit a clearly labeled O&M Manual to NYCEDC. Upon acceptance, we will prepare three (3) final copies (in both hard and electronic formats) of the O&M Manual and deliver same to the Project Team.

Task 9: Review and Analysis of Bids

After the bids are openly opened and all bids are tabulated, we will perform the bid Analysis. We will check all quantities for accuracy. We will also identify if there is any collusion among the bidders. For the apparent low bidder, we will identify all items which are more than 15% over the engineer's estimate and analyze them for any front-loading or over-pricing. We will also identify the items which are extremely low bid and bring it to NYCEDC's attention. NYCEDC may interview the contractor to determine if the contractor has understood the contract requirements. After the bid analysis, we will recommend awarding the contract to the apparent low bidder, if it is in the best interest of the City, subject to PASSPort verification.

Task 10: Construction Administration and Shop Drawing Review

The **Techno** Team will continuously assist the Construction Manager to advance the construction work and to ensure that construction work conforms to the Contract Documents. We will attend a pre-construction conference, biweekly construction meetings, coordination meetings, pre-closeout conference and other conferences as may be required to resolve issues that may arise during the construction of the Project. We will review and revise, if necessary, the list of shop drawings and materials schedule prepared by each contractor, which includes but is not limited to all shop drawings, RFIs, mock-ups, samples, catalog cuts/test data and/or certifications which correspond to the Contract Documents. We will use the schedule to track dates, progress of submissions and maintain a record of submittals. We will review all the submissions, approve/disapprove submittals and material samples within 14 calendar days of the submittal. We will advise NYCEDC of the need to select samples of any materials for testing. We will inform NYCEDC of any delays in the submission of shop drawings or samples. The Consultant shall review the payment requisitions submitted by the Construction Manager to verify that the percentage of payment requested corresponds to the percentage of work complete. As required by NYCEDC, the Consultant shall regularly visit the Project Site, as appropriate to the stage of the Project's construction. The Consultant shall ascertain that the construction work complies with the intended designs. The Consultant shall document in writing and with photographs, as necessary, their observations along with any findings or concerns and submit to NYCEDC. We will provide, at no additional cost to NYCEDC, professional services to design, document and process corrective measures for errors or omissions caused by the Consultant. However, resolving major field conditions may be addressed as an Additional Service, as determined by NYCEDC.

If any work performed by the Contractor does not conform to the Contract Documents, we will reject the work after consultation and concurrence by NYCEDC. We will maintain a log of all permit applications/submissions and assist the Construction Manager. We will prepare a comprehensive and accurate warranty register related to systems/equipment. We will assist NYCEDC and the Construction Manager in determining the dates for Substantial Completion and Final Completion. We will provide all items to allow the Construction Manager and NYCEDC to arrive at a determination that the Project has achieved Substantial Completion and Final Completion. We will review with NYCEDC the completed construction work to verify that the work conforms to the Contract Documents and to confirm that the Punch List submitted by the Construction Manager have been addressed. When the construction work is complete and conforms to the Contract Documents, we will issue a final certificate for payment. We will also revisit the Project Site, prior to one year after the date of Substantial Completion, in consultation with the Construction Manager and NYCEDC, to confirm that no defects of materials or workmanship have occurred.

Task 11: Not Applicable

Task 12: Project Closeout

Techno will provide the Close-out Services, including, Inspection of the Final Punch List and the inspection and issuance of the Certificate of Substantial Completion. If appropriate, assist the NYCEDC and its representative in obtaining Temporary Place of Assembly permits ("TPA"), Temporary Certificate of Occupancy ("TCO"), and Certificate of Occupancy ("CO") for the Project Assignment and/or any other document(s) needed to substantiate that the Project is complete. We will also assist in preparing the Final Performance Evaluation of the Contractor and assist in preparing Final Invoice and Contract Close-out package.

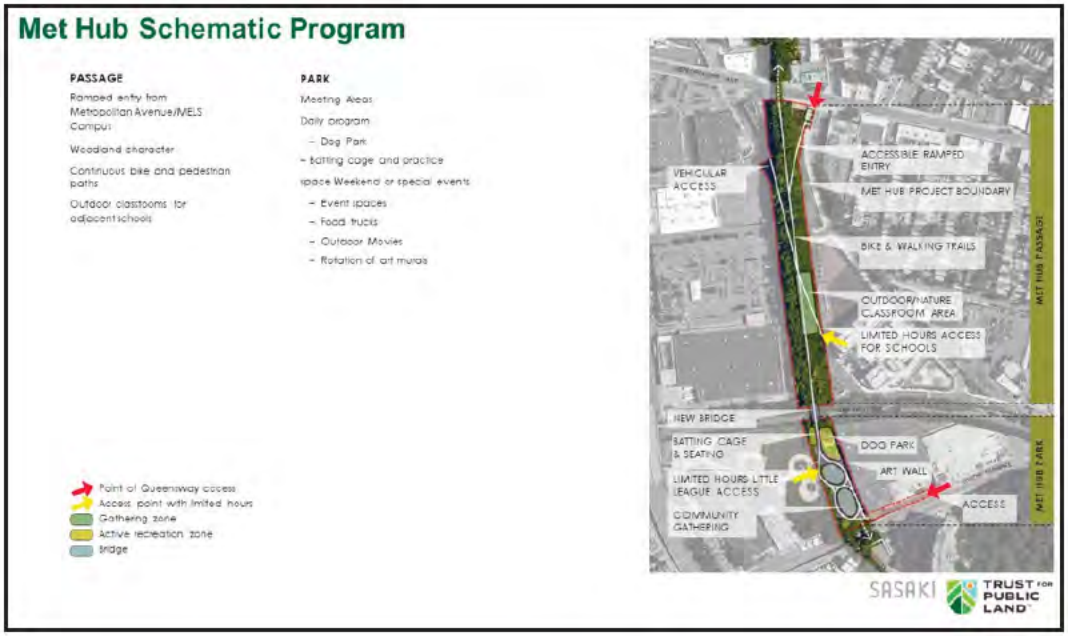
PROJECT UNDERSTANDING

The area includes derelict structures that will need to be removed. There are catenary towers that will need to be evaluated for their potential preservation, restoration and use for lighting and site identity. A former bridge over the LIRR will need to be replaced. Toward the south the Glendale Little League has a batting cage on the property adjacent to their existing fields.



Key features of the plan reflect what was heard through an extensive outreach process that included a broad range of events, tours, polls, lectures, web-outreach, private meetings, presentations to agencies, and elected officials. The site will be fully accessible with ramped entry from Metropolitan Avenue/MELS campus. There will be accessible routes throughout the passage. Biodiversity will be enhanced. Shrubby understory a safe distance from pathways will provide important habitat for migrating birds and butterflies. A rich collection of native plants will be used throughout the design. Trails are separated into bike paths and pedestrian pathways. Pathways are shaded by the canopy of existing trees preserved through careful protection during construction. The QueensWay is a place for learning with outdoor classrooms defined by low seat walls. They can work in their 'backyard' examining cultural, industrial, and ecological issues related to the park. Students can have easier safer access to Forest Park. The passage also provides important connection to the fields in the lower portion of the site.





CONCEPTUAL DESIGN

The current conceptual design uses inspiration from existing elements in order to preserve the original feel of the area by utilizing items like the existing rail line, to site materials; our goal will be to incorporate as much of the features through fnal design as possible. Additionally, we have highlighted some sections of the existing conceptual design whcih we feel are vital to this project:

- Separate Bike and Walking Paths
- Viewing Platform
- Outdoor Classrooms and an elevated pathway connecting to the schools
- Ecological and Habitat Encouragement
- New Bridge over the LIRR
- Infrastructure to support community use; i.e. space available for food trucks, movie projects, dog park, etc







COMMENTS FROM PARKS DEPARTMENT

The RFP mentions the incorporation of the Parks Department comments, dated 08/15/2022, as part of the tasks in order to progress the drawings from 100% Design Development, to the 50% Contract Document set in the Preliminary Design phase. Reviewing these comments, we have identified several areas where the Parks Department has made suggestions for deviation from the 100% Design Development plan, a few of which have been identified below along with mentioning a revised construction estimate of between $25 Million to $30 Million:

- Removal of the Continuous Rail Light
- Removal of the Rails as Path Edging
- Widening of the pathways
- Removal of certain planting strips

Our goal will be to incorporate the Parks Department comments while maintaining the aesthetic qualities of the 100% Design Development drawings as best as possible. **By incorporating members of the team who developed the original 100% Design Development set into our team, we believe we will be able to effectively work with both the Parks Department and the Public Design Commission (PDC) in advocating for the project's design features and intents as conceptualized and provide the best alternatives for Queensway Phase 1, where required.**

PROJECT MANAGEMENT APPROACH

Techno Consult, Inc. (Techno) has successfully delivered several projects and understands the value of "integrated design approach" to progress the design in a concurrent and seamless manner between various disciplines, within budget and on schedule. **Techno**, as "Designer of Record", together with all other sub-consultants, will take full responsibilities of the technical aspects of the project and look to NYCEDC for only administrative and policy level guidance

Working Together: **Techno** has experience in working with several of the sub-consultants and several client agencies like New York City Economic Development Corporation (NYCEDC), New York City Department of Design and Construction (NYCDDC), New Jersey Department of Transportation (NJDOT), etc. **Techno** and all its team members maintain the latest hardware and software technologies for design, virtual meetings and information sharing platforms. These platforms will allow **Techno** to work seamlessly with the entire team as well as NYCEDC and other involved stakeholders. **Techno** will coordinate and integrate all design activities with all team members and prepare design documents at various milestones.

Kick-off Meeting: Following the NTP, we will schedule and attend a kick-off meeting to clarify requirements and administrative procedures including but not limited to detailed scope of work, schedule including key milestones, budget, etc. **Techno** will assemble and review all available documents, and clearly identify the scope of work and identify any missing data. **Techno** will make every effort to obtain the missing data from NYCEDC/or recommended sources.

Project Management Plan: **Techno** will prepare a Project Management Plan that will include major tasks to be performed, Design schedule, budgetary goals, and detailed staffing plan to carry out various design tasks, as well as the methodology for Progress Reporting, Progress Meetings, monthly invoicing, and coordination with NYCEDC as well as other agencies and stakeholders, just to name a few. Project Management Plan will be submitted to the NYCEDC. Project Management Plan will also identify the responsibilities of each of the team member (sub-consultants). **Techno** will closely coordinate the project with NYCEDC so that any specific issues encountered can be quickly and efficiently resolved.

Design Schedule: **Techno** will prepare a design schedule, using Microsoft Project (or another format required by NYCEDC), at the on-set of the project. The Design schedule will outline all design activities, the duration of each activity, design milestones (like Preliminary Design Submission, 75%, 90% & 100% Final Design submission, Community Board Presentation, Public design Presentation, Bid Date, etc.), their interrelationship, and critical path. The design schedule will include development of comprehensive, integrated and complete

design documents for each milestone such that the design activities will proceed seamlessly and continuously. The design schedule will be updated periodically, usually monthly.

Progress Meetings, Progress Schedules & Progress Reports: **Techno** will schedule and hold design meetings, inter-agency meetings and Monthly Progress Meetings as required to coordinate the progress of the project and discuss critical and outstanding issues. If the pandemic restrictions persist, **Techno** will hold virtual meetings. **Techno** will chair the meeting, distribute the agenda, take meeting notes and conduct the meeting. Minutes of the meetings will be prepared and submitted to all participants for review and comments, then finalized and distributed. Progress Schedules and Progress Reports will be prepared and submitted to EDC on a regular (usually monthly) basis, in accordance with NYCEDC requirements. Progress Schedules and Progress Reports will list all the activities performed in the last period and list anticipated activities for the upcoming period, together with any specific issue that might need additional attention. Progress Reports will state the progress of each task (% complete) and list key outstanding issues. Progress Schedules will identify the deviations from the baseline schedule and identify the reasons for deviation. We will recommend actions to minimize the impact of deviations, including the impact on cost and timeline.

Community Coordination: **Techno** team understands that a project may have significant impact on the local community. Effective communication with Community Board, local community, elected officials, utility companies, other agencies and stakeholders is the key to successful completion of a projects that would have minimal disruption to the community and will be welcome by all stakeholders. We will present the project to the Community Board at the Preliminary Design and Final Design Stages, as directed by NYCEDC to get their input and concurrence. We also understand that Community Board input is necessary prior to presenting the project to the Public Design Commission. We will work closely with NYCEDC, prepare PowerPoint presentations, material samples, and other visual aids and supporting material for presentation to Community Board and Public Design Commission. We will follow up with the Community Board and Public Design Commission to obtain their concurrence/approval at various stages of design.

Constructability Review: **Techno** will assign a "constructability Review" specialist to perform a thorough constructability review at various stages of design. We will ensure that the details and methodology shown in the Final Design Documents and Construction Documents are constructible, cost-effective and safe to ensure that the project will be constructed in a safe manner without posing safety risks to the workers, travelling public and community in general. This will also ensure that the Construction Contractor would be able to progress the construction in man expeditious manner and minimize the probabilities of Change Orders and delays.

Quality Assurance/Quality Control: **Techno** takes pride in the quality of its work. QA/QC review is on-going process for all projects at **Techno. Techno** will assign a highly experienced QA/QC Specialist to review the design plans, specifications and estimates at various levels (50%, 75%, 90%, 100% etc.). Every submission (Minutes of Meetings, Progress reports, Schedule, Invoices, Technical Reports, Plans, Specifications, Estimates, etc.) will undergo thru be thorough QA/QC review prior to submittal to NYCEDC or any outside entity.

Construction Administration and Shop Drawing Review Services: **Techno** has experienced that the efficient management of project submittals (shop drawings, RFIs, catalog cuts, permit applications, material samples, etc.) plays a very important role in the successful delivery of the project. At the kick-off meeting for construction, we will inquire of the Contractor if he intends to use prefabricated bridge components or precast-prefabricated components for retaining walls. We will recommend that the contractor submits a schedule for submission of shop drawings, material samples, a list of long lead items, a list of priority approvals required, etc. We will encourage the contractor to submit the submittals during the "mobilization" period to minimize the impact on the community. We will review and approve the shop drawings as per schedule so that the fabrication can proceed expeditiously. Typically, the RE will receive all shop drawings, RFIs, permit applications, material samples, etc. and log them as per NYCEDC guidelines. We will also maintain our own internal log to stay on schedule.

Methodology for Resolving Technical and Administrative Issues: **Techno's** Project Manager will proactively lead the project team and foster open communication with the design team, NYCEDC and all stakeholders to successfully complete the Construction Documents, on time and within budget. As with any project, we anticipate encountering technical and administrative issues. Having open lines of communication with NYCEDC, stakeholders, and all members of the project team, will help identifying the issues early on. As soon as an issue

arise, we will identify and analyze the issue and present alternative solutions, together with its impact on design, schedule and budget to NYCEDC. Upon approval from NYCEDC, we will proceed with the implementation of the approved solution. This process will be undertaken in a very expeditious manner to avoid/minimize schedule delays.

Methodology for Tracking and Maintaining Project Budget and Schedule: Proper management and quality control are the keys to assuring that the project progresses on schedule and on budget. As the project progresses, **Techno** Project Manager (PM) will continuously monitor scope, budget, and schedule to track progress utilizing Triple Constraints Management - the management practice of focusing on the scope, schedule, and budget, with the knowledge that deviation of one component will influence the other two. We will utilize our internal accounting/project management software (Vision by Deltek) to track budget spent in relation to various design milestones out lined in the design schedule. The PM will develop monthly progress reports with schedule updates and review the percent of scope completed versus the percent of budget expended (earned/value comparison). If the schedule or budget begins to deviate, we will identify the underlying constraints. These constraints may be internal such as staff availability; or external such as issues related to utility company review/approvals, inter-agency coordination/review/approvals, changes in project scope, etc. We will develop a recovery plan and ensure that it has no/minimal negative impact on the schedule, budget, and scope. The plan will be presented to the NYCEDC for review and then implemented upon approval.

Project Close-Out: This Task Order Contract includes providing Design Services as well as Construction Administration and Shop Drawing Review Services. **Techno** has experienced that Project close-out is a critical and ongoing process. We will collect and compile all close-out related documents throughout the Final Design and Construction Administration phase. We will closely work with NYCED to obtain the final performance evaluation for the project. We will also prepare the "Contract Close-out Package" which will include the final performance evaluation, final invoice, time-extensions (if approved) and submit it to NYCEDC for processing. We will also be available to support NYCEDC to resolve any unforeseen issues from OMB and/or Comptroller's office and obtain final payment approval from NYC Comptroller's office.

PROJECT EXPERIENCE





Preliminary and Final Design Services

Brooklyn, NY

PROJECT OWNER
New York City Department of Design and Construction (NYCDDC)

POINT OF CONTACT
Landry M. Philémy, P.E., ENV SP
Director/Staten Island Program Administration
718.391.2446
philemL@ddc.nyc.gov

ROLE
Design Engineering

CONSTRUCTION COST
$5 million

START DATE
2018

COMPLETION DATE
Ongoing

CONTRACT NUMBER
HWDCRQ045/HWP19KC3

Techno is responsible for engineering design services for the reconstruction of complex pedestrian ramps in Community Boards 7, and 10 through 12 within the Borough of Brooklyn in NYC to achieve accessibility compliance in conformance with the Americans with Disabilities Act (ADA) and the requirements of the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG) under the Architectural Barriers Act (ABA) as adopted by the New York State (NYS) Department of Transportation (DOT).

Preliminary visual inspection tasks covered forty-five intersections, fifty-four corners, in order to identify obstructions such as traffic and utility interference, the existence of under sidewalk vaults, and encroachments. Subject to a 15 percent MWBE Utilization contract requirement Munoz Engineering performed a complete topographic survey in accordance with General Requirements (GR Section 4.2) version dated August 2015. Techno field staff confirmed topographic features performing an evaluation of Street Elements; pavements, curbs, sidewalks, pavement markings, etc., to determine the extent of deterioration and cause of existing defects in correlation with other factors such as existing drainage conditions and traffic volumes. Encroachments such as fire alarm posts, hydrants, mailboxes, streetlight poles, subway gratings, trees, vault boxes, street signs, and lights were assessed and ground surface measurements were taken to verify the availability of space to accommodate the proposed pedestrian ramps. Utilizing ArcGIS, GIS.nyc.gov, Google Earth, and AutoTURN® Techno collected, analyzed, and submitted road and site design data for use in the preliminary design, reports, and cost estimates for the DDC.

Techno's team is currently finalizing details for the removal of catch basin, traffic signal, and utility pole encroachments. To assist in designs to relocate these facilities, Techno is performing research of the records of agencies such as the Department of Environmental Protection (DEP), the Landmarks Preservation Commission, the NYCDOT Division of Traffic and Street Lighting, the Fire Department, and NYC Transit. Techno is also preparing homeowner written encroachment notice letters on behalf of the Commissioner prior to the removal of their encroachments.

Future tasks include Community Board presentations and mass mailings at 40 and 70 percent submission milestones and Final Contract Documents (Plans, Specifications, and Estimates "PS&E") for each location in accordance with GR Sections 4.25 and 4.12 to include itemized estimates of the cost of all work for use in bidding.





Preliminary and Final Design Services

Queens, NY

PROJECT OWNER
New York City Department of Design and Construction (NYCDDC)

POINT OF CONTACT
Corenzo L. Wilkerson, PE
Engineer-in-Charge
NYCDDC
wilkersco@ddc.nyc.gov
718.391.1786

ROLE
Design Engineering

CONSTRUCTION COST
$5 million

START DATE
2020

COMPLETION DATE
Ongoing

CONTRACT NUMBER
HWPR20QC

SUBCONSULTANTS
Munoz Engineering & Land Survey

Techno is providing Total Design Project services, including both Preliminary Design and Final Design for the Reconstruction of pedestrian ramps in New York City's (NYC) Borough of Queens, within Community Boards 7,8, and 11-13, in order to provide accessibility compliance at 47 corners in conformance with the Americans with Disabilities Act (ADA), and the requirements of the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG) under the Architectural Barriers Act (ABA) as adopted by the New York State (NYS) Department of Transportation (DOT).

The proposed scope of work includes the design and modification of corner sidewalk quadrants according to the requirements of the NYCDDC Design Directives and DOT Street Design Manual to correct unsatisfactory conditions.

Beginning the Data Collection and Analysis phase commencement notification letters were prepared and distributed to agencies, utility companies, community boards, and elected officials. Visiting each of the thirty-one intersections, Techno's field inspection team identified, sketched, and photo-documented required modifications to catch basins, utility lines, and street lighting and signals utilizing NYCDOT Pedestrian Ramp Inspection Form version 1.6. The team discovered signalization at seventeen locations, stop controls at twelve locations, and two locations with no control measures. Evaluations were formalized in a report to the NYCDDC addressing accessibility deficiencies documented during research, surveys, and investigations to include identification of twenty-seven additional complex corners not included in the scope of work which resulted in a Change Order to the contract.

Schematic Geometric Designs are currently under development. Improvements to the structure and roadway (Pavement Design) for fifty-four complex pedestrian ramps to address accessibility deficiencies will be finalized in preparation of the Final Plans. Afterwards Preliminary Itemized Estimates identifying the anticipated construction costs based upon the items of work, Preliminary Environmental Impact Assessments, Community Board Review, and NYSDOT review and approval will occur.

During the Final Plan phase Techno will obtain final review comments, approvals, and concurrence, as applicable, from all relevant agencies, utilities, the Landmarks Preservations and Public Design Commissions and NYSDOT, and develop the plans, estimates, and specifications for bidding.

During construction Techno's staff will perform work acceptance through field verification of all slopes and grades while ensuring compliance with the latest version of the New York Department of Transportation (NYCDOT) Highway Rules, Standard Specifications, Standard Details of Construction.







Preliminary and Final Design Services for Non- Standard Pedestrian Ramps

Brooklyn / Staten Island, NY

PROJECT OWNER
New York City Department of Design and Construction (NYCDDC)

POINT OF CONTACT
Landry M. Philémy, P.E., ENV SP Director/Staten Island Program Administration
30-30 Thomson Ave
Queens, NY 11101
718.391.2446
philemL@ddc.nyc.gov

ROLE
Design Engineering

CONSTRUCTION COST
$5 million

START DATE
2022

COMPLETION DATE
On-going

Techno is responsible for Preliminary and Final Design Services for Non-Standard Pedestrian Ramp Installations, Brooklyn and Staten Island, NY to achieve accessibility compliance in conformance with the Americans with Disabilities Act (ADA) and the requirements of the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG) under the Architectural Barriers Act (ABA), as adopted by the New York State (NYS) Department of Transportation (DOT).

A Preliminary Inspection and Survey of all 40 intersections must be done prior to the schematic geometric design of all intersections within the project's scope of work. Techno field staff confirmed topographic features while executing an evaluation of Street Elements; pavements, curbs, sidewalks, pavement markings, etc., to determine the extent of deterioration and cause of existing defects, such as existing drainage conditions and traffic volumes. Encroachments such as fire alarm posts, hydrants, catch basins, mailboxes, streetlight poles, subway grates, trees, vault boxes, street signs, and lights were assessed and ground surface measurements and levels were taken to verify the availability of space to accommodate the proposed pedestrian ramps of space and slopes to comply with the New City and ADA standards. Utilizing GIS Softwares, Preliminary investigation/ inspections, and photography of current conditions, Techno collected, analyzed, and submitted road and site design data for use in the preliminary design, reports, and cost estimates for the DDC. Techno is responsible for 44 complex pedestrian ramps including 40 intersections, preparing Highway Construction plans, Utility/Drainage plans, Lighting/ITS plans, Traffic/MPT plans and Pavement Marking plans. Techno is performing research of the records of agencies such as the DEP, the Landmarks Preservation Commission, the NYCDOT Division of Traffic and Street Lighting, the Department of Parks and Recreation, MTA Metro North, and various Utility agencies within Brooklyn and Staten Island.

Our team at Techno is skilled in designing sustainable solutions for all sorts of drainage, watermain, gas/utilities, traffic and transportation-related issues. Our team has also designed new intersections on bridges, close to/on top of subways and adjacent to many rail infrastructures. Due to Techno's two similar contracts, we have faced many challenges, but our design team's high degree of knowledge and skill has allowed us to overcome any adversities designing throughout the NYC boroughs.





Green Infrastructure in Flushing Creek

Queens, NY

PROJECT OWNER
New York City Department of Design and Construction (NYCDDC)

POINT OF CONTACT
Lambert Monah, P.E.
Director, Borough of Bronx
917.939.6966
monahl@ddc.nyc.gov

ROLE
Resident Engineering Inspection

CONSTRUCTION COST
$7.5 million

START DATE
2011

COMPLETION DATE
2021

CONTRACT NUMBER
GCTI11-01

"All work was performed in a timely and satisfactory manner."

A Federally funded NYCDOT and FHWA Green Infrastructure project in the Borough of Queens involving Community Board 5 and numerous utility stakeholders. Techno provided Resident Engineering Inspection (REI) services during the construction of approximately 300 Right-of-Way Bioswales (ROWBS) and other green infrastructure in the Flushing Bay area (Tallman Island Combined Sewer Overflow tributary area), including curb and sidewalk reconstruction, pavement marking, and traffic work.

This project included:

- Excavation of the bioswale locations, furnishing and installing High Density Polyethylene (HDPE) barriers, and installation of HDPE pipe for hydraulically connected bioswale
- Furnishing and installing geotextile fabric, open-graded stone, engineered soil, and concrete headers in accordance with the requirements of the design drawings
- Reconstruction of new curbs and sidewalks, L-shaped edging, and stone strip beds
- Installation of stone filled gabions and steel tree pit guards, as well as, performing all final grading and landscaping activities and watering and weeding during the maintenance period

Techno's duties and responsibilities as the Resident Engineering Inspector were as follows:

- Monitor the issuance of all Contractors' work permits and safety related permits
- Monitor construction related work activities to confirm they are conducted in accordance with DDC policies and regulations pertaining to safety
- Maintain documentation and conduct job progress meetings, CPM scheduling meetings, and safety meetings
- Monitor the conditions at the site for conformance with the DDC construction documents and with the Site Safety Plan
- Notify DDC of any emergency conditions and direct the Contractor to provide such labor, materials, equipment, and supervision to abate such conditions





West 215th St. Step Street Between Broadway and Park Terrance

Manhattan, NY

PROJECT OWNER
New York City Department of Design and Construction (NYCDDC)

POINT OF CONTACT
Ali Mallic, P.E.
Associate Commisioner
718.391.1463
mallicka@ddc.nyc.gov

ROLE
Individual Experience of Bharat Parekh,P.E.

CONSTRUCTION COST
$ 7 Million

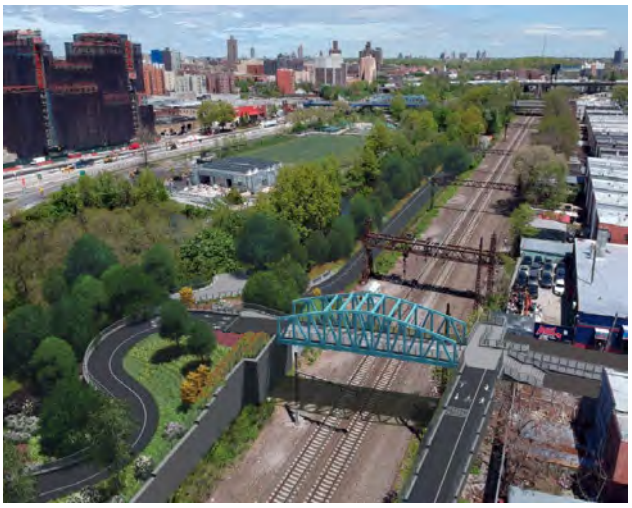
START DATE
2011

COMPLETION DATE
2015

W 215th Street Step Street is a TWIN step street and provides access to the local neighborhood by connecting Broadway and Park Terrace East, having an elevation difference of ~ 65 ft. It also provides access to the private apartment buildings and houses through various landings. Existing Twin-Step Street was deteriorated, with broken and settled granite steps, deteriorated concrete, broken and missing railing, etc., causing ponding, icing and hazardous conditions. Temporary excavation support system was installed to demolish existing Step Street and replace with new reinforced concrete and granite Step Street. One of the Twin stairs was always maintained to provide access to pedestrians as well as apartment buildings and private houses. Existing trees were maintained, and existing landscape was improved. Coordination with local residents was extremely important since the step street provided access to several private properties. The design was approved by New York City Public Design Commission. The project also received prestigious "Design Excellence" award from ACEC.

- Responsible for preparing the Scope of Work, preparing Request for Proposal (RFP) and procuring the design contract and hiring the design consultant
- Completing various Schematic design, select a schematic design for Preliminary Design, Final Design and Bid Documents, including estimates and specifications.
- Prepare methodology and specifications for disposal and remediation of contaminated hazardous soil in accordance with NYSDEC.
- Provided QA/QC and constructability reviews
- Obtain approval from NYCDOT-OCMC and Community Board for Maintenance and Protection of Pedestrian Traffic.
- Obtain approvals from New York City Public Design Commission, Community Boards, NYCDPR and NYCDOT
- Reviewed bid analysis, prepared recommendation for award (RFA) package and followed the contract thru registration.
- Provided Construction Support Services, attended monthly construction Progress meetings and field meetings
- Review RFIs, shop drawings and provided alternate design for unanticipated field conditions
- Actively involved in Change Order negotiations and Change Order processing





Starlight Park and Three Pedestrian Bridges

Bronx, NY

PROJECT OWNER
New York City Department of Design and Construction (NYCDDC)

POINT OF CONTACT
Ali Mallic, P.E.
Associate Commisioner
718.391.1463
mallicka@ddc.nyc.gov

ROLE
Individual Experience of Bharat Parekh,P.E.

CONSTRUCTION COST
$ 23 Million

START DATE
2014

COMPLETION DATE
2019

This project included remediation of hazardous and non-hazardous contaminated soil (originally the lot was NYPD Pound lot), wetland mitigation, design of various park elements (landscape design, walkway, dog run, etc.), design of several retaining walls, two pedestrian bridges over the Bronx River and one bridge over Amtrak within the Starlight Park. The project also included lighting design, irrigation system design, design of wayfinding signs, historic signs, etc.

- Responsible for preparing the Scope of Work, preparing Request for Proposal (RFP) and procuring the design contract for hiring the design consultant
- Prepare a minimum of three schematic design, prepare cost estimates, comparison matrix, life-cycle cost analysis and selection of one schematic design alternate
- Prepare Preliminary Design, Final Design and Bid Documents, including estimates and specifications.
- Prepare methodology and specifications for disposal and remediation of contaminated hazardous soil in accordance with NYSDEC.
- Obtain approval of Maintenance and Protection of Traffic (MPT) plans from NYCDOT-OCMC
- Provided QA/QC and constructability review
- Obtain approvals from New York City Public Design Commission, Community Boards, NYCDPR, NYCDOT, NYSDOT, FHWA, US Coast Guards, Army Corps of Engineers and Amtrak.
- Reviewed bid analysis, prepared recommendation for award (RFA) package and followed the contract thru registration.
- Provided Construction Support Services, attended monthly construction Progress meetings and field meetings
- Review RFIs, shop drawings and provided alternate design for unanticipated field conditions
- Actively involved in Change Order negotiations and Change Order processing



High Bridge Pedestrian Bridge Over Harlem River

Bronx / Manhattan, NY

PROJECT OWNER
New York City Department of Design and Construction (NYCDDC)

POINT OF CONTACT
Ali Mallic, P.E.
Associate Commisioner
718.391.1463
mallicka@ddc.nyc.gov

ROLE
Individual Experience of Bharat Parekh,P.E.

CONSTRUCTION COST
$ 34 Million

START DATE
2010

COMPLETION DATE
2015

High Bridge is the oldest bridge in New York City, crossing over the Harlem River. Original bridge carried water to High Bridge Park in Manhattan and was closed in 1970s. The rehabilitated bridge provides a direct connection between the Bronx and Manhattan for pedestrians and bicyclists. The project included repairs to the structural steel arch, removing the existing paint (using negative pressure enclosure), painting the structural steel arch, replacement of "herringbone" pattern brick walkway, rehabilitation of masonry arch, cleaning and repointing of eleven bridge piers and arches, installing 8' high safety fence, historic railing, pedestrian lighting and architectural lighting. Project also included landscape design near the approaches. Project received multiple prestigious awards from ACEC and various NYC organizations.

- The contract was transferred from the New York City Parks Department
- Prepare a minimum of three schematic design alternates, schematic design cost estimates, comparison matrix, life-cycle cost analysis for safety fence, herringbone brick walkway and structural steel arch rehabilitation
- Prepare Final Design Documents and Bid Documents, including specifications and itemized estimate
- Provided QA/QC and constructability reviews
- Obtain approvals from New York City Public Design Commission, Community Boards, NYCDPR, NYCDOT and NYSDOT
- Reviewed bid analysis, prepared recommendation for award (RFA) package and followed the contract thru registration.
- Provided Construction Support Services, attended monthly construction Progress meetings and field meetings
- Review RFIs, shop drawings and provided alternate design for unanticipated field conditions
- Actively involved in Change Order negotiations and Change Order processing



QueensWay Master Plan

Queens, NY

PROJECT OWNER
The Trust for Public Land

POINT OF CONTACT
Carter Strickland
VP, Mid-Atlantic Region and
New York State Director
Trust for Public Land

ROLE
Landscape Architecture
Planning & Urban Design

CONSTRUCTION COST
$400 K

START DATE
2013

COMPLETION DATE
2014

The history of modern land development in Queens can be traced back to the myriad rail lines that crisscrossed open tracts of land in the late 19th and early 20th centuries. The QueensWay transforms one of these lines into a new public open space corridor.

Along the 3.5-mile length, the former right-of-way transforms from an elevated embankment to a ravine to an elevated steel viaduct. The adjacencies along the QueensWay also vary, with little league fields along the northernmost end; big box stores, residential neighborhoods, and a public park in the middle; and crossing train lines, commercial corridors, and parking lots to the south.

The three main segments of the QueensWay—northern, central and southern—each have their own physical character which shapes the relationship to the surrounding communities in terms of vistas and enclosure, natural and urban experiences along the route. As a result, the issues related to safety, security, and privacy of adjacent properties are directly tied to how the former railway line moves through the landscape.

The QueensWay Master Plan was completed in collaboration with WXY Studio.



QueensWay Metropolitan Hub

Queens, New York

PROJECT OWNER
The Trust for Public Land

POINT OF CONTACT
Carter Strickland
VP, Mid-Atlantic Region and
New York State Director
Trust for Public Land

ROLE
Landscape Architecture
Planning & Urban Design

CONSTRUCTION COST
$19 Million

START DATE
2016

COMPLETION DATE
2018

The QueensWay Metropolitan Hub is the first phase of the larger master plan that sets programmatic and design precedents for the park.

The QueensWay transforms an extant track of the Long Island Rail Road into a new linear public park for Queens. A quiet presence in the city, the former right-of-way is currently camouflaged by school-bus parking, overgrown vines, industrial activity, and limited access. The Metropolitan Hub is the first phase of the QueensWay addressing key themes of the master plan of the larger site.

The Metropolitan Hub sits north of Forest Park and adjacent to the Metropolitan High School complex. Integrated outdoor classrooms are designed specifically to serve these schools, while seasonally evolving native planting provides a rich learning environment. The passage includes a pedestrian path and bike-way with improved under story planting to manage erosion and increase privacy in deference to neighboring homeowners.

Specialized Knowledge

Our team has worked on and advocated for the QueensWay over the past decade. We know the ins and outs of the site and draw inspiration from it's history, materials, and adjacencies. The QueensWay Metropolitan Hub design is the product of a robust process of community and stakeholder engagement. It integrates accessible connections to adjacent neighborhoods, provides community amenities, enhances biodiversity, and creates a safe mobility corridor.

Sustainability practices are integrated throughout the park. The select removal and pruning of trees will help to manage invasive species and increase ecosystem health. Felled trees are reused as furniture to create a unique sense of place and biodiversity is increased with dense shrub and perennial planting to create seasonal interest while enhancing habitat with a rich collection of native plants.



NYC Community Parks Initiative: Arrochar Playground

Staten Island, New York

PROJECT OWNER
New York city Department of Parks and Recreation (NYCDEP)

POINT OF CONTACT
Jeffrey Martin (current)
Senior Landscape Architect
City of New York Parks and Recreation
718 760 6573

ROLE
Landscape Architecture
Planning & Urban Design

CONSTRUCTION COST
$2 Million

START DATE
2014

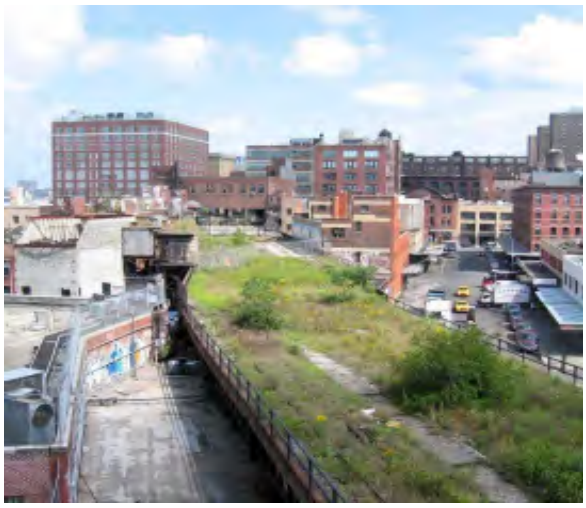
COMPLETION DATE
2018

As part of the Mayor's new Community Parks Initiative, Sasaki (DLANDstudio) was selected to design the reconstruction of Arrochar Playground in Staten Island, NY. It is a jointly operated playground between NYC Parks and P.S. 39. Sasaki (DLANDstudio) led the public scoping process that helped clarify the needs of the communities and stakeholders around the playground.

The design seeks to create a more diverse and functional active area adjacent to the school which was defined by a large asphalt ball field that was in poor condition. The new active areas include a track, basketball courts, passive shaded areas, and a synthetic turf field that manages stormwater runoff. Additionally, new play equipment and amenities, such as a spray shower, are installed in the lower terrace area to provide play spaces for children of all ages.

Additional project funding was provided by NYCDEP for the redesigned playground to manage the stormwater runoff on site through various green infrastructure practices.





The Highline

Manhattan, NY

PROJECT OWNER
New York City Department of Transportation (NYCDOT)

POINT OF CONTACT
Peter J. Bakarich, P.E.
pbakarich@akrf.com
(646) 388-9591

ROLE
Surveying Services

COMPANY FEE
$ 300 K

START DATE
2014

COMPLETION DATE
2018

Control Point Associates, Inc. was subcontracted by AKRF, Inc. to provide topographic and utility surveys in accordance with NYCDOT specifications. This 3.3-mile project encompassed 4th Avenue from 8th Street to 52nd Street. With safety being a major focus and 4th Avenue a multi-lane highway, Control Point Associates, Inc.'s utilization of the most advanced mobile LiDAR technology, the Pegasus: Two, was the best solution to reach the aggressive design goals and timeline of the project. Combining traditional surveying technology with mobile LiDAR, Control Point Associates, Inc. was able to deliver quality survey documents in a cost-effective and time-efficient manner. The strategic combination of these services resulted in a reduction in field time by over 50% and a fee comparable to traditional surveying methods.

Additional benefits from the utilization of the Pegasus:

Two included: Improved safety for field personnel, reduction of maintenance of traffic costs, and the amount of collected data that can be used as a benchmark for this project and surrounding projects in the area.



Route 3, Route 46, Valley Road, and Rifle Camp Road

Clifton, Woodland, and Little Falls , NJ

PROJECT OWNER
New Jersey Department of Transportation (NJDOT)

POINT OF CONTACT
Albert Roughgarden
Albert.Roughgarden@stantec.com
(201) 587-9040

ROLE
Surveying Services

COMPANY FEE
$ 140 K

START DATE
2017

COMPLETION DATE
2018

Control Point Associates, Inc. provided surveying services for this multi-road project. The services were performed in accordance with the NJDOT's current standards, policies, procedures, and directives, including Standard Article 44, Article 51, the 2014 NJDOT Survey Manual, and NJDOT CADD Manual. All of the work was prepared and delivered in MicroStation format. Survey control was established in accordance with the "Quality Assurance Checklist – Survey Services Unit" of the NJDOT procedures manual and coordinated with the NJDOT Geodetic Survey Group. Utilizing a centrally located control point within the project limits the project's horizontal coordinate system was "scaled to ground." Primary Tasks included:

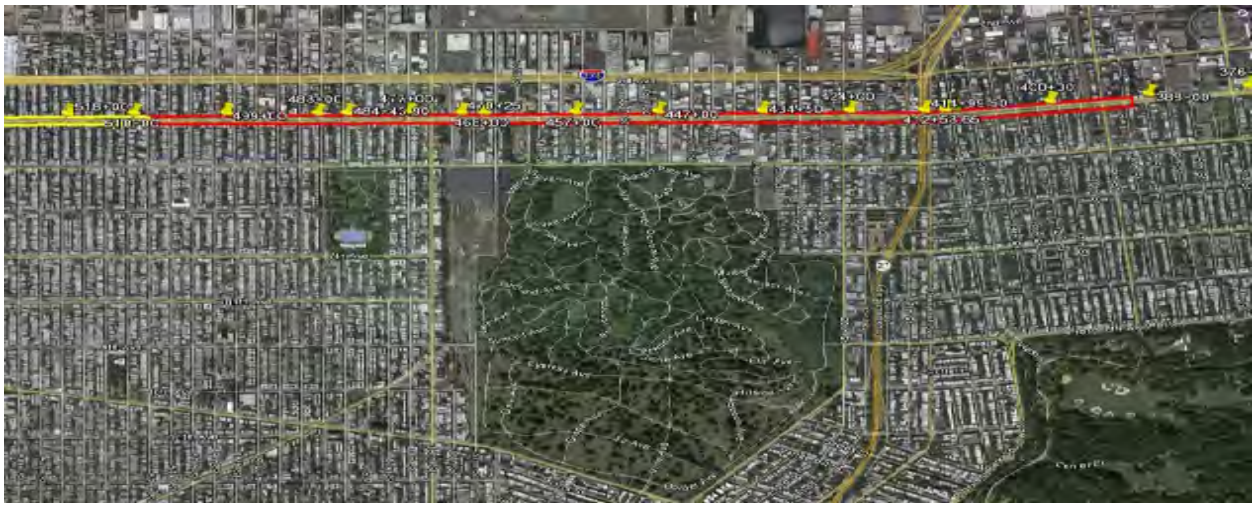
Aerial Targets
Established 14 supplemental control points for aerial photogrammetry.

Photogrammetric Mapping
Obtained new aerial photography of the project site and performed aerial mapping of the project limits.

Bench Marks
Established benchmarks at 400 – 600 foot spacing along roadways within the project limits for vertical control during construction. The work was performed by observing three-wire differential leveling and utilizing calibrated digital levels.

Topographic Surveys

- Route 46 Bridge over Lower Notch Road
- Route 46 East Bound roadside between Lower Notch Road and Notch Road
- Valley Road / St. Philip Drive intersection in the City of Clifton for future ADA upgrades
- Property Surveys
- Two (2) properties at the intersection of Valley Road and St. Philip Drive
- Five (5) properties along Route 46 East Bound and immediately east of Lower Notch Road



4th Avenue Safety Improvements

Brooklyn, NY

PROJECT OWNER
New York City Department of Transportation (NYCDOT)

POINT OF CONTACT
Peter J. Bakarich, P.E.
pbakarich@akrf.com
(646) 388-9591

ROLE
Surveying Services

COMPANY FEE
$ 300 K

START DATE
2016

COMPLETION DATE
2018

Control Point Associates, Inc. was subcontracted by AKRF, Inc. to provide topographic and utility surveys in accordance with NYCDOT specifications. This 3.3-mile project encompassed 4th Avenue from 8th Street to 52nd Street. With safety being a major focus and 4th Avenue a multi-lane highway, Control Point Associates, Inc.'s utilization of the most advanced mobile LiDAR technology, the Pegasus: Two, was the best solution to reach the aggressive design goals and timeline of the project. Combining traditional surveying technology with mobile LiDAR, Control Point Associates, Inc. was able to deliver quality survey documents in a cost-effective and time-efficient manner. The strategic combination of these services resulted in a reduction in field time by over 50% and a fee comparable to traditional surveying methods.

Additional benefits from the utilization of the Pegasus:

Two included: Improved safety for field personnel, reduction of maintenance of traffic costs, and the amount of collected data that can be used as a benchmark for this project and surrounding projects in the area.





Manhattan Greenway Study

Manhattan, NY

PROJECT OWNER
New York City Department of Economic Corporation (NYCEDC)

POINT OF CONTACT
Rayna Huber Erlich
rerlich@bbbarch.com
(212) 777-7800

ROLE
Surveying Services

COMPANY FEE
$ 40 K

COMPLETION DATE
2017

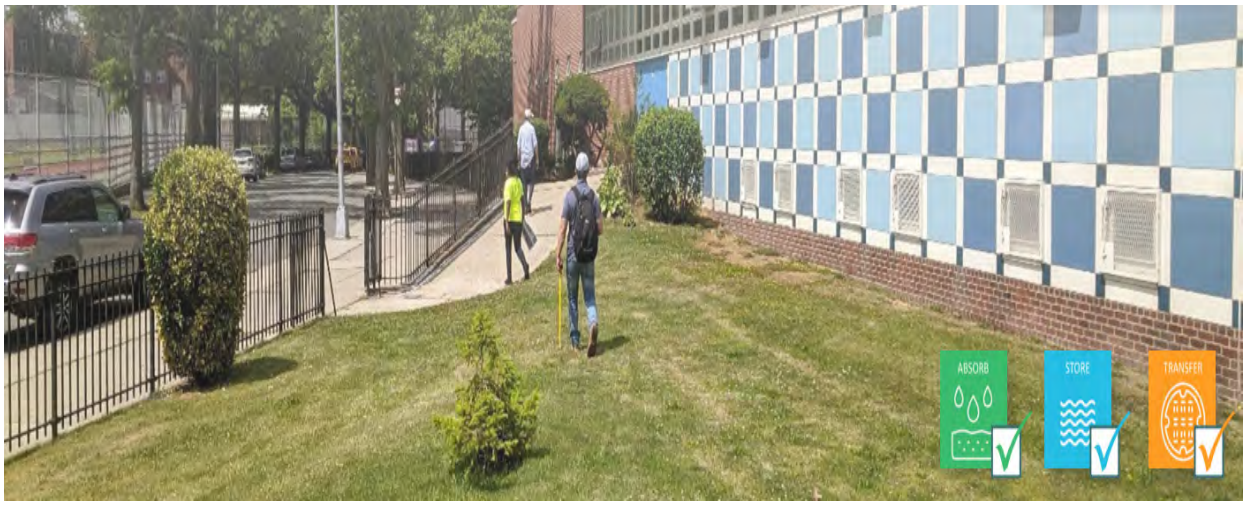
Control Point Associates, Inc. provided surveying services in support of the preliminary design of the Manhattan Greenway Project for the New York City Economic Development Corporation. The survey provided base mapping for the design of a new pedestrian walkway and bikeway on the greenway. The study's goal was to develop recommendations for the alignment of gaps in the greenway while maximizing waterfront access.

The project has consisted of several phases, including:

Dyckman Street corridor from the Eastside of Broadway to the area past the elevated Henry Hudson Parkway Control Point Associates, Inc. located topographic features from building line to building line including the back of walk, permanent street furniture, utility castings, bollards, and striping.

Beneath the Henry Hudson Parkway
Control Point Associates, Inc. located the support columns and curtain walls and plotted the limits of right-of-way and property frontage along the route from available record drawings.

Sherman Creek beginning at the Northside of the University Heights Bridge to the Northside of West 208th Street:
Control Point Associates, Inc. surveyed the shoreline rip-rap borders and other topographic features between the easterly lines of the existing developed lots to the shoreline for varying bandwidths. Right-of-way limits and property frontage along the route from available record drawings were plotted. Both conventional survey and laser scanning methods were employed to collect the required topographic data. The project parameters were adjacent to the Consolidated Edison Facility and required extensive coordination to conduct the fieldwork.



NYC Green Infrastructure Design for Schools & NYCHA

New York, NY

PROJECT OWNER
New York City Department of Environmental Protection (NYCDEP)

POINT OF CONTACT
Roopesh Joshi
Managing Director
718.595.3946

ROLE
Design Services

CONSTRUCTION COST
$15 Million

START DATE
2020

COMPLETION DATE
Ongoing

DOE and NYCHA Sites. Tetra Tech lead the planning and design and will be leading the DSDC for green infrastructure improvements at seven Department of Education (DOE) and three NYCHA sites throughout Brooklyn and Queens.

Following DEP SOPs.
Tetra Tech followed the NYC Green Infrastructure On-Site Design Manual. After a desktop review, Tetra Tech visited each site with DEP and documented existing conditions to prepare Boring Location Plans with Draft Conceptual Plans and proposed surveying limits. Geotechnical Investigations, which were heavily coordinated with school principals and custodians, confirmed the soil characteristics including soil classifications, permeability rates, and depth to groundwater. Tetra Tech added data from the Geotechnical Investigations, Conceptual Site Plans, and Site Summary Analyses to DEP's standard Project Tracking Spreadsheet and uploaded to DEP's GreenHUB program.

Design Deliverables.
After the conceptual phase, Tetra Tech proceeded through the 75% Design Deliverable which included hydrologic and hydraulic analysis, cost estimating, construction scheduling, further geotechnical engineering, health and safety reviews, and arborist design reviews. After another DEP Review, the 75% deliverable was amended and updated based on DEP reviews, as well as School Construction Authority reviews to the 100% Design Deliverable.

Quality.
Listened to school principals, custodians, and housing managers. Provided the needed coordination with each site's lead for O&M, EHS, schedule, avoiding existing trees, existing site drainage, and parking to ensure we accounted for their needs, including the availability of outdoor space during Covid-19.



Urban GI Design Task Order Contract

Detroit, MI

PROJECT OWNER
Detroit Water & Sewage Department

POINT OF CONTACT
Wendy Barrott
General Manager, Wastewater Operations
313.297.0300

ROLE
Design Services

CONSTRUCTION COST
$425 Million

START DATE
2014

COMPLETION DATE
Ongoing

Tetra Tech has served Detroit Water and Sewerage Department (DWSD) for over eight years to implement the agency's green infrastructure (GI) program. DWSD strategically focused beyond stormwater management by concentrating on improving the quality of life and providing a spark of hope to surrounding neighborhoods. In a community with significant public health concerns, GI has provided opportunities to improve physical and social health in Detroit.

Balancing Improvements.
The initial "gray" components of the Plan (i.e. control structures, diversion sewers, shafts and tunnels, pump stations, nets, and disinfection facilities) addressed sewer system benefits, but provided no benefits for other challenges. Therefore, DWSD began neighborhood revitalization and converting portions of the balance of the $425 million system investment from traditional gray approaches to a green-focused plan of green streets, bioretention, and larger-scale GI.

Quality.
Tetra Tech was the prime consultant providing design services and assistance for GI projects focused on stormwater volume reduction, basement flooding backups, and neighborhood strength. Project elements included downspout disconnections (residential and non-residential buildings), public facilities flow management, demolitions and removal of structures on vacant properties, tree planting, and transportation corridor flow management.

Schedule.
As part of the contract, multiple projects were implemented in City parks. This work needed to be coordinated with other activities in the parks at the same time, including separate contracts for recreational improvements issued by other City departments, the schedule of groups such as little league baseball, and the timing for plant installation.





Flood Mitigation Design Task Order Contract

Long Island, NY

PROJECT OWNER
New York State Governor's Office of Storm Recovery (GOSR)

POINT OF CONTACT
Michael Murphy
Program Manager
917.881.8040

ROLE
Design Services

CONSTRUCTION COST
$125 Million

START DATE
2016

COMPLETION DATE
Ongoing

Tetra Tech led the planning, design, permitting, resident engagement, procurement, and DSDC for New York State's Living with the Bay Flood Resiliency program across 28,400 lots. The work required the creation of strategies for the $125M US Housing and Urban Development (HUD)-funded program and implementing projects focused on mitigating flooding, restoring the environment, water quality improvements, improving public access to the waterfront, and social resilience.

Initially Tetra Tech took a stalled planning process from others and created dynamics and outputs across ten (10) public agencies and stakeholders to create a watershed-based Resiliency Strategy with 100% consensus. The next task order included advancing five (5) resiliency designs to 30% complete sets of plans. Subsequent designs were divided amongst other consulting teams with Tetra Tech completing two (2) designs for East Rockaway High School Flood Mitigation and Rockville Centre Lister Park Flood Protection and Creek Restoration. Work for these two projects included development of the 60% and 100% complete drawings, bid phase services, and construction phase services.

Quality
Environmental Justice. Avoiding risk, social, and environmental costs as well as creating social and environmental values were major components of the projects. For example, Preserving Quality of Life, Creating and Improving Public Waterfront Access, Providing Educational Opportunities, and Restoring Environmental Health were 4 of the 5 objectives. In addition, projects located in HUD-identified Low and Moderate Income Areas were given a higher prioritization than projects in other areas.



Path to the park, Valley Stream

Hempstead, NY

PROJECT OWNER
Town of Hempstead

POINT OF CONTACT
Raymond DiBiase, P.E.
PTOE, PTP.
(631) 286-8668

ROLE
Geotechnical Design and Support

CONSTRUCTION COST
$ 62 K

START DATE
2017

COMPLETION DATE
2017

As a teaming partner on this storm resiliency project, Arora prepared contract plans, specifications and estimates for the bulkhead replacement/shoreline restoration at Brook Road Park. As part of the design process, Arora developed an alternatives analysis for the proposed bulkhead and living shoreline that minimized the impacts to the landward facilities in order to maintain old growth trees and the existing tennis court.

Arora also prepared the design and detailing for an overlook in place of the existing fill/abutment for a since removed pedestrian bridge over Valley Stream. All work was coordinated with the NY Rising community Reconstruction Plan for the Town of Hempstead's consideration. All work was performed within the allocated budgets and schedule



Route 72 Over Manahawkin Bay Bridge

Ocean County, NJ

PROJECT OWNER
New Jersey Department of Transportation (NJDOT)

POINT OF CONTACT
??

ROLE
Concept Development, Preliminary and Final Engineering Design, and Construction Support

CONSTRUCTION COST
$ 280 Million

START DATE
2017

COMPLETION DATE
Ongoing

Long Beach Island (LBI) is one of New Jersey's premier oceanfront tourist destinations, with as many as 150,000 people living and vacationing in its six municipalities. Route 72 provides the only vehicular access to LBI and serves as a coastal evacuation route. The four existing bridges that comprise this lifeline causeway crossing Hilliards Thorofare, Manahawkin Bay, West Thorofare, and East Thorofare are over 50 years old and classified as structurally deficient and functionally obsolete. To address the condition of the corridor, the NJDOT initiated a project to design improvements to Route 72 and its bridges from Marsha Drive in the Township of Stafford to the Borough of Ship Bottom on LBI in Ocean County, NJ. The project comprised one comprehensive design, but was advertised and constructed in five separate construction contracts:

- Contract 1A – Improvements to the Marsha Drive intersection with Route 72
- Contract 1B – Long Beach Island drainage and operational improvements
- Contract 2 – Construction of a new parallel Bay Bridge, to carry eastbound traffic
- Contract 3 – Rehabilitation of the three Thorofare trestle bridges
- Contract 4 – Rehabilitation of the existing Bay Bridge, to carry westbound traffic

Arora and Associates, P.C., as a teaming partner to PB Americas, Inc. (now WSP), was fully responsible for the following:

- Existing Bay Bridge alternatives analysis, seismic retrofit analysis, & rehabilitation
- Construction schedules and constructability reviews
- Security vulnerability assessment for all bridges
- Bridge deck evaluation surveys
- Inspection of the Bay Bridge, fenders, and bulkheads
- Replacement or repair of fenders and bulkheads
- Geotechnical engineering for fenders and bulkheads
- Highway and navigation lighting
- Utility engineering and schemes of accommodation
- Roadway and traffic engineering in Contract 4
- Public access improvements
- Supplemental survey, including a navigation survey



Route 206 Bridges Over Stony Brook

Mercer County, NJ

PROJECT OWNER
New Jersey Department of Transportation (NJDOT)

POINT OF CONTACT
??

ROLE
Bridge Design/Inspection and Geotechnical Services

CONSTRUCTION COST
$ 2.5 Million

START DATE
2016

COMPLETION DATE
2017

Built in 1792, the Stone Arch Bridge over Stony Brook in Princeton is the oldest state-owned bridge in New Jersey still in use. The triple-arch stone bridge was built by local masons using stone from nearby quarries and currently carries Route 206 vehicular traffic in Mercer County. The project was triggered by a partial collapse of the parapet and spandrel wall above the north arch on the upstream side of the structure forcing this section of Route 206 to be closed on February 22, 2016. The failed area was stabilized, and an in-depth inspection of the bridge was performed, which revealed additional areas that needed to be addressed prior to reopening the road to traffic. The roadway was re-opened to traffic on March 7th, 2016; however, the failed area and extensive leaning and bulging of the spandrel walls and parapets remained and required more thorough rehabilitation.

The Route 206 Bridge over the Stony Brook Flood Channel (Flood Channel Bridge) lies adjacent to the Stone Arch Bridge on the southern approach. The bridge was in poor condition and in need of replacement. Since the two structures are adjacent to each other, it was determined that the rehabilitation and replacement of these two structures be advanced at the same time to accelerate the project and limit the time needed for the required detour of this section of Route 206. Built in 1892, the Flood Channel Bridge was an existing three-span bridge which was later widened along with the Stone Arch Bridge. The Flood Channel Bridge was determined to be a contributing factor to the Kings Highway Historic District. Another historical and important aspect of the project was the treatment of Worth's Mill Ruin Wall which stands adjacent to both the Stone Arch and Flood Channel Bridges. This wall, which predates the Stone Arch Bridge, was determined to need repair and stabilization.

To ensure the stability of the wall during construction, electronic monitoring of the structure was conducted. The rehabilitation of the Stone Arch Bridge consisted of removing the fill above the arches, rebuilding out-of-plumb walls with the same stone using a lime-based historically appropriate mortar and constructing concrete saddles and walls within the roadway fill to strengthen the arch. The fill of the roadway above the arches was constructed with lightweight concrete to eliminate water infiltration. A reinforced concrete core was used for the parapets for crashworthiness and was faced with existing stone.

PROJECT TEAM

THE TECHNO TEAM

The **Techno Consult, Inc. (Techno)** is a certified M/DBE multidisciplinary engineering firm, with a dedicated professional staff of nearly 75 professionals, that specializes in providing engineering & architectural design, construction management & inspection services to various government agencies for infrastructure projects throughout the tri-state area. Our team has a multitude of experience in providing engineering/design services to agencies like New York City Economic Development Corporation (NYCEDC), New York City Department of Design and Construction (NYCDDC), Port Authority of New York & New Jersey (PANYNJ), etc. Techno will serve as the Prime Consultant and directly coordinate all project related activities with NYCEDC, the team of sub-consultants and ALL stakeholders. Techno has carefully reviewed the RFP and nine supporting documents, including completed Design Development Documents (dated 12/12/2017) provided with this RFP (released on November 8, 2022) and formed a team of highly dedicated professionals to provide state-of-the-art design services for QueensWay Phase 1 project. The limits of the Phase 1 project are approximately about half a mile, between Metropolitan Avenue to the North and Union Turnpike to the South.

After careful review of the scope of services and above referenced supporting documents, we inferred that these supporting documents, and in particular, completed Design Development Documents will form a basis for further Preliminary and Final Design. Techno has diligently reviewed all above referenced documents and reached out to the entities that had performed the original design tasks during the Design Development phase. Our strategy has been to utilize some of the team members and individuals who were involved in the Design Development phase, in order to ensure the progression of the originally intended design, and cost effectiveness by utilizing their existing knowledge base. This may result in substantial cost and time savings for NYCEDC. Techno has assembled a team of highly qualified sub-consultants. Below we have provided brief introductions of each team member along with their responsibilities.

Techno Consult, Inc (Techno)

Techno will provide Civil Engineering and Structural Engineering Design services. Techno's Project Manager, **Bharat Parekh, P.E., ENV SP,** will provide the overall project management and coordinate all design and administrative activities with NYCEDC, all sub-consultants and ALL stakeholders. Some of the major components of the project are: regarding of the entire project site to support the proposed landscape, bio-retention basins, exposed asphalt walkways and bike paths, the pedestrian bridge over the LIRR gap, walkway supported on piles as well as some retaining walls. Techno will provide civil engineering design services, including, regrading of walkways and bike paths, proper drainage of the project area, design of bio-retention basins, etc.

Regrading of Rail lines into Walkways and Bikeways:



Existing Rail Lines



Regrading



Pathways & Bikeways

Techno will also provide structural design for structural elements such as pedestrian bridge, walkway supported on helical piles, retaining walls, structures, etc. The pedestrian Bridge has two segments, one about 16 feet wide and 57 feet long, and second component is about 30 feet wide and 120 feet long. **Bharat** has over 43 years of experience in designing and managing multiple bridge and infrastructure projects. We will explore the possibilities of using geo-textile materials to support the slope, prefabricated bridge and pre-cast concrete retaining wall components to minimize the cost, construction duration and impact to the community.

Sasaki will provide the overall Landscape Architectural Design. **Sasaki's Principal Architect, Susannah Drake, FAIA, FASLA**, was the lead landscape architect involved in Design Development Documents (2017) and has detailed knowledge of every aspect of the project.

Sasaki is one of the highly reputed Landscape Architecture design firms in the Unites States. Sasaki's founding and ongoing evolution are closely tied to America's parks and open spaces. Since Sasaki's inception more than 65 years ago, Sasaki planners and designers have been reinterpreting public space for ongoing economic contribution, civic amenity, ecological and environmental sustainability, and creative programming. Sasaki's global experience includes award-winning work across a range of scales, disciplines, geographies, and industries – from the planning of large-scale international commercial, office, and cultural districts, to new campuses for higher education, to the detailing of individual workspaces for leading corporations. This breadth of experience across client and project types enables us to attack problems multi-dimensionally and develop full-spectrum solutions. The core tenets of Sasaki's work include data-driven analysis; transformation through visionary planning and design; a commitment to advancing equity, resilience, and access; and well-defined implementation strategies to see projects realized.

Sasaki has previously worked on QueensWay Master Plan and QueensWay Phase 1 Design Development Documents. Sasaki will continue to develop the same design philosophy and will provide excellent landscape architecture design services. At the onset of the project, Sasaki will review all the reference documents, prepare a list of issues to be discussed and present it to NYCEDC. We will also present the project to the Community Board, Public Design Commission (PDC) and all stakeholders for their input, at Preliminary Design and final Design and obtain their approvals prior to finalizing the Construction Documents for competitive bids.



Existing Condition



Rendering of Proposed Design

Techno selected CPA as the surveyor for this contract since they performed the original topographic survey for the entire project area. We believe that having CPA on our team will provide the most expeditious and cost effective survey update due to their familiarity with each and every aspect of the project. Founded in 1992 (over 30 years ago), CPA operates strategically throughout the Eastern United States. CPA is professionally licensed in New Jersey, Pennsylvania, Maryland, Delaware, Virginia, South Carolina, New York, Connecticut, Massachusetts, Maine, Vermont, Rhode Island, New Hampshire, Ohio, West Virginia, Florida, and Kentucky, which ensures field crew accessibility and major market coverage. CPA's headquarter is located in Warren, New Jersey, with branches in Mount Laurel, New Jersey; Manhattan, New York; Melville, New York; Albany, New York; Highland, New York; Rochester, New York; Philadelphia, Pennsylvania; Chalfont, Pennsylvania; Georgetown, Delaware; and Southborough, Massachusetts - with over 222 full-time employees and over 56 field crews throughout the company. Creating strategic partnerships with key clientele and our network of partners allows CPA the unique opportunity to offer a variety of land surveying and consulting services to meet the demands of the ever-changing marketplace. Integrity, Quality Assurance, Customer Service, and Reliability are the benchmarks of Control Point Associates, Inc.'s pursuit of excellence. This continues to enable our organization to service our expanding client base and market diversity successfully. Control Point Associates, Inc. has performed an extensive amount of surveying throughout the region, performing thousands of boundary and location surveys, ALTA/NSPS Land Title surveys, 3D laser scanning, interior existing

condition plans, construction stakeout services, as-built surveys, BIM modeling, GIS, asset management, aerial photogrammetry, UAV, hydrographic surveys, mobile LiDAR, and subsurface utility engineering. Control Point Associates, Inc. has worked with many professional organizations across the country, with each having its own independent set of standards, so we can easily adapt or modify to make certain the needs of the project and the client are met.

TETRA TECH

TetraTech will provide environmental review, environmental permitting, stormwater management and electrical engineer/lighting design services on this project. TetraTech was founded as a civil engineering firm by four graduates of the California Institute of Technology in 1966, providing engineering services for waterways, harbors, and coastal areas. Today, Tetra Tech is a leading provider of consulting, engineering, and technical services with more than 20,000 associates in more than 450 offices worldwide. Tetra Tech provides a broad range of civil engineering services focused in supporting public works agencies, transportation departments, and utility authority clients around the world. Tetra Tech has experience in all phases of planning, design, construction, and operation for drainage, water, wastewater, dams, and transportation infrastructure projects. Tetra Tech is knowledgeable in public outreach and stakeholder coordination for large, complex, and multi-phase infrastructure repair and new construction projects.

ARORA and ASSOCIATES, P.C.
Consulting Engineers
40 of Excellence

Arora is one of the highly reputable geological firms in New York metro area and will provide Geotechnical Engineering services. Arora will review all existing geotechnical reports, includi9ng deep soil borings and environmental soil borings and advice of the adequacy and accuracy of the existing information. They will also provide foundation design parameters for bridge foundations, retaining wall foundations, elevated walkway foundation, etc. Arora will also advice if existing geotechnical exploration is inadequate and additional borings and testing may be required to obtain required foundation design parameters. Soil percolation test is one of the important soil tests to ensure that the bio-retention basins and landscape in general will work efficiently. The reference documents provided with the RFP stated that there are hazardous materials present at the site. Arora will advise if additional borings are needed. If additional soil borings are needed, we will prepare soil exploration program and retain the services of a qualified boring contractor and testing laboratory.

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

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

TECHNO CONSULT INC
AKA:TECHNO CONSULT ENGINEERING
14 PENN PLAZA
SUITE 2220
NEW YORK, NY 10122-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2022 TO 12/31/2024.

BETTY ROSA
COMMISSIONER OF EDUCATION

CERTIFICATE NUMBER
0019335

TECHNO

PORT AUTHORITY NY NJ
AIR LAND RAIL SEA

February 10, 2021

Mr. Khalid Mallick
President
Techno Consult, Inc.
d/b/a Techno
5 Independence Way, Suite 150
Princeton, NJ 08540

Re: Minority Business Enterprise (MBE) Certification
Type: Consultants

Dear Mr. Mallick:

We are pleased to inform you that The Port Authority of NY & NJ has re-evaluated your business and determined that it continues to be eligible to participate in the agency's Minority Business Enterprise (MBE) program. **Techno Consult, Inc., d/b/a Techno** remains in the Port Authority's on-line directory of certified MWBEs which can be accessed at:
https://panynj.diversitysoftware.com/FrontEnd/SearchCertifiedDirectory.

Please be advised that we periodically review all certifications and reserve the right to decertify any firm that no longer meets our guidelines. You must notify the Office of Business Diversity and Civil Rights in writing within 30 days of any significant changes to your business. These include, but are not limited to, a change of officers, directors, location and business name. Failure to advise us of these changes can result in decertification of your business.

This certification will remain in effect for five years or until February 10, 2026 after which you must submit a recertification application with supporting documentation. The application can be accessed from our Web site: www.panynjSD.com

If you have any questions regarding your certification, you may contact me at (201) 395-3947 or via email at bsumpter@panynj.gov.

Sincerely,

Brandin Sumpter
Certification Analyst
Office of Business Diversity and Civil Rights

2 Montgomery Street, 2nd Floor I Jersey City, NJ 07302 I T: 201-395-3947 I bsumpter@panynj.gov

NYC Small Business Services | careers businesses neighborhoods

MBE Certificate

Techno Consult, Inc.

This certificate acknowledges that this company has met the criteria as established by the MBE Program at the NYC Department of Small Business Services and is therefore certified as a Minority-owned Business Enterprise (M/WBE).

Certificate Number	Expires on
MWCERT-4169	**1/30/2023**

Bill de Blasio, Mayor

Gregg Bishop, Commissioner

NEW YORK STATE

MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE ("MWBE")

CERTIFICATION

Empire State Development's Division of Minority and Women's Business Development grants a

Minority Business Enterprise (MBE)

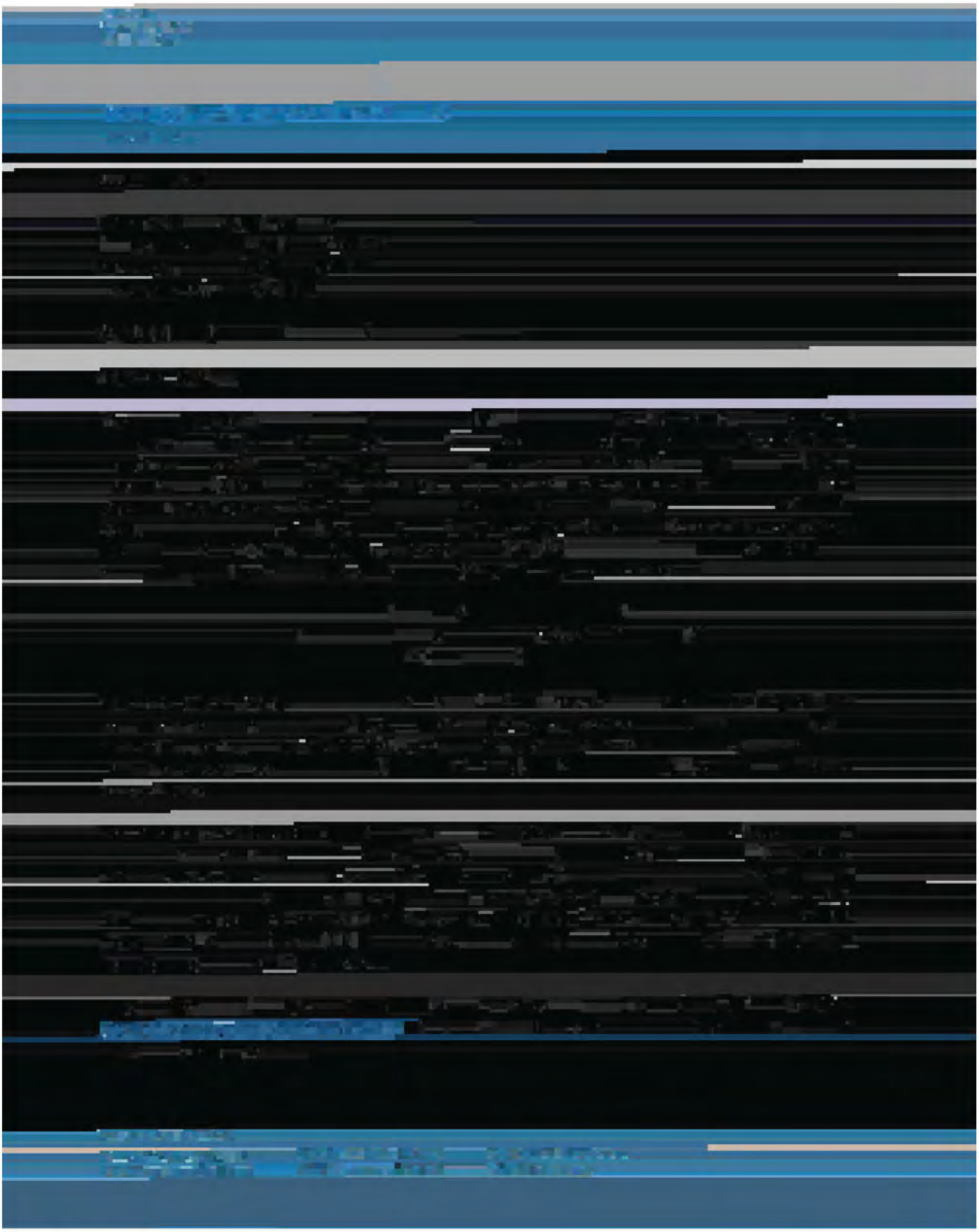
pursuant to New York State Executive Law, Article 15-A to:

Techno Consult, Inc. DBA Techno

Certification Awarded on: March 26, 2020
Expiration Date: March 26, 2025
File ID#: MBE- 44436

NEW YORK STATE OF OPPORTUNITY. Division of Minority and Women's Business Development

A Division of Empire State Development





THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

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

SASAKI ARCHITECTS LANDSCAPE ARCHITECTS AND PE PC
64 PLEASANT STREET
ATTN STEVEN ROSCOE
WATERTOWN, MA 02472-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 05/01/2021 TO 04/30/2024.

CERTIFICATE NUMBER
0018772

BETTY ROSA
COMMISSIONER OF EDUCATION

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

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

CONTROL POINT ASSOCIATES INC PC
30 INDEPENDENCE BOULEVARD
SUITE 100
WARREN, NJ 07059-0000

TO PROVIDE LAND SURVEYING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 06/01/2020 TO 05/31/2023.

CERTIFICATE NUMBER
0017302

SHANNON L. TAHOE
INTERIM COMMISSIONER OF EDUCATION

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

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

TETRA TECH ENGINEERS ARCHITECTS & LANDSCAPE ARCHITECTS PC
CORNELL BUSINESS & TECHNOLOGY PARK
10 BROWN ROAD
ITHACA, NY 14850-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 03/01/2021 TO 02/29/2024.

CERTIFICATE NUMBER
0018434

BETTY ROSA
INTERIM COMMISSIONER OF EDUCATION

THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT

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

ARORA AND ASSOCIATES PC
(ENGINEERING & LAND SURVEYING)
PRINCETON PIKE CORPORATE CNTR
1200 LENOX DRIVE
SUITE 200
LAWRENCEVILLE, NJ 08648-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR THE PERIOD 01/01/2021 TO 12/31/2023.

CERTIFICATE NUMBER
0018075

BETTY ROSA
INTERIM COMMISSIONER OF EDUCATION

NEW YORK STATE
MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE ("MWBE")
CERTIFICATION

Empire State Development's Division of Minority and Women's Business Development grants a

Minority Business Enterprise (MBE)

pursuant to New York State Executive Law, Article 15-A to:

Arora and Associates, P.C.

Certification Awarded on: December 20, 2021
Expiration Date: December 20, 2026
File ID#: 405

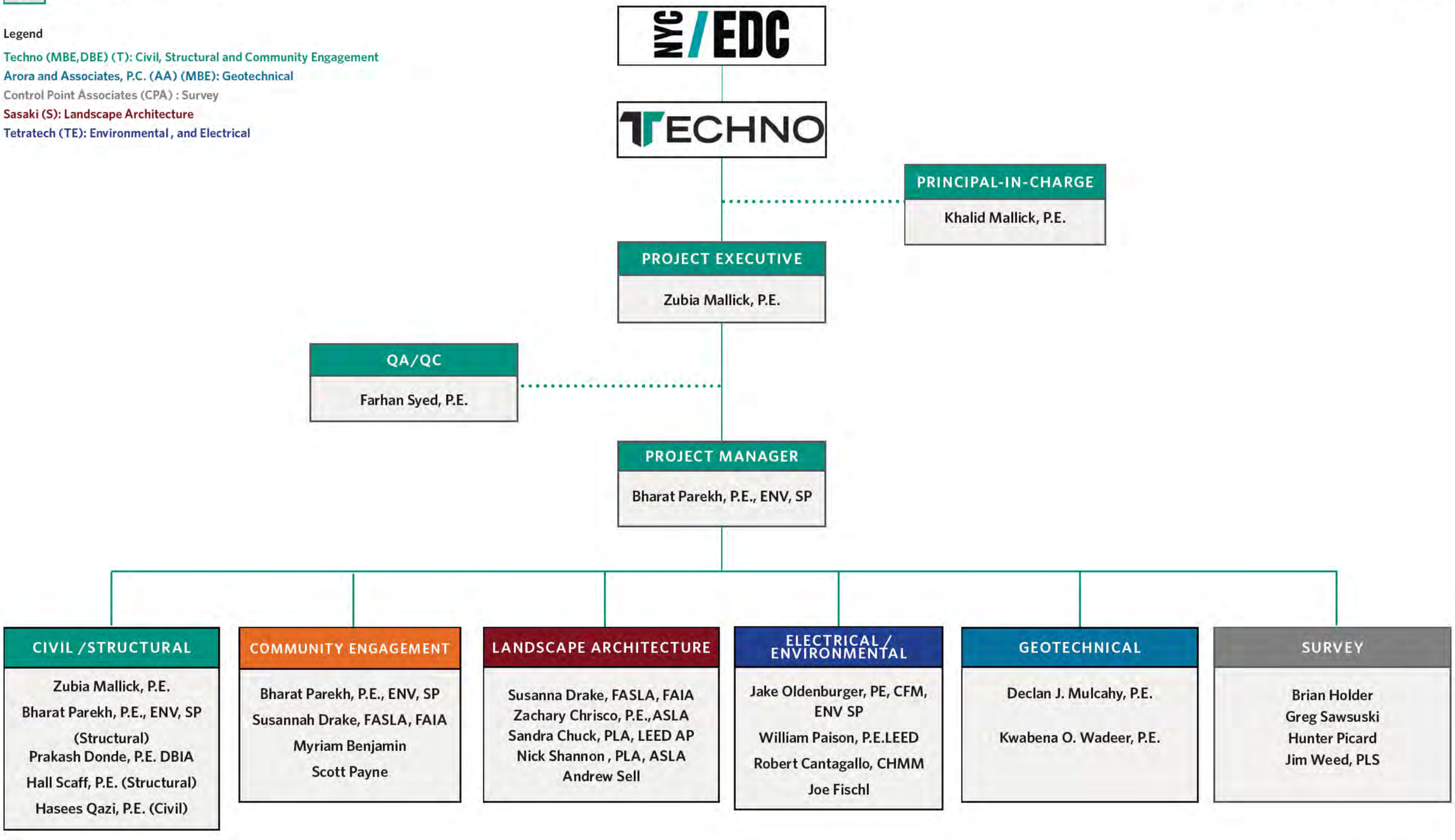
NEW YORK STATE OF OPPORTUNITY. Division of Minority and Women's Business Development

A Division of Empire State Development

D ORGANIZATION CHART

Legend

Techno (MBE,DBE) (T): Civil, Structural and Community Engagement
Arora and Associates, P.C. (AA) (MBE): Geotechnical
Control Point Associates (CPA) : Survey
Sasaki (S): Landscape Architecture
Tetratech (TE): Environmental , and Electrical



TECHNO

Zubia Mallick, P.E.

Project Executive

Education
B.S., Civil Engineering, Rutgers University, New Brunswick, NJ

Years of Experience:10

Licenses & Registrations
Professional Engineer
- New York
- New Jersey
- Maryland
- Washington D.C.

Certifications + Skills
OSHA 30 Hour Construction Safety

OSHA 10 Hour Construction Safety

gINT

INROADS

Primavera P6

MicroStation

Microsoft Office

Adobe Video/Photo Editing

MatLab Computer Programming

SWAC

SIDA

PANYNJ, Issuing Officer Training

AutoCAD

Zubia Mallick, leads the firm's project management and design portfolio, serving as the project manager and providing direct oversight on all active design projects and pursuits. Her main focus is on facilities and infrastructure projects. She has experience in bringing design projects from conceptual and preliminary stages through to final design, to include the production of plans, specifications, and estimates, as well as construction oversight.

EXPERIENCE

NYCDDC | HWPR20QC - PRELIMINARY AND FINAL DESIGN SERVICES FOR COMPLEX PEDESTRIAN RAMPS | QUEENS, NY | TECHNO |OCT 2020 – PRESENT | PROJECT MANAGER

Zubia is providing project oversight on this Total Design Project, including both Preliminary Design and Final Design for the Reconstruction of pedestrian ramps in New York City's (NYC) Borough of Queens, within Community Boards 7,8, and 11-13, in order to provide accessibility compliance at 47 corners in conformance with the Americans with Disabilities Act (ADA), and the requirements of the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG) under the Architectural Barriers Act (ABA) as adopted by the New York State (NYS) Department of Transportation (DOT). The proposed scope of work includes the design and modification of corner sidewalk quadrants according to the requirements of the NYCDDC Design Directives and DOT Street Design Manual to correct unsatisfactory conditions. Zubia is involved with the performance of the project budget, schedule, and quality control.

NYCDDC | HWP19KC3 - PRELIMINARY AND FINAL DESIGN SERVICES FOR COMPLEX PEDESTRIAN RAMPS | BROOKLYN, NY | TECHNO | NOV 2018 – PRESENT | PROJECT MANAGER

Zubia is responsible for client engagement and management of accessibility engineering design services for the reconstruction of complex pedestrian ramps in this urban, high traffic area within NYC's Brooklyn borough. Zubia prepares technical reports and addresses comments, leads strategy meetings, and coordinates subconsultant services such as topographic surveys working with City agencies to ensure compliance with DDC Design Guidelines and Directives (July 2010). She assists in the preparation of CPM construction schedules and project budgets, managing, analyzing, and implementing corrective actions when required.

NYCDDC | HWXS311V1 - CLIFFORD PLACE STEP STREET | BRONX, NY | TECHNO |SEPT 2016 – AUG 2019 | PROJECT EXECUTIVE

The construction of an upper stairway measuring 90 feet by 11.5 feet with three landings, and lower stairs 40 feet by 6.17 feet with four landings connecting the Grand Concourse with Walton Avenue. After demolition of the existing stairs the underlying field conditions revealed the presence of extensive amounts of rock throughout the project site, as well as, structural instability of the retaining walls that were to remain in place. These unforeseen challenges and additional scope of work had significant impacts on the already inconvenienced local community. Early accommodations were made with the construction of a custom steel stairway at the community's request resulting in changes to the staging of construction, leaving less space. The Community Construction Liaison coordinated throughout the project with Board #5 and the numerous stakeholders. Zubia working in collaboration with the Engineer-in-Charge and Design team (AECOM/QRP) project managers assisted in sequencing and planning, providing continuous review and verification, beginning with the establishment of the initial budget and covering subsequent changes. Negotiating changes to the project and further evaluating those costs impacts against the overall construction schedule ensuring that all phases and milestones of the construction process were being met and maintained.

Zubia Mallick, P.E.

Project Executive

EXPERIENCE CONTINUED

NYCDDC | HWP15KCL - SIMPLE LANDMARK AND COMPLEX PEDESTRIAN RAMPS | BROOKLYN AND QUEENS, NY | TECHNO |FEB 2017 – PRESENT | PROJECT MANAGER

NYCDDC | GREEN INFRASTRUCTURE FLUSHING CREEK | QUEENS, NY | TECHNO |SEPT2016 – PRESENT | PROJECT MANAGER

NYCDDC | DISTRIBUTION WATER MAIN (NEW BUILDING CONNECTIONS) | MANHATTAN, NY | TECHNO |SEPT 2016 – PRESENT | PROJECT MANAGER

NYCDDC | RECONSTRUCTION OF FLUSHING AVENUE | TECHNO | SEPT2016 – PRESENT | PROJECT MANAGER

NYCDDC | REPLACEMENT OF DISTRIBUTION WATER MAINS | QUEENS, NY | TECHNO | SEPT 2016 – PRESENT | PROJECT MANAGER

Zubia also serves Techno's Project Manager for their NYCDDC Small Firms REI Requirements Contract. She is focused on working with each client, our resident engineer and staff, providing oversight to make certain that the project is cost-effective with timely delivery, as well as providing support. She is currently the Project Manager on the following projects:

- NYCDDC Preliminary and Final Design Services for Complex Pedestrian Ramps, Borough of Brooklyn
- NYCDDC, Preliminary and Final Design Services for NYCDDC, REI Services, Reconstruction of Clifford Place Step Street, Bronx, NY
- NYCDDC, REI Services, Simple Landmark and Complex Ped Ramps, Brooklyn and Queens, NY
- NYCDDC, REI Services, Green Infrastructure in Flushing Creek, Queens, NY
- NYCDDC, REI Services, Distribution Water Main (New Building Connections), Manhattan, NY
- NYCDDC, REI Services, Reconstruction of Flushing Avenue
- NYCDDC, REI Services, Replacement of Distribution Water Main, Queens, NY

WSP PARSONS BRINCKERHOFF | VARIOUS PROJECTS | JUL 2014 - APR 2016 | CIVIL ENGINEER

Projects Included:

MTA | CANARSIE TUNNEL REHABILITATION | MTA MEGAPROJECT CANARSIE TUBE-SANDY REHABILITATION PROJECT | CIVIL ENGINEER

- Inspection and Conditions Assessment of Existing Tunnel infrastructure
- Investigation of utilities and design of utility relocation
- Design of MPT, temporary roadway schemes, 'final roadway pavement
- Design of sidewalk/curb grading & drainage through Lower Manhattan and Brooklyn.

NJ TRANSIT | COUNTY YARD IMPROVEMENTS PROGRAM | DESIGN RECONSTRUCTION OF DELCOM LEAD LINE | CIVIL ENGINEER

- Analysis of utility impacts and relocations
- Earthwork analysis
- Track placement/grading design to mitigate any effects of LOI
- Drainage design
- Access road design
- Production of preliminary, 10% and 30% plan sets.

NJTPA LOCAL SAFETY PROGRAM | CIVIL ENGINEER

Design of ADA compliant ramps, sidewalk repairs & refuge islands for advancement of safety initiatives on county and local roads.

NEWARK AIRPORT CAPACITY STUDY | CIVIL ENGINEER

- Conditions assessment of existing infrastructure
- Design of conceptual roadway network for multiple Airport concepts for a potential multi-billion dollar Newark Airport redesign project for Port Authority

LONG ISLAND RAILROAD ATLANTIC YARDS | CIVIL ENGINEER

Construction services management team including handling of all RFIs and submittals from various contractors and vendors

DELAWARE RIVER HERITAGE TRAIL | CIVIL ENGINEER

Design of a 5-mile section of the multi-use path in Burlington County, along with study of utility conflicts and design of relocations.

Office of the Professions

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License Information *

09/09/2022

Name : MALLICK ZUBIA
Address : MONMOUTH JUNCTION NJ
Profession : PROFESSIONAL ENGINEERING
License No: 101398
Date of Licensure : 06/19/2019
Additional Qualification :
Status : REGISTERED
Registered through last day of : 08/24

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TECHNO

Farhan Syed, P.E.

QA/QC

Education
M.S. Civil Engineering, New Jersey Institute of Technology

B.S. Civil Engineering, University of Engineering and Technology

Years of Experience: 33

Licenses & Registrations
Professional Engineer
- New York

Skills + Certifications
OSHA 30 Hour Construction Safety

NYC Building Code

Multiple Dwelling Law

Local Law 11/98 Facade Inspection and Safety

ADA

Primavera Expedition

P6 Scheduling

CPM and PERT Scheduling

Reinforced Concrete and Finite Element Analysis

Farhan Syed is Senior Vice President at Techno for Vertical Construction and the Building Market Sector focusing on project management, performance of project budget, schedule, and quality control. Farhan brings a wide spectrum of experience and deep knowledge of project management policies and procedures, managing large Capital Programs at the New York City Housing Authority (NYCHA) where he supervised four project management groups and one negotiations support unit. He coordinated his team's work with multiple departments such as Capital Planning, Energy and Sustainability, and Support Services and Quality Management effectively providing comprehensive management on NYCHA capital projects valued at over $1 billion from planning through to completion. He has also lead Requirements Contract Project Management teams where he provided oversight for cost-effective timely delivery, as well as providing executive support of the project. His responsibilities include quality oversight, client management, project execution, and strategic planning. Farhan keeps his involvement from beginning to end of the entire project. As a part of his function as Contract Executive, he will visit the job site on a routine basis, overseeing field and field office personnel, maintaining a relationship with the NYCDDC team and ensuring that our staff is performing up to the required standards and expectations.

EXPERIENCE

TECHNO | VARIOUS PROJECTS | SENIOR VICE PRESIDENT

Farhan leads the firm's public building facilities and water and wastewater portfolio having worked on multiple wastewater treatment plants and pump station projects. He is responsible for the NYCDDC infrastructure and public buildings portfolio and the project portfolio in Baltimore, providing oversight to make certain that the projects are cost-effective with timely delivery. Farhan is involved with project management, performance of project budget, schedule, and quality control. He focuses on working with multiple clients, our project managers, resident engineers and field and office staff, providing oversight to make certain that the project is cost-effective with timely delivery. He has served as the Contract Executive on the following projects:

- NYCDDC, CM Services, Requirements Contract, Public Buildings, Small Projects, Citywide, NY
- Nassau County Department of Public Works, CM Services, On-Call Services, Building Construction Group, Various Locations, NY
- NYCDDC, REI Services, QED1039, Watermain Replacement/Repair (New Building Connections), Brooklyn and Queens, NY
- NYCDDC, REI Services, HWPEDSF4, Citywide Pedestrian Safety Improvements
- NYCDDC, REI Services, HWP15KCL, Simple Complex & Landmark Pedestrian Ramps, Brooklyn and Queens, NY
- NYCDDC, REI Services, MED642, Installation of Distribution Water Main and Appurtenances for New Building Construction, Manhattan, NY
- NYCDDC, REI Services, SEQ200464, Installation of Storm Sewer, 115th St, College Point, Queens, NY
- NYCDDC, REI Services, HWK1048B, Reconstruction of Flushing Avenue, Waterfront Greenway Initiative, Brooklyn, NY
- NYCDDC, CM Services, PW348-72, Petroleum Storage Tanks, Bronx, NY

Farhan Syed, P.E.

QA/QC

EXPERIENCE CONTINUED

NYCDDC, GCTI1101 - REI Services for Green Infrastructures in Flushing Creek, Queens, NY
Farhan assisted Techno in the close-out process following Resident Engineering Inspection (REI) services for the construction of approximately 300 Right-of-Way Bioswales (ROWBS) and other green infrastructure in the Flushing Bay area (Tallman Island Combined Sewer Overflow tributary area), including curb and sidewalk reconstruction, pavement marking, and traffic work.

NYCEDC, 54970002 - Reconstruction of 125th Street/Park Avenue Public Realm, Manhattan, NY
NYCEDC, 48480004- Water Street Corridor Streetscape Improvement, Manhattan, NY

NEW YORK CITY HOUSING AUTHORITY | VICE PRESIDENT OF CONSTRUCTION PROGRAMS & CAPITAL PROJECT DIVISION
Farhan served as the Vice President of Construction Programs for the New York City Housing Authority's (NYCHA) Capital Projects Division (CPD) from 2011 to 2017. During his tenure, Farhan managed a team of 180 professional to deliver over $ 1 Billion of Federal, State and City Funded Capital Projects from inception through completion. His team delivered the construction project safely and on time. Farhan also has experience and knowledge of Federally funded (HUD) project and Mixed Finance project portfolios. He is experienced in implementing the appropriate policies and procedures for public housing and the construction projects are obligated and expended within the Federal and Mixed Funding deadlines. He led the successful completion of the following portfolios as the Vice President.

- Superstorm Sandy Recovery Program: Farhan was an integral part of the post storm recovery team and provided leadership and support to the CPD team in the immediate aftermath of the storm in the agency's Recovery and Resiliency efforts. Superstorm Sandy caused the most costly and destructive disaster to impact New York City public housing in its history Hurricane Sandy caused over $3 billion in damage to NYCHA properties. The storm's surge impacted 10 percent of NYCHA's developments, knocking out power to more than 400 buildings and leaving 386 buildings and 65,000 Residents without heat and hot water. The Recovery Program included cleanup of hundreds of trees on NYCHA property that were uprooted, cleaning of sand piles accumulated up to four feet tall blocking basement doors, and pumping of contaminated saltwater permanently that destroyed boilers and electrical panels, underground electrical conduits, massive trash compactors, basement areas and playgrounds. These recovery efforts resulted in the restoration of heat, hot water and electricity to the affected Residents and Developments in less than a month.
- Needs Assessment Inspections for NYCHA facilities: Farhan managed CPD Inspection Teams for roof to cellar inspections of NYCHA developments for the condition assessment, upkeep and maintenance of these developments. The inspections included assessment of all critical components, i.e., roofs, facades, windows, interior of the buildings including sample number of apartments in each development, boilers, HVAC, plumbing, and electrical systems. The reports from these inspections was used to prioritize and establish the budget for five, ten, and fifteen-year Capital Plans for the NYCHA developments and bring them to a state of good repair. This data was also used as a basis for establishing a five year Needs Assessment Plan for NYCHA developments.
- Mixed Financed Improvements: The scope of work under this portfolio consisted of exterior renovation of 221 buildings at cost of $250 million. The duration of completing this work was mandated by the deadline of funding expenditure and was set at two years. Work involved but not limited to exterior brick renovations, roof work, elevator work and miscellaneous groundwork at 21 NYCHA developments. All buildings were state funded.
- NYCHA Security Program (Installation of CCTV Cameras and Layered Access Control): In the first year of this program the security installations were completed at 80 NYCHA developments. The total cost of this program was approximately $48 million. All construction work was completed within 8 months. In this portfolio of construction work 4500 cameras were installed in 80 developments. Work was extremely challenging to get City Funding approval and Comptroller Registration of each project. Work was completed before the set deadline. These critical security portfolios were completed four years in succession before time and within budget.
- Bond B Program: This program consisted of providing complete rehabilitation of building envelopes (Facades, Roofs and Windows) at 331 NYCHA buildings. The program was funded by a $ 600 million Bond (B) through Housing Development Corporation as a bond to NYCHA to prioritize and upgrade their worst building envelopes. This was a four-year program from inception through completion which was delivered in less than four years with all projects completed to safe and watertight buildings for the residents of these 31 developments.

The University of the State of New York
Education Department
Office of the Professions

REGISTRATION CERTIFICATE

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License Number: 074817-01 Certificate Number: 1354991

SYED FARHAN MOHAMMAD

87(2)(b) [redacted]

is registered to practice in New York State through 06/30/2024 as a(n)
PROFESSIONAL ENGINEER

LICENSEE/REGISTRANT

EXECUTIVE SECRETARY

INTERIM COMMISSIONER OF EDUCATION

DEPUTY COMMISSIONER
FOR THE PROFESSIONS

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TECHNO

Bharat Parekh, P.E., ENV SP

Project Manager

Education
M.S., Structural Engineer
City College, New York

M.S., Planning
School of Planning,
Ahmedabad, India

B.S., Civil Engineering
S.G. University, Surat, India

Years of Experience: 43

Licenses & Registrations
Professional Engineer
New York
ENV SP

Certifications + Skills
Continuing education seminars, training courses, presentations, etc. I am hard working, self-motivated and challenge oriented. I was President (2014) and presently a Director of the MENY.

I am pleased to offer 43+ years of professional expertise in Planning, Management, Design and Construction of infrastructure projects, that includes 3+ years (post City employment) with various consultants, 28+ years with the City of New York and 12+ years with various consulting firms. My present responsibilities include client management, program management, project pursuit, preparation of project & fee proposals, supervision and management of multiple projects and teams concurrently, etc. I am very familiar with the standards and procedures of NYCDDC, NYCDOT, NYCDEP, NYCDPR, DSNY, MTA C&D, NYSDOT, FHWA, etc. During 28+ years of my professional career with the City of New York (NYCDDC and NYCDOT-Bridges), I have closely worked with Upper Management (various Commissioners) and followed their leadership to deliver the program/projects within budget and on schedule. With NYCDDC, I supervised Bridge/Step Street/Retaining Wall unit's program, about ten professional staff, and grew the portfolio from about $70 million (2005) to about $430 million (2018), which included several Pedestrian Bridges, Bulkheads, Retaining Walls, Step Streets, Plazas, School Safety Projects, Highway Design Projects, etc. With NYCDOT-Bridges, I supervised a professional staff of 30+ engineers and managed a ~$800 million Capital Program for Bridge Reconstruction (60+ bridge projects in various phases of design and construction). I presented the projects to Upper Management, OMB, other City agencies, Public Design Commission, Community Boards, and elected officials to get their concurrence. I have managed all aspects of design process from "inception to completion" – procurement of design contract, fee negotiation, conceptual design, final design and construction administration. I have successfully completed design and construction contracts for several infrastructure projects, some of them ahead of its accelerated schedule. Several projects that I completed, have received prestigious awards.

EXPERIENCE

NYSDOT, NYCDOT, NYCDDC, MTA C&D | PROJECT NAME | NEW HYDE PARK, NEW YORK | M & J ENGINEERING, PC | AUG 2020-PRESENT | SENIOR PROJECT MANAGER
I track and pursue client's (NYSDOT, NYCDOT, NYCDDC, MTA C&D, etc.) 5-year and 10-year capital program. I prepare technical proposals and fee proposals for selected RFPs. I prepare and participate in Oral Presentations with the agencies when "short-listed" by the agency. I am very familiar with the procurement, design and construction procedures of NYCDDC, NYCDOT, NYCDEP, NYCDPR, NYSDOT, etc. I also provide design guidance to design teams for various infrastructure projects.

HENNISON, DURHAM & RICHARDSON, ARCHITECTURE & ENGINEERING, PC (HDR) |NEW YORK, NY | MAR 2019-AUG 2020 | SENIOR PROJECT MANAGER
Responsible for client management & coordination, program management, project pursuit, project proposals & fee preparation, etc. I have tracked and pursued projects with various government and semi-government agencies like, NYCDOT, NYSDOT, NYCDPR, NYCEDC, Port Authority of NY & NJ, etc. I am very familiar with the procurement, design and construction procedures of NYCDOT, NYSDOT, NYCDEP, NYCDPR, DSNY, FHWA, etc.

Bharat Parekh, P.E., ENV SP

Project Manager

EXPERIENCE CONTINUED

NEW YORK CITY DEPT. OF DESIGN+CONSTWCTION| NEW YORK, NY | AUG 05- FEB 2019 | SENIOR PROJECT EXECUTIVE AND DIRECTOR

I have held the positions of Senior Project Executive and Director with NYCDDC-Division of Infrastructure (Bridge/Step Street/Retaining Wall program unit). I supervised 2 Deputy Directors, 2 EICs, 6 Design Engineers, one Administrative Assistant. Under my leadership, the unit's portfolio had grown from about $70 million (2005) to about $430 million (2018). I managed the consultant design contracts for 9 Pedestrian Bridges, 4 Bulkheads, 6 Retaining Walls, 5 Step Streets, 2 Plaza, 4 School Safety and 2 Highway projects. I get involved in the projects from "inception to completion". I reviewed CPIs by the client agencies and advise them about scope, budget and schedule. I prepared several RFPs and Contracts for Bridge/Retaining Wall/Step Street/Bulkhead/Plaza program. I negotiated the Contract Fees with several consultants, procured the contracts and managed the design contract from conceptual design, to preliminary design, to final design and procured the Construction Contracts. I also stayed involved in providing the Construction Support Services (CSS) during construction.

During my professional career with NYCDDC, I have:

- Supervised and provided day-to-day directions to professional staff of 10 and several consultants
- Coordinated meetings with the staff, consultants, City and non-city agencies to resolve critical issues, track overall progress & budget
- Presented projects to upper management, community boards, PDC, elected officials, etc.
- Reviewed Contract Documents (plans, specifications and estimates) prepared by the consultants for compliance with AASHTO, FHWA, NYSDOT, NYCDOT/DDC/DPR Design standards
- Bid, awarded and registered contracts in accordance with the Procurement Policy Board (PPB) rules
- Provided Construction Support Services - provide alternate design solution for field condition related issues

NEW YORK CITY DEPARTMENT OF TRANSPORTATION, DIVISION OF BRIDGES | NEW YORK, NY | AUG 90- AUG 05 |DIRECTOR, DEPUTY DIRECTOR, PROJECT MANAGER, PROJECT ENGINEER

I have held various positions (Director, Deputy Director, Project Manager, Project Engineer, etc.) with NYCDOT-Division of Bridges. The specific responsibilities I have taken were:

- As Director of Brooklyn & Manhattan section, I have effectively managed Capital Bridge Reconstruction program of ~$800 million (about 47 bridges in design and about 17 bridges in construction) and supervised a staff of 30+ professionals
- As Deputy Director of Queens, Bronx & S. I. Section, I have supervised a staff of 5+ professionals and overseen Bridge Design and Construction program of ~$148 million with "inception to completion" (14 bridges)
- As Director of Consultant Design - I, I have overseen Capital Bridge Reconstruction Program of ~$726 million
- (41 bridges) and supervised a staff of 16+ professionals
- As Project Manager - Consultant Design II, have supervised up to five project engineers, bid over 12 bridge construction projects (~ $82 million) and completed over 16 Preliminary Design projects
- During absence of the Deputy Chief Engineer (A/C) and Director, I filled in for their responsibilities and I was actively involved in all decision making
- I participated in streamlining unit's Program/Project Management System and developing Bid Scope with IBM.
- I have overseen GEIS and preliminary design for 9 Belt Parkway bridges and procured PM-REI contract (~$69 million)
- I participated in several Value Engineering workshops with OMB for several bridge projects over $50 million.
- I have reviewed in-depth inspection reports, traffic reports, concrete coring & encasement removal reports, subsurface investigation reports plans, specifications, special provisions, cost estimates, etc.
- I also prepared project schedules, status reports, correspondences to consultants and various City & private agencies.
- As Manager of FMS unit of QA, I supervised 13+ Engineers and oversee 16 field engineers involved in review and approval of structural steel and concrete shop drawings, welding procedure specifications, testing of welded components, corrective procedures, etc. and fabrication of structural steel and prestressed-precast concrete elements.
- As EIC of Harlem River bridges, I have supervised 6 Engineers, 7 Trade Supervisors and overseen over 50 tradesmen. I have overseen repairs and maintenance program of about 62 bridges over water including about 25 movable bridges. I organized & dispatched emergency response team and scheduled preventive maintenance of the bridges



ENVISION

BHARAT PAREKH

ENVISION SUSTAINABILITY PROFESSIONAL

has received the Envision Sustainability Professional credential upon successful completion of the applicable training and exam.

Jan 16, 2015
Issued On

Dec 13, 2022
Valid Through

Anthony D. Kane, President and CEO
Institute for Sustainable Infrastructure

Institute for Sustainable Infrastructure

#103214

THE UNIVERSITY OF THE STATE OF NEW YORK

EDUCATION DEPARTMENT

BE IT KNOWN THAT

BHARATKUMAR DINMANISHANKER PAREKH

HAVING GIVEN SATISFACTORY EVIDENCE OF THE COMPLETION OF PROFESSIONAL AND OTHER REQUIREMENTS PRESCRIBED BY LAW IS QUALIFIED TO PRACTICE AS A

PROFESSIONAL ENGINEER

IN THE STATE OF NEW YORK

IN WITNESS WHEREOF THE EDUCATION DEPARTMENT GRANTS THIS LICENSE UNDER ITS SEAL AT ALBANY, NEW YORK
THIS TWENTY-SEVENTH DAY OF FEBRUARY, 1987.

LICENSE NUMBER
063317

PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

EXECUTIVE SECRETARY
STATE BOARD FOR
ENGINEERING AND LAND SURVEYING

1020692

TECHNO

Prakash Donde, P.E., DBIA

Civil / Structural Engineer

Prakash Donde serves as Techno's Senior Vice President responsible Tunneling and Design Build projects. Prakash previously served as President of COWI/Jenny Engineering Corporation, a worldwide leader in Tunnel Engineering. Prakash has over 35 years of experience in design and construction management of underground structures as Resident Engineer, Project Director, Construction Manager, and Lead Designer on numerous Tunneling and Horizontal Directional Drilling (HDD) projects.

Education
M.S., Structural/ Geotechnical, South Dakota School of Mines & Technology

M.S., Structural Engineering, Indian Institute of Technology

Years of Experience: 40

Licenses & Registrations
Professional Engineer

- New York
- New Jersey
- California
- Washington D.C.
- Florida
- Massachusetts
- Maryland
- Ohio
- Virginia

Memberships
Certified DBIA
FASCE
The Moles
NSPE

EXPERIENCE

CON EDISON | FIRST AVENUE STEAM TUNNEL | MANHATTAN, NY | PROJECT DIRECTOR/MANAGER
Project Director/QA-QC Manager for the design and Construction Management for installation of new steam lines under First Avenue in Manhattan. Project included installation of expansion joints and anchors on the steam pipes designed to carry superheated steam. It also included installation of elevator, lighting, and communication lines. Several utilities in the street at 36th Street and 20th Street were relocated during the construction of this project.

NYCT | YUKON BUS DEPOT | STATEN ISLAND, NY | PROJECT MANAGER AND SENIOR DESIGNER
Design of Yukon Bus Depot building structure. Largest bus depot of the New York City Transit Authority (NYCT). A building which accommodated 350 NYCT buses. Design of one story building, foundations. Worked closely with architects on all aspects of building construction including façade, plumbing, electrical, roofing, and drainage work.

NYCDEP | CM SERVICES FOR CITY WATER TUNNEL NO. 3 | MANHATTAN, BROOKLYN, AND QUEENS | PROJECT MANAGER
Installation of an HDD borehole to explore geology along the tunnel alignment near Manhattan bridge foundation. Provided Geotechnical Inspection and Engineering services for evaluation of tunnel construction for the tunnel crossing two faults in Brooklyn.

NYCT | NEW YORK CITY TRANSIT AUTHORITY | PRINCIPAL IN CHARGE

Chemical grouting to stop water leaks in 63rd Street, Archer Avenue and 2nd Avenue Subway Lines. Prepared specifications for chemical grouting and performed inspection of leak remediation work.

NJ TRANSIT | ARC OR GATEWAY TUNNEL PROJECT | NYC TO SEACAUCUS | OWNER'S REPRESENTATIVE
Design Build project in construction management of a 24,000 ft long, 25 ft Project Controls and Construction Management (PCCM) Services, NJ Transit, NY & NJ. Tunnel Advisor for construction of new NJ Transit tunnels from Secaucus, NJ to NY Penn Station. The Twin Tunnels are 28 ft in diameter, and 10 miles long. Excavation by tunnel boring machine (TBM), sequential excavation, cut-&-cover, and drill-&-blast. Design review, constructability review, and construction management.

TBTA | FLOOD MITIGATION OF GOVERNOR'S ISLAND AND QMT AND HLCT | NYC | PROJECT MANAGER
Worked with D-B contractor team of OHL-Judlau on the D-B contract delivery of the flood wall around the Governor's Island. Also, developed the flood gates and flood walls at and around their portals on both sides of QMT and HLCT. Field tested the structures.

Prakash Donde, P.E., DBIA

Civil / Structural Engineer

EXPERIENCE CONTINUED

IBM | WATSON RESEARCH CENTER UTILITY RELOCATION | YORKTOWN HEIGHTS, NY | PROJECT QUALITY MANAGER
The design of relocation of utilities located in the ceiling of the 2,500 long building to the basement of the building. Utilities included power lines, communication lines, gas pipes, and other utilities. The work needed significant coordination with the IBM staff that was working in the building while the relocation work was performed.

IBM | INTERNATIONAL HEADQUARTERS UTILITY RELOCATION | ARMONK, NY | PROJECT AND QUALITY MANAGER
Design and CM of steam, power, and communications lines connecting all buildings at the IBM Headquarters. Steam, cooling lines at the Headquarters were in the ground and were corroded and leaking. They were relocated and installed in a new tunnel where they were accessible for service and monitoring as required.

CHESAPEAKE BAY BRIDGE TUNNEL (CBBT) COMMISSION | VA | THIMBLE SHOAL PROJECT | OWNER'S REPRESENTATIVE
CBBT Commission in **design-build** procurement project delivery of this $1 Billion project. It was the owner's first project with the D-B project delivery system. Guided the owner in developing bridging documents, worked with the owner in negotiations in analyzing bids, and change process. Assisted the owner in selecting the design-builder who would eventually design and build the project. Provided design-build bridging documents of the 5,800 ft long tunnel, bridge approaches, construction of two 8-acre artificial islands, and a fishing pier.

DC WATER | BLUE PLAINS TUNNEL | WASHINGTON DC | PRINCIPAL IN CHARGE AND QA MANAGER
REI Services for a 24,000 ft long, 25 ft diameter tunnel, with bolted/gasketed precast concrete liner, with three shafts. Excavation by Earth Pressure Balance Machine (EPBM). Monitored construction progress, resolved field issues, responsible for REI staff.

DC WATER | POPLAR POINT PROJECT | WASHINGTON DC | PROJECT DIRECTOR
Design of trenchless construction for 1,000 linear feet of 66-inch sewer; and 350 feet of 24-inch Barry Road replacement sewer. Responsible for overseeing pile design for building foundation, pile support of forced main, and 500 linear feet of ground improvement. Provided services during construction.

DC WATER | ANACOSTIA RIVER TUNNEL (ART) | WASHINGTON, DC | DESIGN MANAGER
Represented the design-build team of Salini-Impregilio-Lane/Parsons. Worked with Parsons to design a difficult tunnel crossing underneath Anacostia River. The project was considered highly successful by the owner.

TREN URBINO | MINNILLAS EXTENSION PROJECT | SAN JUAN, PUERTO RICO | PROJECT MANAGER
Represented the owner to develop bridging documents for design-build project delivery. Assisted the owner in developing procurement documents and terms and conditions. Technical Project Manager for the design of two subway stations, Minillas and San Mateo, and a crossover by NATM technique for San Juan's first subway line in Downtown. The station lengths were 150 meters each and the length of the crossover was 140 meters.

SINGAPORE MASS RAPIID TRANSIT CORPORATION | SINGAPORE METRO CONTRACT 105 | SINGAPORE | CHIEF DESIGNER
Assisted contractor in the design-build bidding with the D-B team. Chief Designer for design of 2,000 meter twin subway tunnels in granitic soils at Orchard Boulevard. Station interfacing, specifications, estimates, sumps, underpinning of structures along tunnels. Design of cast-in-place concrete lining as well as pre-cast concrete segmental lining alternative.

SRVSA | RELOCATED OUTFALL TUNNEL | BRIDGEWATER, NJ | PROJECT MANAGER AND QA MANAGER
Project Manager for design and construction oversight of a sewer tunnel constructed by North-East Remsco. The tunnel was 9 ft. in diameter, 260 ft. long, which passed under railroad tracks with shallow ground cover.

CALIFORNIA HIGH SPEED RAIL AUTHORITY | DESIGN BUILD PACKAGE 1 | MADERA COUNTY TO FRESNO COUNTY, CA | PROJECT MANAGER
Worked for the Design-Build team of Ferrovial Agroman to design the first high speed rail project in the USA. High speed rail project was thrity-two miles long. The design was performed to high level design standards for all aspects of structures along the thirty-two miles of alignment. Designed retaining walls, and foundations for several bridge structures and grade separations.

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07/22/2021

Name : DONDE PRAKASH M
Address : WARREN NJ
Profession : PROFESSIONAL ENGINEERING
License No: 047098
Date of Licensure : 07/29/1971
Additional Qualification :
Status : REGISTERED
Registered through last day of : 06/24

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TECHNO

Hal Scaff, III, P.E.

Civil / Structural Engineer

Education
B.S., Civil Engineering, Lehigh University, P.A.

Years of Experience: 31

Licenses & Registrations
Professional Engineer

- New York
- New Jersey

Skills + Certifications
OSHA 30 Hour Certification

USACOE MII estimator's certificate

NYC Transit Track Safety Certification

MS Project Proficiency

ASTM D2487 Unified Soil Classification System

Approved Federal Energy Regulatory Commission High Hazard Dams Independent Consultant

TWIC cardholder

CPR and Basic First Aid

Hal is an experienced engineer with over 30 years in project management and engineering for water resources, tunnels, subways, train stations and heavy construction requiring complex technical, planning, scheduling and management skills. He is has experience working with major government agencies such as NYCDEP, PANYNJ, and the MTA. Hal has excellent interpersonal, communication, and technical skills. He thrives in high pressure and challenging work environments.

EXPERIENCE

MTA | METRO NORTH HARLEM LINE COMMUNICATIONS & SIGNALING IMPROVEMENTS | STV
Responsible for project planning and coordination, daily report review, tracking of quantities as pay items, monthly pay estimate approval, correspondence, estimating and weekly meeting attendance. The program involves day-shifts, night-shifts and weekend work. Hal performed as an inspector when team members were unavailable and performed as Resident Engineer when necessary.

WATER MAIN REPLACEMENTS FOR SUEZ WATER | MOTT MACDONALD CORP.
Hal observed contractor progress on a daily basis and prepared daily construction reports and as-built drawings for the installation of new water mains. SUEZ Water contracts require detailed documentation of equipment, manpower, materials installed and the methods of installation on a daily basis. Hal reviewed monthly subcontractor payment requests in accordance with daily report documentation. Additional responsibilities included meeting attendance, safety reviews, quality assurance quality control, correspondence and telephone conferences.

NYCDEP | DRILLING & CORING OVERSIGHT FOR KEC2 TUNNEL | JENNY ENGINEERING | FIELD LIAISON
Hal performed as Field Liaison to interface office and field teams performing the design phase of a $6B tunneling project. The geological exploration encompassed three drilling crews working at five locations to investigate four possible tunnel alignments. Daily reports were prepared by Hal and submitted to the team by email. Archiving and access to daily reports proved invaluable in resolving all later requirements for documentation and information. Hal prepared weekly schedules and participated in teleconferences and meetings. Corrective action plans and permit compliance reports were prepared and submitted. Hal authorized subcontractor payments each month.

NYCDEP | ROCKAWAY BEACH BOARDWALK RECONSTRUCTION | JENNY ENGINEERING CORP. | RESIDENT ENGINEER
During boardwalk demolition, an unforeseen condition was realized. A water main from the 1880's was not shown on the base map. Hal performed as Resident Engineer for an out-of-scope water main replacement (12" and 20" diameters). The work was completed on a time and materials basis. Hal prepared four-six-page daily reports with pictures to document field conditions and captured all data necessary for cost computations, monthly payments and subcontractor administration relating to the out-of-scope water main installation. Hal performed review and certification of the as-built drawings that were submitted to NYC DEP upon completion of the work.

NYCT-MTA | SOUTH FERRY SUBWAY STATION | JENNY ENGINEERING CORP. | LEAD FIELD ENGINEER
Lead Field Engineer for the Grouting Remediation Program to restore the water-tightness of 1,200 LF of station and tunnel sections located 30-feet below sea level. The station was inundated by Hurricane Sandy in 2012 and the leakage after dewatering of the flood was determined unacceptable. Daily Logs were prepared to document the drilling, dye testing and 300 psi grout injection program progress. The program included secondary injections using actuator and inhibitor materials.

Hal Scaff, III, P.E.

Civil / Structural Engineer

EXPERIENCE CONTINUED

NJ AMERICAN WATER | SWIMMING RIVER SPILLWAY REHABILITATION | EJD ASSOCIATES
Responsibilities included preparing daily reports for the demolition and rehabilitation of a large cast-in-place concrete spillway at an operational reservoir. Extensive sheeting was driven for support of slopes, erosion control and falsework cofferdams. Performed oversight of subcontractor for vibration and noise monitoring, assisted in protecting the safety of the public and reporting/archiving the noise and vibration monitoring results.

JENNY ENGINEERING | AKRON CSO INTERCEPTOR TUNNEL | 2013 | SENIOR PROJECT ENGINEER
Performed preliminary support of excavation designs, designed/estimated retaining wall geometry and prepared specifications for the live monitoring of noises, vibrations and dust resulting from rock excavations required for tunneling access.

USEPA | DA NANG AIRPORT DIOXIN REMEDIATION BID, VIETNAM | TETRA TECH | 2012 | SENIOR PROJECT ENGINEER
Preparation of a successful Contractor bid to perform 100,000 CY of earthmoving necessary for the restoration of contaminated airport soils located in a wetlands environment.

MALCOLM PIRNIE | THREE LANDFILL CLOSURES | WESTCHESTER CO, NY | 2011 | ESTIMATOR
Prepared schedules and estimates for the Owner prior to bidding. The cost of landfill closures were accurately forecasted for the Owner's budget prior to bidding.

NYCDEP | WARDS ISLAND WATER TREATMENT PLANT ARCADIS/MALCOLM PIRNIE| SENIOR INSPECTOR
Responsible for a Foundation Investigation Program involving subcontractor procurement, determination of pre-drill safety program(s) and execution of the foundation investigation program which provided the basis of design for new foundations for the proposed air handling and odor control equipment to be installed.

USACE | FIVE NEW ORLEANS HURRICANE RECOVERY PROJECTS | NOLA 2009 | ESTIMATOR
Hal used MII estimating software (developed by USACE) and MS Project to prepare estimates and schedules for five pumping station and flood wall projects. Prepared 75%, 95% and 100% documents in concurrence with the design and management team
progress.

NYCDEP | DELAWARE AQUEDUCT, RWB TUNNEL INVESTIGATION | ARCADIS/MALCOLM PIRNIE | SENIOR INSPECTOR
Hal was responsible to analyze tunnel leakage and perform field investigations to identify adverse tunnel conditions. Quarterly Tunnel Monitoring reports were prepared. Exhaustive field reconnaissance and hydrostatic testing was routinely performed. Examples include flow meter testing, flow meter upgrades, mass-balance analysis, ultrasonic and x-ray examinations of pipes/valves and autonomous underwater vehicle excursions. The team designed a remotely operated vehicle for tunnel investigation/rehabilitation, but it was never constructed.

SECAUCUS TRANSFER TRAIN STATION , SECAUCUS, NJ | NEW VERNON ENGINEERING | NIGHT SHIFT SUPERINTENDENT/CONTRACTOR QUALITY CONTROL
Hal performed subcontractor services to Terminal Construction, the General Contractor for Phase 6 of the Secaucus Transfer Train Station construction project. Located on the Northeast Corridor (NEC) 5 miles west of New York Penn Station and 5 miles east of Newark Penn Station. The Secaucus station has two platform levels connected by a third level on top. the NEC crosses above the Main Line, allowing passengers to transfer between trains. Amtrak trains run through Secaucus but do not stop. The electrified two-track Northeast Corridor embankment was expanded to three tracks for a mile on each side of the station and to four tracks through the station itself, allowing Amtrak and nonstop NJTransit trains to pass stopped trains. The two-track Bergen County Line on the bottom level lacks electrification and has four tracks and two island platforms it was re-aligned southwestward to join the two-track Main Line to pass through the station on the four-track lower level. The station 321,000 square feet with an upper concourse with food court and snack bar serving passengers switching trains. Over a two-year duration, Hal performed primarily as Night Shift Superintendent as well as Contractor Quality Control representative and Safety Officer. He reported to the Project Manager and submitted daily reports to the team. Additionally, Hal reviewed correspondence from the Owner's team, prepared draft responses to Owner's correspondence, prepared and reviewed schedules, attended subcontractor progress meetings, attended weekly Owner's meetings, monitored the project for safety concerns, performed quality control assessments and designed/ implemented corrective action plans in response to non-conformance reports. Construction Cost $450M

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License Information

Accurate as of May 18, 2022 3:21 PM

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Name: HAROLD HALL SCAFF III

Address: New Vernon,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: 24GE03865000

License Status: Active

Status Change Reason:

Issue Date: 9/2/1994

Expiration Date: 4/30/2024

NO Board Actions. For more information contact the New Jersey State Board of Professional Engineers and Land Surveyors (973)504-

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TECHNO

Hasees Qazi, P.E.

Civil Engineer

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

Years of Experience: 7

Licenses + Registrations
Professional Engineer
New Jersey

Certifications + Skills
Tunnel Inspection, FHWA-NHI-130110 Certification

AutoCAD Civil 3D

Microstation

Safety Inspection IN-Service Bridges FHWA-NHI-130056

OSHA 10-Hour Construction

Microsoft Project

Oracle Primavera P6

Confined Space Entry

Fall Protection

NYCDDC Water Main Training

Hasees Qazi is a professional Civil Engineer leading Techno's team in all aspects of design within our current contracts, including Highway Construction Plans, Utility/Drainage Plans, Lighting/ITS Plans, Traffic/ MPT Plans, and Pavement Marking Plans. Mr. Qazi is currently working on the design of three major infrastructure and drainage improvement projects in Brooklyn, Queens, and Staten Island. His other experience includes the design of civil and drainage projects such as roads, bridges, and airports with several public agencies including NYCDOT, NYCDDC, NYCT, PANYNJ, NJDOT, PENNDOT, and DRCC.

EXPERIENCE

NJDOT | SUDDER FALLS BRIDGE REPLACEMENT, FINAL DESIGN SERVICES | MICHAEL BAKER INTERNATIONAL | DRAINAGE/WATER RESOURCES ASSOCIATE
Mr. Qazi assisted in post-design of construction plans, drainage plans, and change of plans using inroads, Microstation and ArcGIS. Stormwater Management design, designing improvements to maintain NJDOT runoff requirements. He assisted the client with long-term prioritization for future separation of sewers. The designs were coordinated with the Ironbound Community Corporation, incorporating Green Streets Initiatives as well as Passaic Valley. He assisted in efforts in quantity backup calculations, utility conflicts with inlets and basins on final design plans, analysis, environmental services on-going RFI, and shop drawing submittals, while meeting NJDOT, PENNDOT, and Delaware and Raritan Canal Commission (DRCC) standards.

NJDOT | STORMWATER BASIN AND SELECTED ROADWAY OUTFALL ASSESSMENT AND ANALYSIS | MICHAEL BAKER INTERNATIONAL | DRAINAGE/WATER RESOURCES ASSOCIATE
Mr. Qazi assisted in ongoing roadway basin and drainage outfall identification, and inspection of all outfall and basins inventoried. He logged the locations of the outfalls and basins throughout Central New Jersey, utilizing GPS. He created recommendation and analysis reports of current roadway drainage issues, damages, and safety or assessment concerns.

NYCDDC | FLUSHING CREEK GREEN INFRASTRUCTURE PROJECT | KS ENGINEERING | CIVIL ENGINEER
The assignment entailed creating maps and performed site investigations throughout areas of Queens in order to determine the proper location for the Installation of Green Infrastructure components, including Bioswales and Permeable Pavers. After the correct locations were determined, the new Green Infrastructure components such as the infiltration basins and sidewalks, etc, were designed to help manage storm water, reduce street flooding during storm events, and improve water quality throughout the affected community. Mr. Qazi assisted in designing the delineation of Tributary Drainage Areas (TDA) and preparation of plans for the Borough of Queens. He performed preliminary design for potential Green Infrastructures (GI), field investigation, soil testing, design, and construction of Green Infrastructures.

NYCDDC | HWPR21KRC- PRELIMINARY AND FINAL DESIGN SERVICES FOR NON-STANDARD PEDESTRIAN RAMPS | BROOKLYN AND STATEN ISLAND, NY | TECHNO | PROJECT ENGINEER
Mr. Qazi led the designs of Pedestrian ramps only for those corners provided by DDC, while ensuring they comply with applicable Federal ADA requirements. He identified any encroachment prior to design and informed DDC of such findings during the preliminary inspection. He led the preparation of all schematic geometric design plans from SGD to Final Design plans for improvements to the structure and roadway for 44 complex pedestrian ramps, addressing accessibility deficiencies and providing cost estimates. Plans for the 44 complex pedestrian ramps include 40 intersections with Highway Construction Plans,

TECHNO

Hasees Qazi, P.E.

Civil Engineer

EXPERIENCE CONTINUED

NYCDDC | HWPR21KRC- PRELIMINARY AND FINAL DESIGN SERVICES FOR NON-STANDARD PEDESTRIAN RAMPS | BROOKLYN AND STATEN ISLAND, NY | TECHNO | PROJECT ENGINEER |CONT.

Utility/ Drainage Plans, Lighting/ITS Plans, Traffic/MPT Plans and Pavement Marking Plans. He utilized all NYS Approved Standard Design alternatives must be considered to the maximum extent of feasibility including the use of neckdowns, curb extensions, and raised crosswalks within the Borough of Brooklyn and Staten Island. Managed all aspects of design from Schematic Design to final Construction Documents. He performed preliminary visual inspections tasks covering 40 intersections, 44 corners, to identify obstructions such as traffic and utility interference and the existence of under sidewalk vaults.

NYCDDC | HWPR20QC- PRELIMINARY AND FINAL DESIGN SERVICES FOR NON-STANDARD PEDESTRIAN RAMPS | QUEENS, NY | TECHNO | SENIOR ENGINEER

Mr. Qazi oversaw the reconstruction of pedestrian ramps within the Borough of Queens, Community Boards 7,8, and 11-13, in order to provide accessibility compliance at 47 corners in conformance with the Americans with Disabilities Act (ADA), and the requirements of the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG) under the Architectural Barriers Act (ABA) as adopted by the New York State (NYS) Department of Transportation (DOT). The proposed scope of work includes the design of corner sidewalk quadrant modifications for the construction of new pedestrian ramps and corrections of unsatisfactory conditions. He identified modifications including the relocation of catch basins, utility lines, and street lighting and signals. He visited each of the 31 intersections, leading Techno's field inspection team to perform pre-design data collection utilizing NYCDOT Pedestrian Ramp Inspection. He led the preparation of all schematic geometric design plans to completion and led Techno's team to Final Design plans for improvements to the structure and roadway for 54 complex pedestrian ramps, addressing accessibility deficiencies and providing cost estimates. Plans for the 54 complex pedestrian ramps include 31 intersections with Highway construction plans, utility/ Drainage plans, lighting/ITS plans, traffic/MPT plans and pavement marking plans. In addition, he provided narrative and bar schedule Monthly Progress Reports in Oracle P6 and Microsoft Project formats to the DDC to communicate the work plan. Along with Techno's staff, ensured compliance with the latest version of the New York Department of Transportation (NYCDOT) Highway Rules, NYSDEP Standards, Standard Specifications, Standard Details of Construction during construction, and performed work acceptance through field verification of all slopes and grades.

NYCDDC | HWP19KC3 - PRELIMINARY AND FINAL DESIGN SERVICES FOR NON-STANDARD PEDESTRIAN RAMPS | BROOKLYN, NY | TECHNO | SENIOR ENGINEER

Mr. Qazi oversaw the design, development, implementation, and analysis for the New York City (NYC) Department of Design Construction (DDC) Bureau of Infrastructure Design Division Reconstruction of Complex Pedestrian Ramps in Community Boards 7 and 10 through 12 within the Borough of Brooklyn. He ensured accessibility compliance in conformance with the Americans with Disabilities Act (ADA) and the requirements of the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG) under the Architectural Barriers Act (ABA) as adopted by the New York State (NYS) Department of Transportation (DOT). He oversaw all aspects of design from Schematic Design to final Construction Documents. Performed preliminary visual inspections tasks covering 32 intersections, in order to identify obstructions such as traffic and utility interference and the existence of under sidewalk vaults. He led Techno's field team to confirm topographic features and ground surface measurements were confirmed during preliminary inspections to verify the availability of space to accommodate the proposed pedestrian ramps. He utilized ArcGIS, GIS.nyc.gov, and AutoTURN® in order to collect, submit, and analyze road and site design data for use in the design. He provided coordination with the following agencies and organizations: Department of Environmental Protection (DEP) for sewer, water main, and service connection facility impacts, the NYC DOT Division of Traffic and Street Lighting, Fire Department, NYC Transit, Department of Parks and Recreation, Landmark Preservation Commission, Department of Housing Preservation, Department of Education, Department of City Planning, Office of the Borough President of Brooklyn, Police Department, Department of Information Technology & Telecommunications, Economic Development Corporation, and public and private utilities such as Consolidated Edison Company of NY, Inc., Verizon/ECS, Altice, RCN, AT&T LNS, JCDecaux, EPS Pro Inc., Crown Castle, Spectrum, National Grid, etc.



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License Information

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Name: HASEES QAZI

Address: Monmouth Junction,NJ

Profession/License Type: Engineers & Land Surveyors,Professional Engineer

License No: 24GE05858500

License Status: Active

Status Change Reason: License Issuance

Issue Date: 8/17/2022

Expiration Date: 4/30/2024

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TECHNO

Myriam Benjamin

Community Outreach

Education
B.S., Business Management

Years of Experience: 28

Skills + Certifications
NYCDDC Community Construction Liaison Excellence Award in the Borough Manhattan

New York 811 – Call Before You Dig Training

OSHA 10-Hour Construction Safety

NYCDDC Water Main Training

Microsoft Office

Google Workspace

Social Media Platforms

Fluency in French and Créole

Myriam Benjamin is a public participation and community outreach specialist with several years of experience communicating with diverse groups of stakeholders on infrastructure projects. She has strong conflict resolution and problem solving abilities while maintaining public entity protocols for superb written and verbal communications and materials distribution.

EXPERIENCE

NYCDDC | HWPEDSF4 - MULTI-SITE PEDESTRIAN SAFETY CITYWIDE | TECHNO | JANUARY 2021 - PRESENT | COMMUNITY CONSTRUCTION LIAISON

A Department of Transportation (DOT) and Federal Transit Administration (FTA) funded multi-site pedestrian safety improvement project, part of Techno's Resident Engineering and Inspection services contract for the New York City Department of Design and Construction (NYCDDC). Techno coordinates and manages a total of nine work locations- four locations in Manhattan, four locations in Brooklyn and one location in Staten Island. As Community Construction Liaison for Techno and the New York City Department of Design and Construction (NYCDDC) Myriam is responsible for being the first contact for the project. She is accountable for providing updates to stakeholders, attending meetings, maintaining logs of her efforts and activities, and efficiently resolving or escalating issues.

NYCDDC | MEDA003 - ACCELERATED DISTRIBUTION WATER MAIN REPLACEMENT | CES CONSULTANTS, INC. | JULY 2018 - DECEMBER 2020 | COMMUNITY CONSTRUCTION LIAISON

Improvements to NYC's water main system requiring the installation and replacement of the water main on East 116th Street between Lexington Avenue and 3rd Avenue and adjacent side streets in the Borough of Manhattan. Preliminary work involved saw cutting the street and digging small test pits with minimal impact, to determine the type of infrastructure below ground before larger trenching occurred. Where replacement was deemed necessary 12-inch distribution water mains were then installed along with replacement of fire hydrants and gate valves, and lastly trench restoration. As a result of construction, intermittent water service interruptions affected several public schools requiring extensive planning and local coordination with Principals, parents, and school personnel to establish and confirm work times and project requirements. Community outreach also included the surrounding businesses and residences. Myriam's primary duties and responsibilities included: Effective management of the needs of local residents, businesses, and public schools in diverse communities throughout Manhattan by addressing their concerns and complaints in a timely fashion in collaboration with construction management, OCON, and the Contractor to minimize impact throughout the project duration. She provided notices and advisories to the local Business Improvement Districts (BIDs) (Village Alliance, Garment District Alliance and Grand Central Partnership) and elected officials (City Council Members, State Senators and Representatives, Mayor's Office); attended monthly Community Board CBOs meetings and provided Project updates (Manhattan Community Boards 2, 5, 10, 11, and 12); coordinated and worked closely with the Bleecker Area Merchants and Residents Association (BAMRA); 116th Street Block Association; and Union Settlement Business Development Center. Additionally, Myriam focused on the mitigation and resolution of major community issues within the project limits to avoid further escalation; prepared and distributed outreach materials for each assigned Task Order in a timely manner; communicated with the affected communities regarding water shutdowns providing 72-hour and 24-hour advisories and weekly construction bulletins; developed and maintained an up-to-date Neighborhood Notification Network (NNN) spreadsheet and an email distribution list of various community members, major stakeholders, and other parties relevant to the Project; and explained the scheduled construction activities and potential impacts to the affected communities through effective ongoing outreach efforts, as a way of proactively supporting our work. Construction Cost $16.6M.

TECHNO

Myriam Benjamin

Community Outreach

EXPERIENCE CONTINUED

NYCDDC | HWPLZ004M/MED622 - RECONSTRUCTION OF PERSHING SQUARE WEST | JED ENGINEERING, P.C. | MARCH 2014 - JULY 2018 | COMMUNITY CONSTRUCTION LIAISON

Streetscape Reconstruction of Pershing Square West pedestrian plaza in the Borough of Manhattan, with additional work in the vicinity from Park Avenue West from East 40th Street to East 42nd Street; East 40th Street from Park Avenue to Madison Avenue; and East 42nd Street from Vanderbilt Avenue to Lexington Avenue. The scope of work included utility relocations, 12-inch trunk and distribution main replacement, and anticipated water service interruptions. In total 129 linear feet of 6-inch water main pipe; 1,878 linear feet of 12-inch water mains, 609 linear feet of 20-inch water mains; and 1,422 linear feet of 36-inch steel trunk water main pipes were replaced. Ancillary work on this project involved sewers, catch basins, street lighting, private utility relocations, traffic signals, and roadway reconstruction. Myriam's primary duties and responsibilities included: Managing the needs of high-profile businesses by addressing their inquiries/ concerns in collaboration with construction management, OCON, and the contractor in a timely fashion to minimize community impact; working very closely with the local BID (Grand Central Partnership) and with Manhattan Community Boards 5 and 6 to mitigate and/or resolve major community issues within the project limits to avoid further escalation; preparing and distributing outreach materials, including but not limited to project brochure, 72-hour advisories, weekly construction bulletins, and quarterly newsletters to the affected community; developing and maintaining an up-to-date Neighborhood Notification Network (NNN) spreadsheet and an email distribution list of various community stakeholders, and many other relevant parties to the project; explaining scheduled construction activities and potential impacts through effective ongoing outreach efforts; proving administrative support to field office team as needed, i.e., assisted RE/OE with developing monthly reporting and meeting minutes, preparing correspondence, maintaining delay and change order logs, etc.; and attending monthly Community Boards DSC meetings to provide project updates and discuss pending community concerns/issues related to this $10.4M reconstruction project.

DJAM INSURANCE BROKERAGE INC. | PROPERTY AND CASUALTY | OCTOBER 2011 - MARCH 2014 | CUSTOMER SERVICE REPRESENTATIVE

Serving as the Customer Service Representative, Myriam's Primary duties and responsibilities included: handling customer inquiries about insurance products and services; processing new policies and renewals; providing new information and account documentation for regulatory compliance; analyzing and explaining policy coverages and policy types to clients; and managing policy change requests, billing and claim inquiries, and endorsements.

FOREST HILLS YOGA, LLC (DBA BAMBOOMOVES) | JUNE 2011 - APRIL 2013 | STUDIO MANAGER

Myriam's primary duties and responsibilities included: Managing the daily operations of the studio to ensure outstanding service delivery; coordinating class schedules, subs, weekly updates and quarterly staff meetings; ensuring accurate accounting and reporting of monthly income and expenses; and providing recommendations for marketing, sales, and business strategies to ensure revenue growth.

VERIZON COMMUNICATIONS | MARCH 2002 - NOVEMBER 2008 | FORCE COORDINATOR – RESOURCE MANAGEMENT

As the Force Coordinator, Myriam's primary duties and responsibilities included: Overseeing management of scheduling procedures, analysis of real time workload requirements, and call routing to manage service performance level requirements and maximize efficiency and occupancy. She adjusted schedules based on real-time call volume, adherence exceptions, and staff availability; tracked and recorded daily call-outs related to tardiness and absence; handled work schedules, vacation assignments, overtime, surplus time, and payroll discrepancies; and acted as liaison to department/management to resolve problems and issues

VERIZON COMMUNICATIONS | DECEMBER 2000 - MARCH 2002 | CREDIT AND COLLECTIONS SUPERVISOR

VERIZON COMMUNICATIONS | CONSUMER SALES AND SERVICE CENTER | AUGUST 1995 - DECEMBER 2000 | CUSTOMER SERVICE REPRESENTATIVE – CONSUMER SALES AND SERVICE CENTER

TECHNO

Lionel Scott Payne

Community Outreach

Education
B.S., Architecture, Pratt Institute

Years of Experience: 27

Skills + Certifications
NYCDDC Water Main Training

Microsoft Office

Adobe Photoshop

Scott is an experienced Community Outreach with several years of experience working on challenging projects with difficult Community Boards employing his excellent problem solving skills. He has strong written, verbal, and design skills as well as an understanding of the construction process with attention to detail.

EXPERIENCE

NYCEDC | 48480004- REI SERVICES WATER STREET CORRIDOR STREET SCAPE IMPROVEMENT PROJECT | JUNE 2021 - PRESENT | COMMUNITY CONSTRUCTION LIAISON

Pedestrian infrastructure improvements to provide a safer and more inviting pedestrian experience along Water Street. The goal and vision of the City is to maintain vibrant and viable connections between the multiple recreational, cultural, and tourism destinations, commercial businesses, retail establishments, and transportation modes in and around the Project area. Scott is responsible for community communications in an area that employs over 100,000 people with major cross streets such as Whitehall, Wall and Fulton that provide direct access to the City's waterfront amenities and transit options such as buses, subways, ferries, and bike paths serving residents and visitors.

NYCEDC | CONISPH3B- CONSTRUCTION OF STORM & SANITARY SEWERS, AND TRUNK AND DISTRIBUTION WATER MAINS IN CONEY ISLAND PHASE 3B | SEPTEMBER 2017 - SEPTEMBER 2020 | COMMUNITY CONSTRUCTION LIAISON

Installation of 8-inch distribution and 36-inch steel trunk water mains, and 10-inch ESVP sanitary sewers. Also included the installation of new storm sewers that varied in size from 12-inch DI Pipe to 7 foot by 5 foot FTRC Box and 26 foot by 38 foot RC Outfall, all combined with manholes, catch basins, and chute connections. All mentioned sewer work was built on wood piles. All underground work was followed by curb and sidewalk restoration, historical street lighting and signal installation, and roadway concrete and asphalt paving. Construction Cost $27.7M

- Worked closely with the Mayor's office of Capital Project Development, Community Board 13, Councilman Treyger's office, the Alliance for Coney Island, MCU Stadium, Coney Island Amphitheater, the amusement park stakeholders, NYCDOT, NYCEDC, NYCDDC, NYCDEP, DSNY, NYCHA, FDNY, Con Edison, National Grid, Verizon, local schools, churches, businesses, home owners, etc. Along with these agencies, we worked together to facilitate, & mitigate the work which identified and reconciled the needs & concerns of the community and entities affected.
- The project was split into 2 packages, each one with a separate contractor, and separate subs. Daily management and coordination was critical due to the daily activities ranging from water shut downs, road closures, travel lane diversions, etc.
- Coordinated the massive "full road closure of Surf Avenue from West 16th thru West 21st Street for 8 months which was reopened on time as promised.
- Met with the Resident Engineer/Engineer In Charge daily to discuss the project's progress/concerns/outreach.
- Maintained an ever growing list server which informed the affected parties as to both of the Contractor's daily operations, and impacts by means of advisories, newsletters, critical notices, and informative maps.
- Attended and gave project status presentations at progress meetings, Community Board meetings, Inter-Agency Task Force meetings, etc. Fielded and addressed questions and concerns. Also represented EDC at various community events.
- Notified and alerted the community about impending water shut downs & utility interruptions, along with their impacts in layman's terms.
- Tracked crucial project issues and concerns from inception to fruition. Arranged meetings where necessary to address these issues.
- Prepared agenda, progress & critical phase meeting minutes.
- Special coordination was made between neighboring DDC projects, private construction

TECHNO

Lionel Scott Payne

Community Outreach

EXPERIENCE CONTINUED

projects, and the NYCHA houses which underwent major interior/exterior construction along with our planned work.
- Helped facilitate bus removal & relocations, scaffolding/sidewalk shed removal, and transported water samples to DEP

NYCDDC | HCONISPH01 - CONSTRUCTION OF STORM AND SANITARY SEWERS, AND TRUNK AND DISTRIBUTION WATER MAINS IN CONEY ISLAND PHASE | JANUARY 2013 - SEPTEMBER 2017 | COMMUNITY CONSTRUCTION LIAISON

The installation of 8" distribution and 36" steel trunk water mains, and 10" ESVP sanitary sewers. Work also included the installation of new storm sewers that varied in size from 12" DI Pipe to 7' x 5' FTRC Box and 26' x 38' RC Outfall, all combined w/ manholes, catch basins, & chute connections. All above mentioned sewer work was built on wood piles. All underground work was followed by curb & sidewalk restoration, and roadway concrete & asphalt paving. Construction Cost $27.7M

- This phase was the 1st phase of many which followed to rebuild Coney Island's infrastructure, Worked closely with NYCDDC, NYCDOT, NYCEDC, NYCDEP, DSNY. Con Edison, Community Boards 13, the Alliance for Coney Island, the amusement park stakeholders, etc. Along with these agencies, we worked closely facilitating, & mitigating the work to identify and reconcile the needs & concerns of the community and entities affected.
- Daily site visits, meeting with the Resident Engineer/Engineer In Charge to discuss project concerns and outreach.
- Communicated daily with the community by walking the job site, attending formal/informal meetings, and maintained an electronic list server which informed the affected parties as to the Contractor's daily operations, and impacts.
- Attended and gave project status presentations at progress meetings, Community Board meetings, etc.
- Prepared and dispersed community advisories, and monthly project newsletters, describing the project's progress in detail.
- Notified and alerted the community about impending water shut downs & utility interruptions, along with their impacts in layman's terms.

NYCDDC | HWKC1019 - RECONSTRUCTION OF HARRISON STREET | AUGUST 2009 - JANUARY 2011 | COMMUNITY CONSTRUCTION LIAISON

Installation of water main. Full depth reconstruction of roadways, sewer, sidewalk, pedestrian ramps, curb, catch basins & chute connections, street lighting, and major utility upgrades for telephone, steam, electric, and gas work (joint bid project). Construction Cost $18M

- Worked closely with the Lower Manhattan Construction Command Center (LMCCC), The MTA, PANYNJ, The Downtown Alliance, NY State & City DOT, NYCDOB, EDC, Con Edison, Empire City Subway, The Battery Park Authority, Community Board 1, etc. Along with these agencies, we worked together to facilitate, & mitigate the current work, as well as future work to identify and reconcile the needs & concerns of the community and entities affected.
- Met with the Resident Engineer/Engineer In Charge daily to discuss the project concerns, and outreach.
- Communicated daily with the community by walking the job site to ensure the community's needs were met, and maintained an electronic list server.
- Coordinated the removal of scaffolding at key locations where work was halted due to it's presence. I maintained a high success rate in expediting this process.

NYCDDC | MED-583 AR - RECONSTRUCTION OF FULTON STREET PHASE I | AUGUST 2009 - JANUARY 2011 | COMMUNITY CONSTRUCTION LIAISON

Installation of 20" & 24" water main. Full depth reconstruction of roadways, sewer, sidewalk, pedestrian ramps, curb, catch basins & chute connections, street lighting, and major utility upgrades for telephone, steam, electric, and gas work. Project limits: Church Street to South Street (including intersections). Construction Cost $25M

- Worked closely with the LMCCC, The MTA, PANYNJ, The Downtown Alliance, NY State & City DOT, NYCDOB, EDC, Con Edison, Empire City Subway, The Battery Park Authority, Community Board 1, etc. Working together we helped to facilitate project issues.
- Attended, and gave project presentations, and updates weekly at the Lower Manhattan Infrastructure Construction Coordination & Community Taskforce Meetings at the Lower Manhattan Construction Command Center.
- Created and distributed daily construction bulletins, and advisories.
- Scheduled water shutdowns for water main installations with DEP.
- Relocated authorized parking for various agencies.
- Ensured that the contractor provided necessary emergency access for the FDNY throughout the site.
- Monitored the maintenance and protection of traffic.
- Scheduled and coordinated special work with PANYNJ inside the WTC site.

SASAKI

Susannah Drake, FASLA, FAIA

Principal | Landscape Architect | Architect

Education
Master of Architecture, Harvard University Graduate School of Design

Master of Landscape Architecture, Harvard University Graduate School of Design

B.A, Art History and Fine Arts, Dartmouth College

Years of Experience: 31

Licenses & Registrations
Registered Landscape Architect:

- New York
- New Jersey
- Arizona
- Colorado
- Missouri

Registered Architect:

- New York
- Arizona
- Colorado
- Florida
- Louisiana

Academic Positions
The Cooper Union Irwin S. Chanin School of Architecture, Adjunct Associate Professor,

University of Colorado Boulder Environmental School of Design, Associate Professor,

Escola de Cidade, Sao Paulo, Brazil-Visiting Professor

Harvard University Graduate School of Design, Visiting Professor

Illinois Institute of Technology College of Architecture, Morgenstern Visiting Chair

Washington University Visiting Professor

Florida International UniversityCejas Scholar

Susannah is a landscape architect and architect who specializes in complex projects that require a synthesized, analytical, and research-based approach. All of her designs engage diverse systems to create ecologically and socially progressive projects that are equally well-crafted and beautiful. As one of very few designers of her generation with professional design qualifications in architecture and landscape architecture, Susannah paved the way for more synthetic thinking about urban ecological infrastructure. She is formerly the founding principal of DLANDstudio, which joined Sasaki in May 2022. Susannah's research has been at the forefront of innovation on urban ecological infrastructure. Her research on campus and urban design has received funding through grants from the Graham Foundation, the Environmental Protection Agency, the New England Interstate Water Pollution Control Commission, the New York State Department of Environmental Conservation, NYS Environmental Facilities Corporation, and the New York State Council on the Arts. Her work has received numerous national and international design awards and is in the permanent collections of the Museum of Modern Art and the Cooper Hewitt Smithsonian Design Museum.

EXPERIENCE

THE TRUST FOR PUBLIC LAND | THE QUEENSWAY MASTER PLAN | QUEENS, NEW YORK | SASAKI | 2014 (COMPLETION DATE) | PRINCIPAL-IN-CHARGE
The history of modern land development in Queens can be traced back to the myriad of rail lines that crisscrossed open tracts of land in the late 19th and early 20th centuries. The QueensWay transforms one of these lines into a new public open space corridor. Along the 3.5-mile length, the former right-of-way transforms from an elevated embankment to a ravine to an elevated steel viaduct. The adjacencies along the QueensWay also vary, with little league fields along the northernmost end; big box stores, residential neighborhoods, and a public park in the middle; and crossing train lines, commercial corridors, and parking lots to the south.

THE TRUST FOR PUBLIC LAND | THE QUEENSWAY METROPOLITAN HUB | QUEENS, NEW YORK | SASAKI | 2017 (COMPLETION DATE) | PRINCIPAL-IN-CHARGE
The QueensWay Metropolitan Hub is the first phase of the larger master plan that sets programmatic and design precedents for the park. The QueensWay transforms an extant track of the Long Island Rail Road into a new linear public park for Queens. A quiet presence in the city, the former right-of-way is currently camouflaged by school-bus parking, overgrown vines, industrial activity, and limited access. The Metropolitan Hub is the first phase of the QueensWay addressing key themes of the master plan of the larger site. The Metropolitan Hub sits north of Forest Park and adjacent to the Metropolitan High School complex. Integrated outdoor classrooms are designed specifically to serve these schools, while seasonally evolving native planting provides a rich learning environment. The passage includes a pedestrian path and bikeway with improved understory planting to manage erosion and increase privacy in deference to neighboring homeowners.

NEW YORK CITY DEPARTMENT OF PARKS & RECREATION | NYC COMMUNITY PARKS INITIATIVE: MCDONALD PLAYGROUND | STATEN ISLAND, NEW YORK | SASAKI | 2018 (COMPLETION DATE) | PRINCIPAL-IN-CHARGE
In 2014, Sasaki (DLANDstudio) was selected to design the reconstruction of McDonald Playground in Staten Island, NY. The mid-block project qualified for funding under the Mayor's new Community Parks Initiative; a program which seeks to upgrade playgrounds that have received less than $250,000 in capital investments over the last 20 years. Despite being in need of upgrading, McDonald Playground was heavily used by individuals of all ages from the local communities. Generated from a public scoping process, we developed a design that creates a park to serve the diverse needs of its constituents. This includes bringing the playground up to meet ADA standards and providing new maintenance

Susannah Drake, FASLA, FAIA

Principal | Landscape Architect | Architect

EXPERIENCE CONTINUED

NEW YORK CITY DEPARTMENT OF PARKS & RECREATION | NYC COMMUNITY PARKS INITIATIVE: MCDONALD PLAYGROUND | STATEN ISLAND, NEW YORK | SASAKI | 2018 (COMPLETION DATE) | PRINCIPAL-IN-CHARGE |CONT.
entrances that did not exist before, the design creates more usable basketball courts, upgrades play equipment, and provides a new spray shower. Additionally, the reconstructed playground includes new spaces for adult fitness activities and passive seating areas.

NEW YORK CITY DEPARTMENT OF PARKS & RECREATION | ALLEY POND ENVIRONMENTAL CENTER | QUEENS, NEW YORK | SASAKI | 2022 (COMPLETION DATE) | PRINCIPAL-IN-CHARGE
Alley Pond Environmental Center, a new LEED Silver educational facility located within Alley Pond Park, sits adjacent to both salt-marsh and freshwater wetlands. The center hosts 50,000 visitors each year including students from Nassau County, Suffolk County, and the five boroughs of New York City. Sasaki (DLANDstudio) collaborated with Leroy Street Studio on the design of the overall campus plan with focus on the entry sequence, gardens, terraces, deck, and outdoor classrooms. The new facility is designed to recycle rain water, collect stormwater runoff from the parking lot, and showcase native plant species in rain gardens. Water management features and other green technology building elements will become hands-on educational tools. The design develops distinct zones that relate to the entrance, classrooms, parking lot, and trail head connection to the larger trail network within Alley Pond Park. These areas will act as a series of thresholds, transitioning from an urban to more natural environment.

NEW YORK CITY DEPARTMENT OF PARKS & RECREATION | GOWANUS CSO FACILITY LANDSCAPE & SPONGE PARK PILOT | BROOKLYN, NEW YORK | SASAKI | 2016 (COMPLETION DATE FOR SPONGE PARK PILOT); ONGOING (CSO FACILITY PUBLIC SPACE) | PRINCIPAL-IN-CHARGE
As part of the Gowanus Canal's EPA Superfund Program cleanup project, the City of New York was tasked with building an 8-million-gallon combined sewer outfall (CSO) retention tank and facility to filter and store combined sewage during wet weather events that would otherwise result in sewage overflows directly into the canal. In collaboration with the NYCDEP, Hazen and Sawyer Engineers, Brown and Caldwell Engineers, and Selldorf Architects, Sasaki (DLANDstudio) is designing a resilient 1.6 acre public open space atop the storage tank. This project elevates traditional stormwater infrastructure to an artful public amenity and environmental asset for the Gowanus community. The open space design draws inspiration from the industrial character of the neighborhood, informing material selection. It will provide multipurpose passive recreation opportunities with a mix of soft- and hardscape features while allowing for NYCDEP maintenance access to infrastructure below. The future open space will be the capstone of a larger city initiative to create a continuous esplanade along the Gowanus Canal.

ST. NICK'S ALLIANCE & THE TRUST FOR PUBLIC LAND| BQ GREEN | BROOKLYN, NEW YORK | SASAKI | ONGOING | PRINCIPAL-IN-CHARGE
BQ Green reconnects neighborhoods divided by the construction of the Brooklyn Queens Expressway (BQE) and reduces many of the negative environmental, economic, and social impacts of the highway artery. Notably, the creation of a 3.5 acre green space would improve air quality in a park-poor area of New York where asthma rates are double the citywide average. Originally proposed by the Regional Plan Association in the mid-1930s, the BQE was intended to mitigate traffic congestion, facilitate industrial development and strengthen the connection between the boroughs of New York City. As chair of the Tri-borough Bridge and Tunnel Authority, Robert Moses charted its path through low income residential neighborhoods of Brooklyn & Queens. Construction left a trail of divided neighborhoods in its wake. BQ Green is part of a larger vision to transform the BQE into an ecologically and socially productive spine by introducing recreation space, ecological strategies, and infrastructure improvements that enhance the urban performance of the trench while transforming it into a true public amenity. Two blocks will be capped to provide playing fields and verdant open space for an under-served Hispanic community in the south-side Williamsburg section of Brooklyn.

NYSED.gov

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04/11/2022

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Address : BROOKLYN NY
Profession : ARCHITECTURE
License No: 033227
Date of Licensure : 04/29/2009
Additional Qualification : Not applicable in this profession
Status : REGISTERED
Registered through last day of : 10/23

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SASAKI

Zach Chrisco, P.E., Honorary ASLA

Principal | Civil Engineer

Education
B.S.,Civil Engineering, Tufts University

Years of Experience: 17

Licenses & Registrations
Honorary ASLA

Professional Engineer:
- New York
- Alabama
- Arizona
- California
- Connecticut
- District of Columbia
- Delaware
- Florida
- Illinois
- Indiana
- Louisiana
- Massachusetts
- Maryland
- North Carolina
- New Hampshire
- Ohio
- Rhode Island
- South Carolina
- Tennessee
- Texas
- Virginia
- Vermont
- West Virginia

Professional Affiliations
American Society of Civil Engineers

American Sports Builders Association

Boston Society of Civil Engineers

As Sasaki's lead civil engineer, Zach works with built design leaders and interdisciplinary teams to execute, strengthen, and innovate resilient engineering solutions. His portfolio includes some of Sasaki's most complex site work—from the Chicago Riverwalk to the Wilmington Waterfront Park in Los Angeles. He integrates civil engineering solutions that are at once sustainable and sensitive to the design intent. Zach's greatest motivation is to create built work that is both durable and well-loved by the client and users. He continues to refine a vision for further cultivating Sasaki's civil engineering practice, encouraging a collaborative built work practice, and better integrating resilience and ecology into the firm's work. Zach holds a bachelor of civil engineering from Tufts University, and is a registered civil engineer. He is a member of the American Society of Civil Engineers, the American Sports Builders Association, and the Boston Society of Civil Engineers.

EXPERIENCE

CHICAGO DEPARTMENT OF TRANSPORTATION | CHICAGO RIVERWALK | CHICAGO, ILLINOIS | SASAKI | 2016 (COMPLETION DATE)| PRINCIPAL-IN-CHARGE
Tasked with extending and re-envisioning a legacy landscape, our team creatively built upon existing historic infrastructure to improve the economic and ecological value of the Chicago Riverwalk. Working with the City, our team found opportunities to maximize capital value, create new revenue, and bring to life a previously underutilized linear corridor. The task at hand was technically challenging. The design team, for instance, needed to work within a tight permit-mandated 25-foot-wide build-out area to expand the pedestrian program spaces and negotiate a series of under-bridge connections between blocks. Turning these challenges into opportunities, the team imagined new ways of thinking about this linear park. Rather than a path composed of 90-degree turns, the team re-conceived of the path as a more independent system—one that, through changes in its shape and form, would drive a series of new programmatic connections to the river.

BONNET SPRINGS PARK, INC. | BONNET SPRINGS PARK | LAKELAND, FLORIDA | SASAKI | 2022 (COMPLETION DATE) | PRINCIPAL-IN-CHARGE
Recently completed, Sasaki led the design effort to transform a 180-acre former industrial and agricultural brownfield in Lakeland, Florida into Bonnet Springs Park—Central Florida's next great park. Amidst rapid growth and changing demographics in this mid-size college town, this restored ecological jewel and cultural destination will serve as a central public amenity, free and open to all Lakeland residents for generations to come.For nearly two years, Sasaki has worked in partnership with the private park conservancy, Bonnet Springs Park, Inc. to co-create the vision, master plan, design, and implementation of this park. The design of this holistic, multifaceted destination park is utilizing the best of Sasaki's in-house interdisciplinary team of planners, landscape architects, civil engineers, architects, interior designers, and graphic designers. The major natural features of the park include the remediation of the polluted brownfield, resilient stormwater treatment strategies, the restoration of the park's namesake Lake Bonnet, mangroves and sand seep spring, and the protection and restoration of a mature live oak grove. New landscape amenities are designed to extend the visitor experience such as native botanic gardens, a nature play area, and a great event lawn for hosting concerts and festivals.

SASAKI

Zach Chrisco, P.E., Honorary ASLA

Principal | Civil Engineer

EXPERIENCE CONTINUED

EAST BATON ROUGE RECREATION & PARK COMMISSION | RESTORATION OF UNIVERSITY LAKES SYSTEM | BATON ROUGE, LOUISIANA | SASAKI | ONGOING | PRINCIPAL-IN-CHARGE

Built by 900 men as part of the federal back-to-work program during the Great Depression, the once Cypress-Tupelo swamp was dredged and turned into Baton Rouge's largest public park with six 20-foot-deep lakes. This provided a roadmap for today's urban development and settlement around the 360-acre lake system. Over the years however, the idyllic vision of the lake and the associated culture around it were in conflict with nature.

Today, 65 years later, the lake system with an average depth of three-feet is at the brink of collapse with degraded water quality, failing infrastructure, and limited recreational assets for its growing use. A new vision emerges at the intersection of culture and nature, which establishes the grounds for an inclusive 21st century public space and destination for visitors. Sasaki was awarded the project in late 2020 as master design firm to transform a vision for the six lakes into a reality. Working hand-in-hand with the Flood-Risk-Reduction (Stantec) consultant, Sasaki looked at how to reuse over 600,000 cubic yards of dredge material to create novel edge conditions that both provide additional recreational programs and help heal the lakes degraded hydrology and ecological health. The team approached the project through four major goals to provide a more sustainable aquatic system, increase flood protection, enhance environmental performance, and improve and diversify recreational uses.

EAST BATON ROUGE RECREATION & PARK COMMISSION | GREENWOOD COMMUNITY PARK MASTER PLAN & PHASE 1 IMPLEMENTATION | BATON ROUGE, LOUISIANA | SASAKI | ONGOING | PRINCIPAL-IN-CHARGE

Greenwood Park sits in the heart of North Baton Rouge, an African American community that has experienced disinvestment for the past decades. In 2017 a proposal to move the Baton Rouge Zoo from the area's largest park sparked an outcry from the community to keep the zoo and reinvest in their greatest public space, Greenwood Park. Sasaki was hired to develop a long-term master plan and implementation strategy for the new and reinvigorated 'Signature Park' for East Baton Rouge's Parks and Recreation system. This master planning process included bringing together stakeholders on both sides of the table to find common ground around a future for this amazing ecological site in the heart of the parish. The goal was to deliver a much needed community asset for the adjacent neighborhoods as well as developing a vision for a larger regional destination which could host major community events. The design team was responsible for integrating multi-modal connections in and around the park, as well as ensuring flood resilience and stormwater protections for this frequently flooded area. The master plan will include provisions for revenue generating programs specifically tailored to the community needs and desires and supported by economic analysis. Working with the client, the design team is integrating this new vision for the site into existing conditions including historical military structures, existing ecological functions, and existing program as well as integrating into a concurrent master plan process with the Baton Rouge Zoo which is located within the boundaries of the park.

PORT OF LOS ANGELES | WILMINGTON WATERFRONT MASTER PLAN & IMPLEMENTATION | LOS ANGELES, CALIFORNIA | SASAKI | 2011 (COMPLETION DATE FOR MASTER PLAN); 2015 (COMPLETION DATE FOR PHASE 1); ONGOING (PHASE 2) | PRINCIPAL-IN-CHARGE

Once a part of the Pacific coastline, the Wilmington community became disconnected from the waterfront by the Port of Los Angeles—a burgeoning, diverse mix of industrial maritime facilities. After completing the Wilmington Waterfront Master Plan, Sasaki identified three open spaces for implementation: the Wilmington Waterfront Park, the Avalon North Streetscape, and the Avalon South Waterfront Park. The Wilmington Waterfront Park is the first project to be fully implemented. Built on a 30-acre brownfield site, the new urban park revitalizes the community and visually reconnects it to the waterfront. The park integrates a variety of active and passive uses—informal play, public gathering, community events, picnicking, sitting, strolling, and observation—determined through an extensive community outreach process. The open space serves as a public amenity by doubling the current community open space while also buffering the Wilmington community from the extensive port operations to the south.

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EXECUTIVE SECRETARY
STATE BOARD FOR
ENGINEERING AND LAND SURVEYING

SASAKI

Sandra Chuck, PLA, LEED AP

Director, New York Office | Senior Associate | Landscape Architect

Education
B.A., Landscape Architecture, University of California, Berkeley College of Environmental Design

Years of Experience: 28

Licenses & Registrations
Registered Landscape Architect: New York

LEED Accredited Professional

Fellowships
Geraldine Knight Scott Traveling Scholarship, Italy, 1994

Sandra Chuck is a landscape architect and serves as Co-Director of Sasaki's New York office. She applies her 28 years of experience in project management, all phases of design, and construction administration to a diverse body of work. She has successfully led efforts for park, campus, streetscape, plaza, and playground projects, and for numerous educational, cultural, municipal and developer clients. She has devoted her career to the craft of the built environment and creating enriching spaces. Sandra graduated from the University of California at Berkeley, majoring in landscape architecture. She has served as a regular guest critic for several design studios at Columbia University and Pratt Institute.

EXPERIENCE

NEW YORK CITY DEPARTMENT OF PARKS & RECREATION | NYC COMMUNITY PARKS INITIATIVE: ARROCHAR PLAYGROUND | STATEN ISLAND, NEW YORK | SASAKI | 2018 (COMPLETION DATE) | PRINCIPAL-IN-CHARGE

As part of the Mayor's new Community Parks Initiative, Sasaki (DLANDstudio) was selected to design the reconstruction of Arrochar Playground in Staten Island, NY. It is a jointly operated playground between NYC Parks and P.S. 39. We led the public scoping process that helped clarify the needs of the communities and stakeholders around the playground. The design seeks to create a more diverse and functional active area adjacent to the school which is currently defined by a large asphalt ball field that is in poor condition. The new active areas will include a track, basketball courts, passive shaded areas, and a synthetic turf field that manages stormwater runoff. Additionally, new play equipment and amenities, such as a spray shower, will be installed in the lower terrace area to provide play spaces for children of all ages. Additional project funding is provided by NYCDEP for the redesigned playground to manage the stormwater runoff on site through various green infrastructure practices.

NEW YORK CITY DEPARTMENT OF PARKS & RECREATION | GOWANUS CSO FACILITY LANDSCAPE & SPONGE PARK PILOT | BROOKLYN, NEW YORK | SASAKI | 2016 (COMPLETION DATE FOR SPONGE PARK PILOT); ONGOING (CSO FACILITY PUBLIC SPACE) | LANDSCAPE ARCHITECT

As part of the Gowanus Canal's EPA Superfund Program cleanup project, the City of New York was tasked with building an 8-million-gallon combined sewer outfall (CSO) retention tank and facility to filter and store combined sewage during wet weather events that would otherwise result in sewage overflows directly into the canal. In collaboration with the NYCDEP, Hazen and Sawyer Engineers, Brown and Caldwell Engineers, and Selldorf Architects, Sasaki (DLANDstudio) is designing a resilient 1.6 acre public open space atop the storage tank. This project elevates traditional stormwater infrastructure to an artful public amenity and environmental asset for the Gowanus community. The open space design draws inspiration from the industrial character of the neighborhood, informing material selection. It will provide multipurpose passive recreation opportunities with a mix of soft- and hardscape features while allowing for NYCDEP maintenance access to infrastructure below. The future open space will be the capstone of a larger city initiative to create a continuous esplanade along the Gowanus Canal.

SASAKI

Sandra Chuck, PLA, LEED AP

Director, New York Office | Senior Associate | Landscape Architect

EXPERIENCE CONTINUED

NEW YORK CITY DEPARTMENT OF PARKS & RECREATION | NYC COMMUNITY PARKS INITIATIVE: MCDONALD PLAYGROUND | STATEN ISLAND, NEW YORK | SASAKI | 2018 (COMPLETION DATE) | LANDSCAPE ARCHITECT

In 2014, Sasaki (DLANDstudio) was selected to design the reconstruction of McDonald Playground in Staten Island, NY. The mid-block project qualified for funding under the Mayor's new Community Parks Initiative; a program which seeks to upgrade playgrounds that have received less than $250,000 in capital investments over the last 20 years. Despite being in need of upgrading, McDonald Playground was heavily used by individuals of all ages from the local communities.

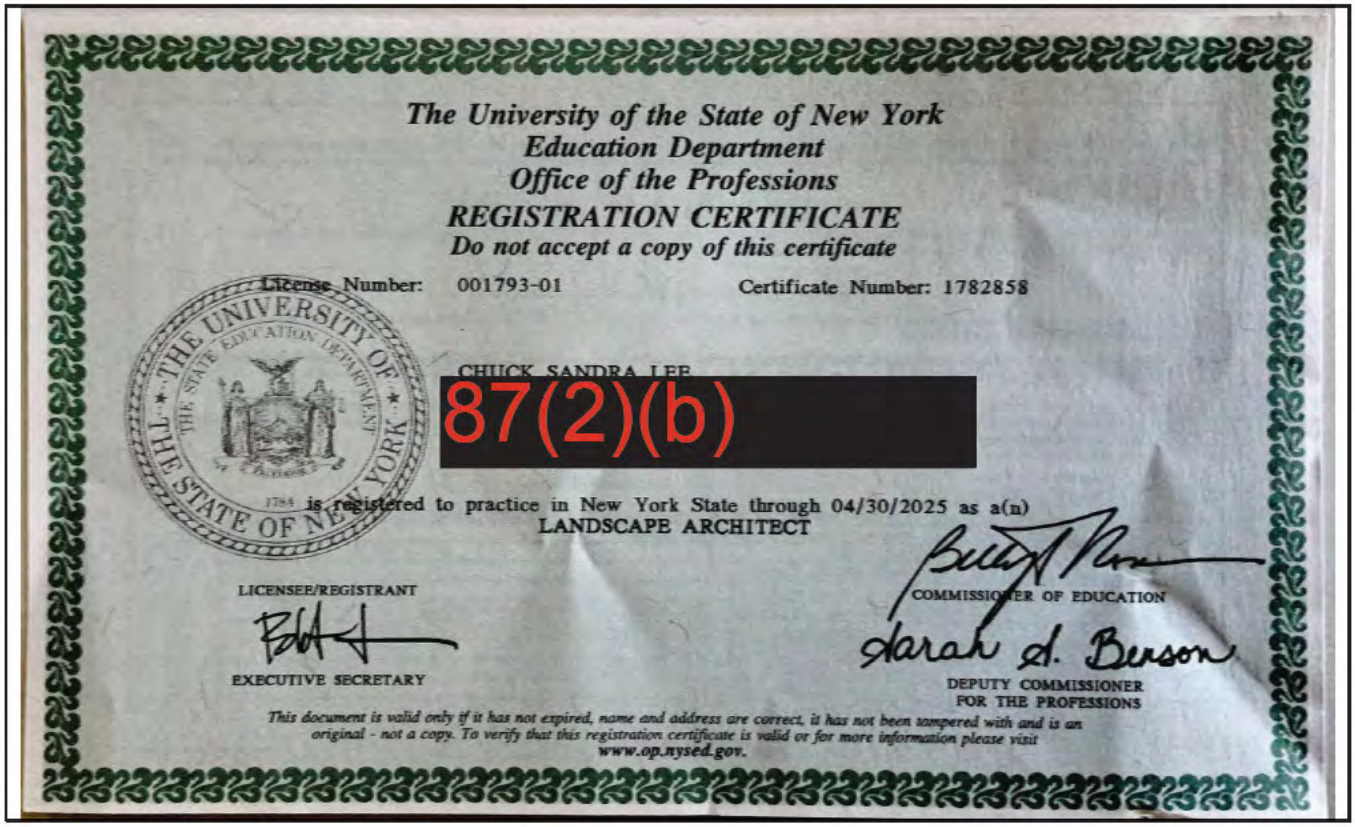
Generated from a public scoping process, we developed a design that creates a park to serve the diverse needs of its constituents. This includes bringing the playground up to meet ADA standards and providing new maintenance entrances that did not exist before, the design creates more usable basketball courts, upgrades play equipment, and provides a new spray shower. Additionally, the reconstructed playground includes new spaces for adult fitness activities and passive seating areas.

NEW YORK STATE | NEW YORK RISING COMMUNITY RECONSTRUCTION | NEW YORK, NEW YORK | SASAKI | 2014 (COMPLETION DATE) | LANDSCAPE ARCHITECT

The New York Rising Community Reconstruction program provides additional rebuilding and revitalization assistance from the state to communities affected by recent storms including Sandy, Irene and Lee. The project empowers local communities by pairing them with design and planning professionals who provide guidance in identifying innovative reconstruction and protection strategies. DLANDstudio, in collaboration with Perkins Eastman, The Louis Berger Group, and BFJ Planning, developed Community Reconstruction Plans for communities in Nassau County and the East and South Shores of Staten Island. These plans include long-term visions for resilience, as well as proposals for more immediate projects to ameliorate the effects of past and future storm events. In addition, the South Valley Stream proposal in Nassau County received a "Rising to the Top" award for green infrastructure which provides an additional $3 million in project funding.

PROSPECT CEMETERY ASSOCIATION, NEW YORK LANDMARKS CONSERVANCY, GREATER JAMAICA DEVELOPMENT CORPORATION & NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION | PROSPECT CEMETERY RESTORATION | QUEENS, NEW YORK | SASAKI | 2013 (COMPLETION DATE) | LANDSCAPE ARCHITECT

Prospect Cemetery in Jamaica, Queens is one of the oldest cemeteries in the country, dating back to 1668. After the final interment in 1988, the cemetery fell into a state of disrepair. Restoration of its 19th-century chapel was completed in 2008, but the cemetery landscape remained overrun with vegetation and invasive species that obscured the gravestones and paths, limiting public access to the historic site. Sensitive to the somber simplicity of the original design, the project sought not to rework the grounds or change the character of the cemetery, but rather to enhance the unique and beautiful existing features while implementing a sustainable, cost-effective management strategy for the conservation of this historic landmark. After careful removal of the vines and weeds that had overtaken the landscape, the grounds were seeded with a low-growing grass species mix that reduces the need for mowing, thereby averting further damage to the grave markers, and non-invasive ornamental shrubs and perennials were planted around the chapel. The revitalized landscape re-introduces visitors to the cemetery, preserving and highlighting the history of those who have made New York City what it is today.



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CHUCK SANDRA LEE
87(2)(b)

is registered to practice in New York State through 04/30/2025 as a(n)
LANDSCAPE ARCHITECT

LICENSEE/REGISTRANT

COMMISSIONER OF EDUCATION

EXECUTIVE SECRETARY

DEPUTY COMMISSIONER
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SASAKI

Nick Shannon, PLA, ASLA

Senior Associate | Landscape Architect

Education
B.S, Landscape Architecture, SUNY College of Environmental Science and Forestry

Years of Experience: 5

Licenses & Registrations
Registered Landscape Architect: New York

Nick Shannon, PLA, is a landscape architect at Sasaki. He brings a focus on systems thinking, technical design, and adaptable solutions—working across scales and types of projects to guide design vision into implementation. Nick integrates research into every aspect of a project, from systems-thinking to detailed site design, to craft strong project narratives that ground the landscape in its local context. He values the engagement of diverse stakeholder groups to coalesce around a shared vision that is responsive to the site's specific ecological and cultural history, building relationships between people and their environment. Furthermore, he utilizes a multi-disciplinary approach to craft design frameworks and built landscapes that are resilient and adaptable to uncertain futures. This includes the implementation of innovative forms of nature-based infrastructure that adapt with a changing climate, while providing new forms of public access that inspire the long-term stewardship of the landscape.

EXPERIENCE

EAST BATON ROUGE RECREATION & PARK COMMISSION | GREENWOOD COMMUNITY PARK MASTER PLAN & PHASE 1 IMPLEMENTATION | BATON ROUGE, LOUISIANA | SASAKI | ONGOING | LANDSCAPE ARCHITECT

Greenwood Park sits in the heart of North Baton Rouge, an African American community that has experienced disinvestment for the past decades. In 2017 a proposal to move the Baton Rouge Zoo from the area's largest park sparked an outcry from the community to keep the zoo and reinvest in their greatest public space, Greenwood Park. Sasaki was hired to develop a long-term master plan and implementation strategy for the new and reinvigorated 'Signature Park' for East Baton Rouge's Parks and Recreation system. This master planning process included bringing together stakeholders on both sides of the table to find common ground around a future for this amazing ecological site in the heart of the parish. The goal was to deliver a much needed community asset for the adjacent neighborhoods as well as developing a vision for a larger regional destination which could host major community events. The design team was responsible for integrating multi-modal connections in and around the park, as well as ensuring flood resilience and stormwater protections for this frequently flooded area. The master plan will include provisions for revenue generating programs specifically tailored to the community needs and desires and supported by economic analysis. Working with the client, the design team is integrating this new vision for the site into existing conditions including historical military structures, existing ecological functions, and existing program as well as integrating into a concurrent master plan process with the Baton Rouge Zoo which is located within the boundaries of the park.

PORT OF LOS ANGELES | WILMINGTON WATERFRONT PROMENADE | LOS ANGELES, CALIFORNIA | SASAKI | ONGOING | LANDSCAPE ARCHITECT

In the Master Plan, Sasaki sought to connect the community back to the waterfront in order to, once again, serve as a key open space amenity for the area. The Promenade, the second phase of the Master Plan, is currently under development, connecting the park and the community to the ocean. The new L-shaped ribbon of green development will connect the Industrial District and Avalon Corridor with the new Waterfront Promenade. A future landbridge connection will carry Angelinos and visitors over the industrial port sites to arrive in the space of the promenade—a grand entrance, opening to a sweeping view of LA harbor from the top of a sculpted landform, which cleverly nests the restrooms and services underneath the dome of earth. What had previously been inaccessible—a place for machines, less for people—is being transformed through design intervention into a place where a community can meet at the water's edge.

The University of the State of New York
Education Department
Office of the Professions

REGISTRATION CERTIFICATE

Do not accept a copy of this certificate

License Number: 002960-01 Certificate Number: 1377497

SHANNON NICHOLAS

87(2)(b) [redacted]

is registered to practice in New York State through 02/29/2024 as a(n)
LANDSCAPE ARCHITECT

LICENSEE/REGISTRANT

EXECUTIVE SECRETARY

INTERIM COMMISSIONER OF EDUCATION

Sarah A. Benson

DEPUTY COMMISSIONER
FOR THE PROFESSIONS

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SASAKI

Andrew Sell

Senior Associate | Landscape Ecologist

Education
Master of Landscape Architecture, Conservation Ecology Track, University of Michigan

Bachelor of Fine Arts, Minor in Terrestrial Ecology, University of Michigan

Years of Experience: 14

Professional Affiliations
American Public Gardens Association

American Society of Landscape Architects

Garden Writers of America

Society of Ecological Restoration

United States Green Building Council

Academic Experience
University of Michigan, School of Environment and Sustainability
Environ 421: Restoration Ecology, Graduate Student Instructor; 2016

NRE 587: Making Place: Landscape Architecture Studio, Graduate Student Instructor; 2015

As a senior project ecologist at Sasaki, Andy collaborates with multidisciplinary teams in translating academic research into design strategies for ecological resilience. His passion for increasing environmental complexity in urban and suburban settings is evident in his range of domestic and international project experience. Andy is a seasoned plantsman and ecological designer with professional experience in horticulture, public garden administration, and landscape restoration. As a former park ranger, he's committed to connecting people to the environment through experiential design and education. From conceptual master plans for habitat connectivity to built shoreline restorations designed to enhance interspecies food webs, Andy leverages sustainable thinking to inform design, construction, and maintenance strategies for Sasaki's landscape and planning practices. Outside of project work, Andy is an active member of Sasaki's culture – leading efforts to improve office environmental sustainability and conducting research in trial pollinator gardens and for a new climate resiliency toolkit for parks. In his free time, you'll often find Andy in his home garden and hiking across all of New England.

EXPERIENCE

DAVENPORT PUBLIC WORKS | MISSISSIPPI RIVER FLOOD RESILIENCY PLAN | DAVENPORT, IOWA | SASAKI | 2021 (COMPLETION DATE) | LANDSCAPE ECOLOGIST
The City of Davenport, Iowa, experienced record flooding in 2019 when the Mississippi River flooded the city's riverfront for 103 days of the year and reached a new record crest. The long-term detours, drains on city resources, and lack of access to the riverfront's many public spaces galvanized the desire to create a long term Mississippi River Flood Resiliency Plan for Davenport's beautiful 9-mile riverfront. Together with engineering partners HR Green and Shive Hattery, Sasaki collaborated with the Davenport Public Works team and the community to develop a Resiliency Plan that identifies a mix of built structure and other solutions for flood mitigation. The benefits of the plan, once implemented, will be transformational for Davenport. For example, if the plan's recommendations had been in place since the year 2000, they would have greatly reduced or eliminated the city's flood response activities for over 850 days in the Garden Addition neighborhood.

HOOSIC RIVER REVIVAL | HOOSIC RIVER FLOOD CHUTE NATURALIZATION | NORTH ADAMS, MASSACHUSETTS | SASAKI | 2015 (COMPLETION DATE) | LANDSCAPE ECOLOGIST
Working with the local community-based non-profit Hoosic River Revival and the Massachusetts Department of Ecological Restoration, Sasaki partnered with the award-winning river restoration firm Inter-Fluve to re-envision the Hoosic River through downtown North Adams and advance the community's vision toward future implementation. Home of the largest contemporary art museum in the United States, the Massachusetts Museum of Contemporary Art (MASS MoCA), North Adams has in recent years become a center for tourism, culture, and recreation. However, the river, which flows through downtown, has inhibited the city's renaissance. Given the advancing age of the chutes, it became time to examine how to restore the river, enhance public access to the water's edge, and rethink its flood protection strategy.Allowing nature to inform design, our restoration strategies capitalize on natural processes—such as reestablishing the river's connection to its historic floodplain, providing a natural 'relief value' for flood waters, improving the riparian habitat, and enhancing access to the river. Reinvented as a river filled with life, both in the channel and along its banks, the plan includes improved habitats for native cold-water species, like brook and brown trout, reimagined recreational facilities, well-planned paths, and a host of other amenities for residents and visitors. These improvements will transform the area while maintaining or exceeding the existing level of flood protection. Based on more ideal

SASAKI

Andrew Sell

Senior Associate | Landscape Ecologist

EXPERIENCE CONTINUED

HOOSIC RIVER REVIVAL | HOOSIC RIVER FLOOD CHUTE NATURALIZATION | NORTH ADAMS, MASSACHUSETTS | SASAKI | 2015 (COMPLETION DATE) | LANDSCAPE ECOLOGIST |CONT.

river conditions upstream, the goal of the in-channel restoration is to develop, enhance, and reestablish stable riverine habitats, improve water quality, and restore in-stream connectivity. This strategy results in a design that is largely self-maintaining, reducing overall long-term maintenance costs.

LAMDA DEVELOPMENT | THE ELLINIKON METROPOLITAN PARK | ATHENS, GREECE | SASAKI | ONGOING | LANDSCAPE ECOLOGIST

Sasaki is honored to be leading the design of the Ellinikon Metropolitan Park and Coastal Front in Athens, Greece, which will be Europe's largest coastal park. Sasaki's goal is to create an exciting new landscape for Athens, with an accessible and inclusive public realm that rivals other world-class parks around the world. The park is an opportunity to embrace the abundant cultural heritage of Greece while establishing a 21st century identity for Athens that will resonate for centuries to come — befitting of a city that has led democratic and inclusionary thinking for millennia. The Ellinikon Metropolitan Park will be unlike any other public space in the world. It is an opportunity to embrace its abundant cultural heritage while establishing a 21st century identity for Athens that will resonate for the next 1,000 years. It is also a world-class model for sustainable landscape design. With over 3 million endemic, native, and regionally adapted non-invasive plants, the park showcases landscape restoration and enhances ecosystem services. It will be net zero operational carbon, and embodied carbon neutral within 35 years due to its rigorous approach to salvaging and repurposing existing site materials.

WUHAN PLANNING & DESIGN INSTITUTE, WUHAN NATURE RESOURCE & PLANNING BUREAU | WUHAN YANGCHUN LAKE BUSINESS DISTRICT | WUHAN, CHINA | SASAKI | 2015 (COMPLETION DATE) | LANDSCAPE ECOLOGIST

Wuhan's strategic location on the banks of the Yangtze River in central China has led to its sustained success as a trade hub for centuries. Heralded as the "crossroads of nine provinces," Wuhan continues to build on this legacy of economic vitality and mobility. Once on the periphery of the urban core, a recent influx in population to Wuhan led to the rapid densification of the district, but without a planning vision to accommodate for this growth. Reclamation of the lake's edge provided necessary land to respond to development pressures, but resulted in a detrimental impact to the water quality. Another significant environmental concern was a large solid waste landfill near the waterfront. These existing conditions inspired the Sasaki team to develop a series of five key remediation strategies that respond to these environmental challenges.

CHENGDU TIANFU GREENWAY CONSTRUCTION INVESTMENT CO., LTD. | CHENGDU PANDA RESERVE | CHENGDU, CHINA | SASAKI | ONGOING | LANDSCAPE ECOLOGIST

The master plan for the Chengdu Panda Reserve represents the launch of China's increasing communication, collaboration, and awareness of its pioneering strategies to protect the species and its native habitat. The giant panda is an icon of Chinese culture and a symbol for wildlife preservation efforts around the world. With only about 1,800 left in the wild, it is one of the most vulnerable species on Earth. Although a staple at many zoos around the world, giant pandas are native to only one region in western China near Chengdu, which is also one of the fastest growing cities in the world. Although urbanization and conservation are often in conflict with each other, the Chengdu Panda Reserve provides a framework for the protection of the giant panda and its native habitat, and strategies which will lead Chengdu into a more resilient future. With over 20 million people expected to visit the Chengdu Panda Reserve each year—a figure that surpasses current annual visitors to Disneyland—the city has a tremendous responsibility to advance its development in a manner that is mindful of protecting the panda's habitat. Conservation efforts have multiple benefits, as pandas serve as an 'umbrella species' for other wildlife which indirectly benefit from the protection of their shared habitat. Sasaki's plan for the reserve provides a framework for the protection of the species through a robust expansion plan focused on conservation, education, and research—with the ultimate objective of improving their ability to thrive in the wild.

Brian Holder

Director of Subsurface Utility Engineering

Years of Experience: 17

Certifications + Skills
Confined Space Entry
OSHA 10-Hour
OSHA Hazwhopper

Brian Holder has over sixteen (16) years of experience providing utility mapping services in accordance with American Society of Civil Engineers C/I/ASCE 38-02 Standard Quality Levels A, B, C, and D. Services provided include utility test holes, utility designating/marking, mapping utilities, utility record research, and communication of utility data to concerned parties. Brian's projects have included horizontal and vertical location of underground utilities, identification, and verification of underground utilities, ground-penetrating radar surveys, and investigation of related structures through various means to include video pipe inspections.

EXPERIENCE

KINGS PALZA SHOPPING CENTER | BROOKLYN, NY | 2021 | SUE PROJECT MANAGER
Site investigation for the proposed construction of an elevator and escalator SUE Project Manager Aided in the clearing two boring locations within the space utilizing a concrete GPR and RD8100 to perform a passive utility scan to detect utilities and structural reinforcement embedded within and below the concrete slab at an active shopping mall. Control Point provided the following service:

- Subsurface Utility Engineering (SUE) Quality Level B Survey

AVANGRID I-90 CROSSING | HENRIETTA, NY | 2020 | SUE PROJECT MANAGER
The Client was unable to identify the location of the water main through their normal utility detection processes, and poor record documentation was not able to provide an accurate location of the pipeline in the field inhouse. Control Point provided the following services:

- Quality Levels A and B Utility Data Collection
- Determined precise horizontal and vertical location of a 12" water main utilizing electromagnetic and ground penetrating radar technologies
- Excavated pipeline within small test hole locations to obtain precise measurements and elevations

ASHLAND SUBDIVISION STORM WATER REPLACEMENT INSPECTION | SMYRNA, DELEWARE | 2018 | SUE PROJECT MANAGER
Inspection of storm water installation project. Control Point provided the following services:

- CCTV Inspection of Storm Water Installation
- Quality Level B information provided for defects and debris
- Data provided in NASSCO certified report format

PLAINFIELD ELEMENTARY SCHOOL | PLAINFIELD, NJ | 2020 | SUE PROJECT MANAGER
Control Point Associates provided a quality level B utility survey of the school property and surrounding municipal easements for the construction of a new school building. Though the previous building had been demolished, Control Point GPR technicians were able to determine the location and approximate depth of many abandoned and decommissioned utility lines. Services included:

- 14.5-acres
- Quality Level B utility data collection
- Determined precise horizontal location of active and decommissioned utilities utilizing electromagnetic and ground penetrating radar technologies

Brian Holder

Director of Subsurface Utility Engineering

EXPERIENCE CONTINUED

212 DURHAM AVENUE | METUCHEN, NJ | 2020 | SUE PROJECT MANAGER

Planned for redevelopment, a Quality Level B investigation was performed on this multi-unit parcel and surrounding municipal streets and right-of-ways to confirm the location of underground utilities were nesacary to have the underground utilities located for the accurate location of the water main on the property.Control Point provided the following services:

- Quality Level B utility data collection
- Obtained critical storm and sanitary sewer data
- Discovered presence of buried stormwater manholes

MOORESTOWN FRIENDS SCHOOL| MOORESTOWN, NJ | 2020 | SUE PROJECT MANAGER

Control Point Associates provided a quality level B utility survey of the school property to depict the location of underground utilities and existing stormwater and roof drain piping surrounding the property. This information including relevant invert information was depicted on electronic drawings prepared by our office.

- Quality Level B utility data collection
- Determined precise horizontal location of exiting utilities utilizing electromagnetic and ground penetrating radar technologies
- Prepared electronic drawing of findings

DARBY FRIENDS BURIAL GROUND PROPERTY TRUST | DARBY, PA | 2020 | SUE PROJECT MANAGER

Missing sanitary sewer information prompted the Darby Friends Burial Ground Property Trust to request a thorough investigation of the sanitary sewer system to determine if a sanitary pipe was located on the property. A full Quality Level B investigation of the sanitary pipe, including a video inspection with NASSCO reporting, was performed. Control Point was able to confirm that the sanitary pipe did not enter the property and was in fair condition. Services included:

- Quality Level B utility data collection
- CCTV Video investigation using robotic camera equipment
- NASSCO certified investigation reporting

THE BELOVED SCHOOL | JERSEY CITY, NJ| 2020 | SUE PROJECT MANAGER

Control Point Associates provided a Quality Level B Utility Survey of the school property for planned construction work and exterior improvements. The work area contained many known utilities that needed to be designated and confirmed. Additionally, Control Point Associates was able to identify the location of additional utilities that were not known or documented on record mapping. Services included:

- 2-acres
- Quality Level B utility data collection
- Determined precise horizontal location of known and unknown utilities utilizing electromagnetic and ground penetrating radar technologies

Gregory Sawulski

Surveying Principal-In-charge

Education
A.S. Urban Forestry
Essex-Agricultural & Technical Institute

Years of Experience: 22

Certifications + Skills

AutoCAD
Civil 3D
Land Desktop
Revit
Leica Cyclone
Survey Link
TDS Survey
Microsoft Office Suite
Adobe Photoshop
OSHA Coursework

Gregory Sawulski has been involved with the land surveying industry for over twenty (20) years. For the past fifteen (15) years, Greg has been an integral part of the Control Point Associates, Inc. team, holding roles as CAD Operator, Survey Technician, Project Manager, and Branch Manager, in his current role as New York City Metro Regional Manager, Greg oversees the production and operations of Control Point's Manhattan and Long Island offices. His extensive knowledge consists of boundary and topographic surveys, ALTA/NSPS Land Title surveys, interior surveys, three-dimensional high-definition laser scanning, and building monitoring. Greg holds an Associate of Science Degree for Urban Forestry from Essex-Agricultural and Technical Institute.

EXPERIENCE

NYCDEP | BRONX RIVER GREEN INFRASTRUCTURES | BROOKLYN, NY | 2021 -CURRENT | SURVEYING PRINCIPAL-IN-CHARGE
The New York City Department of Environmental Protection (DEP) lead the implementation of green infrastructure throughout the City to better manage stormwater runoff and reduce combined sewer overflows in New York City. Services include:

- Limited topographic and utility surveys of up to 55,000 linear feet of right-of-way sidewalk bioswale sites including sidewalk and street frontage, and vault surveys
- Geotechnical investigations to determine whether subsurface conditions can support green infrastructure
- Requested water and sewer utility mapping for preparation of background documentation for proposed water and sewer tie-ins
- Site conditions were memorialized using Esri ArcGIS Collector to capture site photos at various angles

NYCEDC | PIER 42 – SOUTH STREET AND FDR DRIVE | MANHATTAN, NY | 2020 - 2021 | SURVEYING PRINCIPAL-IN-CHARGE
Survey of the property for the preparation of subdivision plans.

- Site survey
- Preparation of Metes and Bounds descriptions
- Miscellaneous survey services

550 10TH AVENUE | MANHATTAN, NY | 2020 - 2021 | SURVEYING PRINCIPAL-IN-CHARGE
Background documentation for the construction of a 52-story building

- Construction stakeout services
- Boundary survey
- As-built floor plans
- As-built slab deviation plans
- Final survey
- As-built survey

NEW YORK CITY HOUSING AUTHORITY | MANHATTAN MEGA-BUNDLE SITES | MANHATTAN, NY | 2019 | SURVEYING PRINCIPAL-IN-CHARGE
Surveying services of sixteen (16) sites throughout Manhattan for the New York City Housing Authority as part of their NextGeneration and PACT initiative and rehabilitation program.

- Property size varied from .25 acre lots to a full city block
- Boundary and topographic surveys
- Attend client kickoff meeting to review project goals and work scope
- Formulated "plan of attack" to maximize efficiency and meet aggressive deadlines

Gregory Sawulski

Surveying Principal-In-charge

EXPERIENCE CONTINUED

NYCDEP | BRONX RIVER GREEN INFRASTRUCTURES | BROOKLYN, NY | 2021 -CURRENT | SURVEYING PRINCIPAL-IN-CHARGE

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CONTROL POINT ASSOCIATES, INC.
traditional methods | modern approaches

Hunter Picard

Surveying Project Manager

Education
A.S. Civil Technology, Survey, and Mapping
University of New Hampshire

Years of Experience:12

Registrations
Land Surveyor In Training

Certifications + Skills
10-Hour Construction Safety

OSHA 40 Hour

OSHA HAZWOPER

Hunter Picard has over 10 years of experience in the survey industry and has managed and worked on projects of all types and sizes for federal, state, and municipal public agencies as well as private developments from residential properties to large commercial sites. Hunter has a background in many aspects related to the field such as Land Law, Conventional Survey, Construction Layout, 3D Scanning, Aerial/Hydrographic Mapping, GPS, GIS, and the use of various CAD programs.

EXPERIENCE

NYCDEP | BRONX RIVER GREEN INFRASTRUCTURES | BROOKLYN, Y | 2021 -CURRENT | SURVEYING PROJECT MANAGER
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Hunter Picard

Surveying Project Manager

EXPERIENCE CONTINUED

THE TRUST FOR GOVERNORS ISLAND | GOVERNORS ISLAND,NY | 2018 - PRESENT | SURVEYING PROJECT MANAGER

Control Point Associates, Inc. was contracted by the Trust for Governors Island to provide a variety of survey services related to the redevelopment of the island.

- Boundary, topographic, and location surveys
- As-built surveys
- Utility surveys
- Subdivision plans
- RP-602 sketches
- Shoreline and pier/bulkhead as-builts
- Stakeout services
- Preparation of submission plans, easements, and other legal documents

NYCDEP | BRONX RIVER GREEN INFRASTRUCTURES | BRONX, NY | 2018 - 2019 | SURVEYING PROJECT MANAGER

The New York City Department of Environmental Protection (DEP) lead the implementation of green infrastructure throughout the City to better manage stormwater runoff and reduce combined sewer overflows in New York City. The project included retail stores, supermarkets, playgrounds, and a K-8 public school

- Topographic and utility surveys of 300 Right-of-Way sidewalk bioswales
- Site survey for Fairmont Playground and Barretto Park
- Geotechnical Investigation to provide sub-surface information including vertical and horizontal alignment

NYCEDC | CONEY ISLAND | BROOKLYN, NY| 2018 | SURVEYING PROJECT MANAGER

20-acre site made up of numerous blocks for the preparation of subdivision plans.

- Aerial Mapping, boundary, and location surveys
- Reviewed deed plotting's, boundary evidence and performed boundary analysis
- Reviewed proposed subdivision lot lines with client
- Oversaw scheduling, field work, and production of deliverables

James Weed, PLS

Surveyor of Record

Education
B.S. Surveying Engineering
New Jersey Institute of Technology

Years of Experience:24

Licenses & Registrations
Land Surveyor
- New York
- New Jersey
- Pennsylvania
- Connecticut
- Vermont

Affiliations
Pennsylvania Society of Land Surveyors

New Jersey Society of Professional Land Surveyors

James Weed has been an active member in the land surveying industry for over twenty-three (23) years. Mr. Weed joined Control Point Associates, Inc. in 2009 bringing expertise with construction stakeout services, expert testimony, and geodetic control surveys. Mr. Weed holds professional land surveying licenses in New Jersey, New York, Pennsylvania, Connecticut, and Vermont. As Partner, Mr. Weed oversees construction services.

EXPERIENCE

NYCEDC | PIER 42 – SOUTH STREET AND FDR DRIVE | MANHATTAN, NY | 2020 - 2021 | SURVEYOR OF RECORD
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- Site survey
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- Oversaw scheduling, field work, and production of deliverables

550 10TH AVENUE | MANHATTAN, NEW YORK | 2020 - 2021 | ROLE: SURVEYOR OF RECORD
Background documentation for the construction of a 52-story building
- Construction stakeout services
- Boundary survey
- As-built floor plans
- As-built slab deviation plans
- Final survey
- As-built survey

James Weed, PLS

Surveyor of Record

EXPERIENCE CONTINUED

THE TRUST FOR GOVERNORS ISLAND | GOVERNORS ISLAND, NY | 2018 - PRESENT | SURVEYOR OF RECORD

Control Point Associates, Inc. was contracted by the Trust for Governors Island to provide a variety of survey services related to the redevelopment of the island.

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NEW YORK CITY HOUSING AUTHORITY | MANHATTAN MEGA-BUNDLE SITES | MANHATTAN, NY | 2019 | SURVEYOR OF RECORD

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- Formulated "plan of attack" to maximize efficiency and meet aggressive deadlines

NYCDEP | BRONX RIVER GREEN INFRASTRUCTURES | BRONX, NY | 2018 - 2019 | SURVEYOR OF RECORD

The New York City Department of Environmental Protection (DEP) lead the implementation of green infrastructure throughout the City to better manage stormwater runoff and reduce combined sewer overflows in New York City. The project included retail stores, supermarkets, playgrounds, and a K-8 public school

- Topographic and utility surveys of 300 Right-of-Way sidewalk bioswales
- Site survey for Fairmont Playground and Barretto Park
- Geotechnical Investigation to provide sub-surface information including vertical and horizontal alignment

*The University of the **State** of New York*
Education Department
Office of the Professions

REGISTRATION CERTIFICATE

*Do not accept a copy of **this** certificate*

License Number: 050765-01 Certificate Number: 1743760

WEED JAMES CHRISTOPHER

87(2)(b)

1784 is registered to practice in New York State through 12/31/2024 as a(n)
LAND SURVEYOR

LICENSEE/REGISTRANT

EXECUTIVE SECRETARY

COMMISSIONER OF EDUCATION

Sarah L. Benson
DEPUTY COMMISSIONER
FOR THE PROFESSIONS

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TETRA TECH

Jake Oldenburger, P.E., CFM, ENV SP

Regional Manager

Education
ME, Civil Engineering, Stevens Institute of Technology

B.S., Civil Engineering, Rensselaer Polytechnic Institute

Years of Experience:14

Licenses & Registrations
Professional Engineer

- New Jersey
- New York
- Texas
- Connecticut
- Florida
- Delaware

Certifications + Skills
Certified Floodplain Manager (CFM)

Mr. Oldenburger has over 14 years of experience in civil engineering, stormwater management, land development, and construction. He oversees Tetra Tech's Resilient and Sustainable Infrastructure practice in the New York metro area. His project experience has focused on projects throughout the tri-state area, as well as Texas and Florida. He has effectively overseen the performance and preparation of detailed engineering designs for permitting and construction. As a project manager Mr. Oldenburger has developed a reputation of being extremely versatile in executing a wide range of complex projects. His expertise lies in civil/site, flood resiliency design and feasibility studies, hydrologic and hydraulic analyses, stormwater management reports, and flood studies. He is well versed in the design of soil erosion and sediment control, site grading and earthwork analyses, survey, construction coordination and inspections. Over the past few years, he has specialized in resiliency and flood mitigation planning in response to severe weather events in New York, Texas, Massachusetts, and Florida.

EXPERIENCE

NYCDDC| RED HOOK COASTAL RESILIENCY | BROOKLYN, NY.
Mr. Oldenburger is the Project Manager on a consultant team that is designing the flood protection improvements for this $100 million coastal resiliency project, which is partially funded by a FEMA's Hazard Mitigation Grant Program. Red Hook area of Brooklyn is categorized as a low-lying, coastal area with the greatest risk of flooding in hurricane-strength storms. Tetra Tech is leading the detailed analysis of the interior drainage system, which is comprised of combine sewers and major interceptors. Because the project is receiving FEMA funding Tetra Tech is leading the benefit-cost analysis, which required a detailed evaluation of finish floor elevations of approximately 1,000 structures.

NYCDEP | ONSITE GREEN INFRASTRUCTURE, SCHOOLS| BROOKLYN/QUEENS, NY–
Mr. Oldenburger is the Project Manager leading the planning and design of approximately $15 million in green infrastructure improvements at eight New York City public schools in Brooklyn and Queens. The project includes subsurface storage chambers, porous paving and other various site improvements. The sites range in size from 1 to 15 acres and are numerous constraints to work around. Planning efforts included a detailed site visit and geotechnical investigation to characterize soil conditions and determine infiltration rates. The design of the green infrastructure is in accordance with the NYCDEP On-site Design Manual. The Green Infrastructure Program is part of the city's CSO consent order to manage stormwater and reduce combined sewer overflows. The goal of the program is to manage the equivalent of one inch of precipitation on 10% impervious surfaces thereby improvements the water quality and promoting sustainability.

NYS GOVERNOR'S OFFICE OF STORM RECOVERY, LISTER PARK GREEN INFRASTRUCTURE IMPROVEMENTS, ROCKVILLE CENTRE, NY.
Mr. Oldenburger was the Project Manager for the approximately $3.1 million in site improvements to retrofit the park site with new green infrastructure components intended to reduce discharge and treat runoff before entering the Mill River. The design includes reconstruction of an existing paved parking area and the creation of a new rain garden. The final design minimizes construction costs by utilizing the existing parking area base material and minimizing excavation requirements. The project also incorporated the environmental enhancement of the Mill River banks with a living shoreline. In addition the project provide flood mitigation to nearby residence with proposed walls, berms, and deployable flood gates. The project included a detailed site investigation walk through with a review of existing conditions and a geotechnical investigation (boring) plan and geotechnical testing to determine field and laboratory soil characteristics, soil permeability rates, and depths to groundwater table.

TETRA TECH

Jake Oldenburger, P.E., CFM, ENV SP

Regional Manager

EXPERIENCE CONTINUED

PS 313, 235TH STREET PUMPING STATION, NYCDEP, BRONX, NY. PROJECT ENGINEER.
In charge of facility planning, design and DSDC for the complete overhaul of the 235th Street combined sewer pumping station with a dry weather flow of 1.5 MGD and a total station capacity of 3.5 MGD. The previous 1960's design included two belt-driven pumps with a bypass to handle wet weather flow exceeding pump station capacity. The improvement project for BWT included upgrading outdated equipment and the physical structure which are both in poor condition. Installation of a new 1,100 LF 24-inch force main and 6-inch water main is also included. The services included the preparation of a Facilities Plan Assessment, Engineer's Basis of Design Report, full detailed design submittals (30%, 60%, 90%, and Final), bidding services, and DSDC. Permitting required BWT, BEDC, and
BWSO coordination and collaboration as well as Community Board, PDC, DOB, NYCDOT, and NYC Parks approvals. The project also involved sustainability elements the requirement to meet local laws 96/97. Lead the sustainability coordination and obtain Institute for Sustainable Infrastructure Envision Gold Award for sustainability on the project.NYS

GOVERNOR'S OFFICE OF STORM RECOVERY, EAST ROCKAWAY HIGH SCHOOL GREEN INFRASTRUCTURE RETROFIT / EAST ROCKAWAY, NY.
Mr. Oldenburger was the Project Manager for the planning and design of approximately $4.1 million in green infrastructure improvements at East Rockaway High School on Long Island. The project includes subsurface storage chambers, synthetic turf, porous paving, and rain gardens. The existing site is constrained on all four sides by school buildings and the Mill River resulting in very limited work areas. The project included a detailed site investigation walk through with a review of existing conditions and a geotechnical investigation (boring) plan and geotechnical testing to determine field and laboratory soil characteristics, soil permeability rates, and depths to groundwater table. The final improvements include five (5) new rain gardens, improvements to the school's turf fields, parking lot improvements, and retrofitting of the existing failing subsurface drain system. Storm surge mitigation improvements are also incorporated into the design that include backflow prevention devices and an elevated bulkhead.

NYS GOVERNOR'S OFFICE OF STORM RECOVERY, SMITH POND, ROCKVILLE CENTRE, NY
Mr. Oldenburger was the Project Manager for the approximately $4.9 million in site improvements to retrofit the park site to reduce sedimentation, nutrient loads, and vegetation growth within the open water of pond in Rockville Centre on Long Island. In addition to other park improvements a fish ladder will be constructed to support historic fish migration in the upper section of the Mill River. The project included a detailed site investigation walk through with a review of existing conditions and a geotechnical investigation (boring) plan and geotechnical testing to determine the quantities for dredging.
North Shore Bulkhead Project, City of Long Beach, Long Beach, NY. – Project Manager for the design and construction of a $12 Million bulkhead replacement project for the City of Long Beach, NY. The city's north shore is almost entirely comprised of bulkheads that are owned by either the city or private residents. The project intends to increase the City's resiliency to flooding in the wake of Superstorm Sandy by installing approximately 6,500 linear feet of new bulkheads along the city owned portions. The scope of work involved bulkhead alignment design, grading, construction impact evaluation, and cost estimating for the project. Mr. Oldenburger coordinated and prepared design deliverables (30%, 60%, 90%, and Bidding) with internal design team members and external subconsultants, as well as the Commissioner of Public Works. Responsible for oversight of construction on behalf of the city by providing construction management and inspection services.

PORT NEWARK FIRE PROTECTION BUILDING 111 RESILIENCY IMPROVEMENTS, PANYNJ, NEWARK, NJ. 2017-2020
Project Engineer for Stage I, III, and IV services for the facility improvements to protect the high service and fire protection building electrical and mechanical equipment for Port Newark. Tetra Tech was selected by the Port Authority of NY & NJ to investigate means and methods to improve the resiliency of Building 111 to significant coastal storm surge events, such as Hurricane Sandy. Tetra Tech will perform design analysis to investigate pragmatic and cost-effective measures to fully protect the building from water damage due to Hurricane Sandy-type storm surge. Electrical, fire/plumbing, HVAC equipment, and appurtenances will be replaced, relocated, or installed. These include, but are not limited to pumps, controls, conductors, panels, and other appurtenances. Multiple disciplines such as architectural, civil, structural, mechanical, and fire suppression were included in the design.

The University of the State of New York
Education Department
Office of the Professions

REGISTRATION CERTIFICATE

Do not accept a copy of this certificate

License Number: 092397-01 Certificate Number: 1370819

OLDENBURGER JACOB
87(2)(b) [redacted]

is registered to practice in New York State through 07/31/2024 as a(n)
PROFESSIONAL ENGINEER

LICENSEE/REGISTRANT

EXECUTIVE SECRETARY

INTERIM COMMISSIONER OF EDUCATION

DEPUTY COMMISSIONER
FOR THE PROFESSIONS

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TETRA TECH

William Paison, P.E., LEED® AP

Senior Electrical and Controls Engineer

Education
B.S., Electrical Engineering, University of Michigan

Years of Experience:27

Licenses & Registrations
Professional Engineer
- New York
- Michigan
- Georgia
- Nebraska
- Pennsylvania
- Ohio
- Oklahoma
- Texas
- Missouri,

Certifications + Skills
Construction Documents Technologist, Construction Specifications Institute

DoD Secret Clearance

DoE Q Clearance

LEED Accredited Professional

Mr. Paison is experienced in the electrical and instrumentation design and specification of water and wastewater treatment systems. These facilities feature computerized monitoring and control systems, radio telemetry, cellular telemetry, power distribution systems, security, and networking. Mr. Paison also has extensive experience in the design of government and industrial buildings. These facilities feature power distribution systems, automatic light control to conserve energy, LEED design recommendations, video based security with remote monitoring, communications, lightning protection, and addressable fire systems. He has expertise in the following areas: medium and low voltage power distribution design, supervisory control and data acquisition (SCADA) design, Instrumentation, medium voltage substations, motor control, process control, chemical feed system instrumentation, generators and standby power systems, and lighting.

EXPERIENCE

KERR LAKE CAMPSITE, NORTH BEND PARK, WATER AND ELECTRICAL IMPROVEMENTS, MECKLENBURG COUNTY, VA.
Electrical ITR Lead. Conceptual and detailed design of water and electrical service provision to 47 additional campsites within Site C and D camping areas. Procured and managed subconsultants to include utility and land survey. ARRA-funded project.

DELAFIELD SUBSTATION REPLACEMENT, UNITED STATES MILITARY ACADEMY, WEST POINT, NY. | LEAD ELECTRICAL ENGINEER.
Completed replacement of the main distribution switchgear at the utility substation. Switchgear supplies power to 75 percent of the campus. Provided coordination with the utility for interconnection, protection, and tie in requirements. Designed a system that provided for future additional loading and construction sequencing to allow for replacement gear to be reinstalled in the same location.

WILSON GATE SUBSTATION UPGRADES, UNITED STATES MILITARY ACADEMY, WEST POINT, NY. | LEAD ELECTRICAL ENGINEER.
In charge of the addition of second substation transformer and distribution switchgear to the utility substation. Coordination with utility for interconnection, protection, and tie in requirements. Designed medium voltage duct bank for completion of distribution loop using both existing and new duct.

BRIGHTMARK RNG, NEW YORK. SENIOR ELECTRICAL ENGINEER.
Developed electrical and controls interconnection drawings for an RNG plant. System accepts trucked in biogas from local dairy farms. The system compresses the gas and either injects into the utility natural gas pipeline or sends to a scrubbing system for final polishing before injection. Provided site grounding and lighting design.

RIVER PUMP HOUSE VFD UPGRADES, TONAWANDA, MAJOR AUTOMOTIVE MANUFACTURER, NEW YORK. 2019. SENIOR ELECTRICAL ENGINEER.
Worked with switchgear supplier for pre-purchase by Owner. Designed the replacement of the pump house incoming switchgear and the installation of VFDs for the four pumps. Replaced two diesel generator powered pumps with electric driven pumps. Upgraded the PLC controls to incorporate the VFDs, switchgear, and operator interface. Sequence of construction was laid out so that two pumps were always available for use.
South Mall Improvements and Snow Melt System, City of Kalamazoo, MI. Electrical Engineer. Designed street lighting system for pedestrian mall converting to vehicular traffic road. System included updating several intersection traffic control devices and strategies, power distribution for street lighting and snowmelt system, and utility coordination.

William Paison, P.E., LEED® AP

Senior Electrical and Controls Engineer

EXPERIENCE CONTINUED

RIVER PUMP HOUSE VFD UPGRADES, TONAWANDA, MAJOR AUTOMOTIVE MANUFACTURER, NEW YORK. 2019. SENIOR ELECTRICAL ENGINEER. | CONT.
Buckley Air Force Base Track and Field Lighting, Aurora, CO. Electrical Engineer. Designed the power distribution system and lighting system for the Bases new track and Field. Project was designed to meet the stringent height limitations and stray light requirements of the United States Air Force.

WASTEWATER TREATMENT PLANT IMPROVEMENTS, UNITED STATES ARMY CORPS OF ENGINEERS, ST. CROIX FALLS, WI. LEAD ELECTRICAL AND CONTROLS ENGINEER.
Designed the power distribution and control systems replacement associated with doubling the plant's capacity. Power distribution was converted from 120/208 volt, 3-phase to 480/277 volt, 3-phase. A fiber optic network was installed to provide a robust SCADA network between the three buildings on site. Coordinated power feed upgrades with City utility provider along with temporary feeds during construction. Designed to meet the stringent requirements of the United States of America Corp of Engineers.

ROCK ISLAND ARSENAL, UNITED STATES ARMY CORPS OF ENGINEERS, ROCK ISLAND, IL. ELECTRICAL ENGINEER.
Designed the power distribution, fire alarm, and security systems, local area networks (LAN), and paging/mass notification system for the facility. Project was designed to meet the stringent requirements of the United States Army. The LAN includes both NIPR and SIPR networks. Building design incorporated an operations center and a command center. The fire, security, LAN, and paging systems are connected via fiber optic cabling to the base-wide associated systems. Building is designed to meet LEED Silver requirements.

TACOM LAB RELOCATION, UNITED STATES ARMY, DETROIT ARSENAL, WARREN, MI. ELECTRICAL ENGINEER.
Designed the power distribution, fire alarm, and security systems, local area networks, and paging/mass notification system upgrades to the lab relocation facility. Designed to meet the stringent requirements of the United States Department of Defense.

MEDICAL WAREHOUSE, BUCKLEY AIR FORCE BASE, UNITED STATES AIR FORCE, AURORA, CO. ELECTRICAL ENGINEER.
Designed the power distribution, fire alarm, and security systems, local area networks (LANs), and paging/mass notification system for the facility. Designed to meet the stringent requirements of the United States Air Force. The fire, security, LANs and paging systems are connected via fiber optic cabling to the base-wide associated systems.

BIOMASS WEST SIDE CHILLER, DTE ENERGY, OHIO. SENIOR ELECTRICAL ENGINEER.
Developed electrical and controls interconnection drawings for the addition of a chiller to an existing blower system. Validated the power feed sizing and was able to save the Owner the need to upsize incoming power feed. Extended controls from existing blower system to include a chiller. Altered site power distribution system to feed chiller. Provided site grounding design.

LOW IMPACT ASSET PROTECTION NERC CIP, DTE ENERGY, MULTIPLE LOCATIONS, MI. PROJECT ENGINEER.
Project consisted of transitioning its Low Impact NERC BES Cyber Systems/ and or Assets from the CIP V3 to CIP V5. Developed required Electronic Access Controls (EAC) and Physical Access Controls (PAC) for the identified sites. Provided engineering services for the design and construction phases to bring 21 DTE Energy sites throughout Southeast Michigan into compliance with the current NERC CIP requirements (CIP V5 or latest) for Low-Impact systems. Initial design and construction phase services included: SME interactive sessions for scope determination; site visit assessments and gap analysis; development of preliminary design, functional design, and site-specific detailed design packages; budgetary estimating; implementation plan; construction administration for submittals and RFI management; and compliance documentation for the implementation of cyber and physical access controls each facility type (Power Plant, Peaker, Renewable and Control Center). Protection measures were leveraged based upon consistency of security measures in place as well as medium and high impact controls and policies. Managed multi-discipline team throughout project life cycle while maintaining project scope, schedule, budget, and quality expectations

TETRA TECH

Robert Cantagallo, CHMM

Program Manager/Project Manager

Education
M.A., Biology, William Paterson University

B.S., Biology, William Paterson University

Years of Experience: 30

Registrations & Certifications
Certified Hazardous Materials Manager, Number 15713

Mr. Cantagallo has 30 years of experience in the environmental field. He has held multiple positions for commercial and federal clients, from Field Scientist and Field Operations Lead to Program and Project Manager, on projects ranging from Phase I ESAs and Remedial Investigations, to Feasibility Studies, Remedial Design and Remedial Oversight. His significant project experience includes MGP projects, groundwater plume investigation and remediation, and long-term compliance and monitoring. Mr. Cantagallo has managed projects for utility clients, the USEPA, the USACE industrial clients, and private developers. various RI/FS and SI field tasks including site health and safety management, sample management, and site management; and serving as a community relations liaison on a multi-site, high-visibility project. Mr. Cantagallo has been responsible for projects at a dozen National Grid former MGP sites as a client lead for tasks ranging from remedial investigation activities to IRMs, feasibility studies, and remedial design. In addition, Mr. Cantagallo is responsible for managing the schedule and budget and overall technical execution as the Project Manager of National Grid projects at the Troy (Smith Avenue), Watervliet (5th Avenue), and the Ingall's Avenue former MGP sites.

EXPERIENCE

EQUINOR, BROWNFIELD CLEANUP PROGRAM FOR EMPIRE WIND 1 AND 2, MULTIPLE LOCATIONS, NEW YORK
Project manager for New York State Brownfield Cleanup Program (BCP) applications submittal and compliance for multiple properties in New York State. These properties will be used to facilitate on-shore grid connections and serve as operations and maintenance facilities for the Empire Wind 1 & 2 projects off the southern shore of Long island. Responsible for managing the schedule and budget and supervising overall technical execution for pre-application investigations, BCP application preparation and submittal, and implementation of requirements under the Brownfield Cleanup Agreement (BCA).

GLENN SPRINGS HOLDINGS, LLC, COPR PROGRAM, SITE 58, KEARNEY, NJ
Project manager for stormwater design at this chromate ore residuals site in Kearney, NJ. Responsible for managing the schedule and budget and supervising overall technical execution of an engineering team tasked with incorporating overall site drainage into a planned cap system. Subsequently tasked by the client as the project coordinator for ongoing work at this Site. Responsibilities include coordinating efforts of multiple consultants and contactors to complete the overall remedial design and meet NJDEP schedule and regulatory requirements.

UGI MGP PROGRAM, MULTIPLE SITES | SUBJECT MATTER EXPERT, OCTOBER 2016–PRESENT
Provide technical expertise on multiple MGP projects being performed by Tetra Tech under UGI's consent order with the Pennsylvania Department of Environmental Protection. Responsibilities include client relations, planning of investigation work, and technical instruction and advice to the Tetra Tech Project Managers and Field staff.

VARIOUS CLIENTS, PHASE I ENVIRONMENTAL ASSESSMENTS OF COMMERCIAL PROPERTIES, MD, GA, KS, NE | PROJECT MANAGER, MAY 2017–MAY 2021
Through the recommendation of the financial firm Raymond James, managed sole source contracts to perform Phase I environmental assessments and property transfer consultation for light industrial/commercial facilities along the east coast and in the mid-west. Managed field personnel who conducted site reconnaissance and reviewed facility information, Sanborn maps, aerial photographs, current and historical topographic maps, and interviews. Ensured that the Phase I Reports were completed to ASTM standards and client's requirements. Managed oversite of third party Phase II investigation, and provided consultation on REC definition and financial liability.

Robert Cantagallo, CHMM

Program Manager/Project Manager

EXPERIENCE CONTINUED

PPG, WALTON'S FARM SITE, DELRAN, NJ | PROJECT MANAGER, JANUARY 2018–FEBRUARY 2021
Project Manager responsible for managing the schedule and budget and supervising overall technical execution of the Remediation and Investigation activities for this site in a residential area along Rancocas Creek. Managed the oversight of soil excavation activities, Remedial Investigation of groundwater at the site, and the Remedial Investigation of sediment. Responsible for development of the Remedial Investigation Report, Feasibility Study, and Remedial Action Work Plan for remediation of impacted sediments at the site.

HELIX RAVENSWOOD LLC, RAVENSWOOD GENERATING FACILITY, LONG ISLAND CITY, NY | PROGRAM MANAGER, 2001–APRIL 2020
Responsible for providing environmental consulting, investigative, permitting, compliance and reporting services to the owner of the Ravenswood Generating Station and Gas Turbine Facility (Ravenswood Site), an active power generating facility comprising both a generating station (GS) and a gas turbine (GT) facility. Project Manager for environmental consulting services at this facility for over 17 years for four different facility owners. Currently, the Ravenswood Site is owned by LS Power and operated by EthosEnergy. Former owners have included the Consolidated Edison Company of New York, Inc. (Con Edison), Keyspan Energy Corporation (Keyspan, subsequently National Grid), and TransCanada Corporation. The 32-acre Ravenswood Site is located in a heavily urbanized area of Long Island City, Queens, New York along the East River. Responsible for managing the schedule and budget and supervising overall technical execution of activities at this facility, including spill closure, remedial investigation, permit compliance and monitoring, and negotiation with regulatory agencies. Tasks have included in-situ waste classification, health & safety oversight, and work area and perimeter air monitoring program during a partial remediation of a former MGP and subsequent construction of a combined cycle power unit.

NATIONAL GRID/KEYSPAN, MULTIPLE SITES, NY | PROGRAM MANAGER, JANUARY 2004–MARCH 2020
Responsible for client relations and supervising technical execution of multiple projects for National Grid, at a total value of over $3M. These projects, all former MGP or gas holder sites, are located throughout New York State, including Long Island, Queens, and Brooklyn. Tasks for these projects include Site Characterization, Remedial Investigation, LNAPL and DNAPL delineation, Feasibility Studies, Remedial Design, and Remedial Actions. Mr. Cantagallo has coordinated investigation, design, and remedial activities with multiple parties, including the client, State regulators, the public, and the USACE; has made numerous presentations to regulators and the community regarding project activities; and successfully negotiated with regulators on behalf of the client. KeySpan was acquired by National Grid in 2008, and Mr. Cantagallo continued as the Program Manager for the former KeySpan sites.

NATIONAL GRID, PEOPLES WORKS FORMER MGP SITE, BROOKLYN, NY | PROJECT MANAGER, 2009–MARCH 2020
Project Manager responsible for managing the schedule and budget and supervising overall technical execution of the Site Characterization activities for this site located on the Wallabout Channel. Investigation tasks included surface and subsurface soil sampling, soil boring advancement and monitoring well installation, test pit excavation, sediment core collection and sampling, and groundwater sampling.

TETRA TECH

Joe Fischl

Supervising Biologist/Ecologist

Education
M.S., Ecology, Rutgers University

B.S., Wildlife Biology, Rutgers University, 1976

Years of Experience:41

Registrations & Certifications
Habitat Evaluation Procedures (USFWS), US

40-Hour OSHA Hazardous Waste Health and Safety Training

8-Hour OSHA Hazardous Waste Health and Safety Refresher Course

8-Hour OSHA Hazardous Waste Health and Safety Supervisor Training

Mr. Fischl has more than 40 years of experience in technical management/consulting and research activities involving both private and public sectors. His consulting/management experience includes ecological site characterization/mapping; threatened and endangered species surveys; wetland delineation, mitigation/restoration design, and permitting; preparation of National Environmental Policy Act (NEPA) and state program environmental assessments and environmental impact statements; and training and supervision of field research assistants. Mr. Fischl has regulatory and permitting experience at the state, federal, and local program level, including extensive experience with Clean Water Act Section 10/404 permitting, and threatened and endangered species biological assessments relating to Endangered Species Act Section 7 and Section 10 consultations. Mr. Fischl's research experience includes design and implementation of field studies investigating avian behavior and population dynamics, and the analysis and interpretation of results. Mr. Fischl is currently the Biological Sciences Group Technical Lead in Morris Plains and also provides guidance for northeast region staff. He supervises biological sciences staff of up to seven individuals; reviews biological, ecological and environmental assessments and reports evaluating physical and/or chemical impacts to the environment resulting from the construction of new facilities, or the remediation of contaminated or disturbed sites. He also provides technical direction, recommendations, and evaluations for field sampling procedures for terrestrial and aquatic, vegetation and wildlife resources.

EXPERIENCE

MCMILLEN JACOBS/NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION, HONK FALLS DAM DESIGN, WAWARSING, NY | ENVIRONMENTAL ASSESSMENT/PERMITTING LEAD, 2018–PRESENT
Working with the New York City Department of Environmental Protection and McMillen Jacobs, who served as the prime consultant responsible for project management and overall work execution of the design effort for rehabilitation of the Honk Falls Dam, led the state/city environmental quality review of project impacts associated the proposed design plan. Also responsible for leading the preparation of federal, state and local permits required to authorize the proposed activity. Key environmental issues assessed included: land use, socioeconomic conditions, visual resources, natural resources, hazardous materials, noise, neighborhood character and construction related impacts. Key permits prepared included the U.S. Army Corps of Engineers (USACE), Sections10/404, New York State (NYS) Department of Environmental Conservation (DEC) Protection of Waters (Water Quality Certification, Excavation & Fill, and Dam Safety), and NYS State Pollutant Discharge Elimination System (SPDES).

GLEN SPRINGS HOLDINGS, INC., REMEDIAL DESIGN - LOWER 8.3 MILES OF THE LOWER PASSAIC RIVER, OPERABLE UNIT TWO OF THE DIAMOND ALKALI SUPERFUND SITE, NEWARK, NJ | HABITAT SURVEY LEAD, 2017–PRESENT
Prepared the Habitat Survey Work Plan for the Pre-Design Investigations (PDI) and coordinated habitat surveys conducted to gather additional site-specific information required to develop the Remedial Design for the lower 8.3 miles of the Lower Passaic River (Operable Unit Two [OU 2]) of the Diamond Alkali Superfund Site (the Site), located in Essex, Hudson, Bergen, and Passaic Counties, New Jersey. Habitat surveys were performed as part of the PDI activities to characterize existing shoreline and in-river habitats within OU 2 for the purpose of designing habitat replacement measures on the mudflats and any other sensitive habitat areas affected by implementation of the selected remedy, including subtidal areas, and to support any permitting or regulatory requirements.

TETRA TECH

Joe Fischl

Supervising Biologist/Ecologist

EXPERIENCE CONTINUED

GLEN SPRINGS HOLDINGS, INC., REMEDIAL DESIGN - LOWER 8.3 MILES OF THE LOWER PASSAIC RIVER, OPERABLE UNIT TWO OF THE DIAMOND ALKALI SUPERFUND SITE, NEWARK, NJ | HABITAT SURVEY LEAD, 2017–PRESENT | CONT.

Specific habitat surveys conducted included: shoreline and in-river habitat surveys delineating wetlands and mudflats, wetland function and value assessment, avian surveys, assessment of threatened and endangered species habitat, and assessment of diversity and abundance of benthic communities.

PSE&G, TRANSMISSION RIGHT-OF-WAY (ROW) VEGETATION MAINTENANCE PROGRAM, NJ | PROJECT MANAGER/ECOLOGY LEAD, 2016–PRESENT

Supervised technical field staff for PSE&G's Transmission ROW Vegetation Maintenance Program by providing the following environmental services associated with transmission ROWs: environmental evaluations of existing natural resources including wetlands, riparian zones, threatened and endangered species habitat, and invasive species; state and federal threatened and endangered species surveys; and environmental oversight of contractors working in sensitive habitats. Assisted PSE&G with the updates of data matrices documenting environmental resources and review of draft submissions to state agencies.

PANYNJ | JOHN F. KENNEDY INTERNATIONAL AIRPORT (JFK), INSTALLATION OF FLOOD GATES AT 17 OUTFALLS, NY | PERMITTING LEAD, 2016–2018

Determined environmental impacts and prepared draft National Environmental Policy Act (NEPA) documentation for installation of flood gates on 17 outfalls at JFK Airport. Identified environmental requirements for construction; identified and supported acquisition of all environmental permits, including providing all supporting materials for permit applications. This project was funded in whole or in part by a Federal Emergency Management Agency (FEMA) grant for Super Storm Sandy–related repair and resiliency.

PANYNJ | EMERGENCY MANAGEMENT ADMINISTRATION ("FEMA") GRANT PROJECTS, PORT NEWARK, NJ | PERMITTING LEAD, 2016–2018

Supported the environmental review for Super Storm Sandy–related repair and resiliency projects located at Port Newark. Determined environmental permits required for the proposed action; and prepared appropriate documentation to comply with NEPA addressing the purpose, scope, location, proposed elements, level of planning, design, and potential impacts. To date projects have included: 1) Building 111 Electrical and Mechanical Equipment Resiliency and Relocation and 2) Reconstruction of the Resident Engineer's Offices.

NEWARK COMMUNITY ECONOMIC DEVELOPMENT CORPORATION (NCEDC), NEWARK RIVERFRONT PARK, NJ | PERMITTING SPECIALIST, 2016–2018

Supported the NCEDC with the proposed development of the Newark Riverfront Park project along the approximately 1-mile reach of the Passaic River from Bridge Street to Madison Street. Responsibilities included identification of New Jersey Department of Environmental Protection (NJDEP) and USACE potential permit requirements based on existing site conditions/natural resources within the project area, and proposed activities associated with park development.

SUNEDISON LLC, SITE SUITABILITY ANALYSES FOR POTENTIAL SOLAR ENERGY SITES THROUGHOUT NY | PERMITTING SPECIALIST, 2016–2017

Supervised site suitability analyses (SSAs) assessing constraints associated with key resources at over 45 locations proposed for solar energy facilities in various counties throughout New York. Analyses focused on issues that would likely affect the feasibility, cost, and schedule of project development; and that would be addressed during the environmental review and permitting process. Key resources evaluated included biological, cultural, protected lands and zoning and land use constraints.

Declan J. Mulcahy, P.E.

Geotechnical Engineer

Education
M.S., Manhattan College, Civil Engineering

B.S., Manhattan College, Civil Engineering

Years of Experience: 19

Licenses & Registrations
Professional Engineer,
- New York
- New Jersey,
- Pennsylvania,
- Delaware
- Illinois

Certifications + Skills
Fundamental Engineer/2005

40 Hour Hazardous Waste Operations Training

NJ Transit Railroad Training

Mr. Muclcahy is responsible for design and supervision of subsurface investigations, and geotechnical design and analysis related to buildings and highway construction. Specific experience includes design and analysis of shallow and deep foundations for buildings and highway and railroad bridges, various types of retaining structures, concrete, steel and timber piles, pedestrian bridges, cellular antennae tower foundations, stabilization of embankment fills over compressible deposits, slope stability analysis with and without geotextile reinforcement, driven and drilled pile foundations, and drilled shafts. He is also involved in review of geotechnical aspects of construction such as wave equation evaluation, settlement data analysis, and temporary sheeting design review.

EXPERIENCE

NJDOT | ROUTE 7 DRAINAGE | KEARNY, NJ | 2017 - 2020 | GEOTECHNICAL ENGINEER.
The Route 7 Drainage Project involved the construction of 4 pump stations constructed approximately 25 ft.+ below the groundwater elevation, and multiple sheet pile walls to raise the grade of the road in an effort help reduce flooding . Responsibilities included assisting in the preparation of the Geotechnical Engineering Foundation Report. Preformed borings and established a laboratory testing program consisting of grain sizes, Atterberg Limits, triaxial testing and consolidation testing. Evaluated shallow versus deep foundations. Performed a pile capacity analysis consisting of axial resistance and uplift resistance calculations for a single pile and group condition. He also evaluated liquefaction. Mr. Mulcahy was also responsible assisting in the design of the sheet pile walls.

NJDOT | NJ ROUTE 22 OVER CHESTNUT STREET | UNION, NJ | 2016 - 2019 | GEOTECHNICAL ENGINEER.
This project consisted of the replacement of the current Route 22 Bridge over Chestnut Street, designing a temporary bridge to support traffic during construction and various retaining walls. Responsibilities included conducting boring and pavement core inspection within the vicinity or the bridge. The project also consisted of inspecting and recording the soil properties. Mr. Mulcahy was involved in the selection of the foundation type for the new bridge, the design of the King Pile system for the bridge abutments, performing a pile capacity analysis, lateral capacity analysis, and drivability analysis for the bridge abutments, analyzing settlement and possible liquation and performing laboratory testing. Additionally, Mr. Mulcahy assisted in the preparation of the geotechnical foundation report.

NJDOT | NJ ROUTE 54 & NJ ROUTE 322 OVER CAPE MAY POINT BRANCH | FOLSOM BOROUGH, NJ | 2014 | GEOTECHNICAL ENGINEER.
This project consisted of the replacement of three bridges, various retaining walls, and hydraulic design. Mr. Mulcahy was responsible for the settlement analysis of the retaining walls, cofferdam design and assisted with the geotechnical foundation report and scour analysis report.

NJDOT | NJ ROUTE 7 OVER CONRAIL | KEARNY, NJ | GEOTECHNICAL ENGINEER.
This project consisted of the replacement of the current Route 7 Bridge over Conrail. Responsibilities included conducting boring and pavement core inspection on the bridge and within the bridge approach. The project also consisted of inspecting and recording the soil properties. Mr. Mulcahy responsibilities included the settlement and stress analysis of the pavement, the global stability analysis of the approach embankment, the evaluation of the existing and proposed pile loads, pile capacity analysis and performing laboratory testing. Mr. Mulcahy also assisted in the preparation of the geotechnical foundation report and pavement report.

NYCDDC | 3 DDC WALLS | BRONX, NY| GEOTECHNICAL ENGINEER.

Declan J. Mulcahy, P.E.

Geotechnical Engineer

EXPERIENCE CONTINUED

The DDC project consisted of the reconstruction of 3 walls: Bailey Place, Decatur Avenue, and Pennyfield Avenue. With Bailey, Mr. Mulcahy was responsible for addressing remediation of the wall, so it did not have to be replaced. With Decatur, Mr. Mulcahy was responsible for determining that the Decatur wall should be replaced with a cast in place retaining wall. With Pennyfield, Mr. Mulcahy was responsible for determining that the Decatur wall should be replaced with a sheet pile wall with cast in place moment slab and parapet. Mr. Mulcahy was responsible for performing retaining wall calculations using CTShoring. Mr. Mulcahy used the NYC Building code and the properties of the bearing materials to establish design parameters. Mr. Mulcahy was responsible for assisting with the foundations reports.

ST. MARY'S HOSPITAL FOR CHILDREN | BAYSIDE, NY | GEOTECHNICAL ENGINEER.
This project consisted of the construction of two new buildings to expand the St. Mary's Hospital for Children located at 29 01 216th Street, Bayside, New York. Mr. Mulcahy was responsible for determining that 1 building consisting of a 50 ft. by 40 ft. concrete structure be supported on spread footings while a second pavilion expansion should be supported on micropiles due to uncontrolled fill when the building was originally constructed. Also Mr. Mulcahy was responsible for recommending design parameters for the retaining wall and shoring systems. Mr. Mulcahy used the NYC Building code and the properties of the bearing materials to establish design parameters. Mr. Mulcahy was responsible for assisting with the foundations report.

47TH AVENUE LONG ISLAND CITY | QUEENS, NY | GEOTECHNICAL ENGINEER.
This project consisted of the construction of a fifteen-story steel frame and masonry building. Mr. Mulcahy was responsible for determining that the building should be supported on H-piles. Mr. Mulcahy used the NYC Building code and the properties of the bearing materials to establish design parameters. Mr. Mulcahy was responsible for assisting with the foundations report.

ROUTE 295 & 42/I-76 DIRECT CONNECTION | CAMDEN COUNTY, NJ | GEOTECHNICAL ENGINEER.
The Direct Connection Project involved the reconstruction of I-295, I-76, New Jersey State Route 42 and affected roadway segments traversing the Borough of Bellmar, the Borough of Mount Ephraim and Gloucester City, Camden County. Responsibilities included assisting in the preparation of multiple Bridge Foundation Reports, Retaining Wall Reports, Noise Wall Reports, Sign Structure Reports, a Roadway Report consisting of three volumes, and a Pavement Report. Organized the lab data and used it for design in the geotechnical software and in hand calculations. Responsible for preparing geologic sections and profilesto aid with bridge and retaining wall design. Calculated bearing capacitiesfrom bridge abutment and piers and recommended their embedment on flat, sloped and near sloped ground. Where a footing could not fit, was excess settlement, or was not enough capacity for the abutment/pier footings, the program APILE was used and performed hand calculationsto calculate pile capacities on H piles. SHAFT was used to perform hand calculations to obtain shaft lengths versus shaft capacities while comparing costs. Shaft lengths versus pile lengths were also compared. The wave equation in GRL WEAP was used to perform drivability analysis. Settlement calculations were performed within the influence of the bridge footings and evaluated downdrag on the pile foundations, where applicable. Mr. Mulcahy was also responsible for assigning a seismic site class for the structures on this project. GS STABLE was used to perform global stability calculations in the vicinity of large fill areas or fill areas over soft soils. With regards to the Pavement Report, a Visual Condition Assessment of the existing Route I 295, I 42 and Route 42 noting the different levels of distress of the pavement. The data along with pavement cores and typical sections were used to determine a pavement thickness. The existing pavement vs. new pavement was evaluated and used traffic data to determine where an overlay vs. new pavement would need to be installed.

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MULCAHY DECLAN JAMES
87(2)(b)

is registered to practice in New York State through 11/30/2025 as a(n)
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Kwabena O. Wadeer, P.E.

Geotechnical Engineering

Education
M.S., Civil / Geotechnical Engineering, New Jersey Institute of Technology,

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

B.S., Civil Engineering, University of Science & Technology

Years of Experience: 40

Licenses & Registrations
Professional Engineer
- New York
- New Jersey

Certifications + Skills
ASCE – Earthquake Induced Ground Motions

Steel Solutions for DOT Bridge

Construction, July 2011 High Modulus Walls (HZ, Pipe Z, Box Piles, Wide Flange,

Marine)

Overcoming Corrosion and Designing Life into Steel Structures

Mr. Wadeer has 40 years of experience in geotechnical and structural engineering. He has successfully completed numerous challenging geotechnical engineering projects for the NJ Turnpike Authority and NJDOT. As the General Engineering Consultant to the NJTA, Mr. Wadeer was responsible for establishing the Authority's Geotechnical Manual and review of geotechnical designs. Notably these projects included Mullica River Bridge, 65 VMSs along Parkway, the Secaucus Interchange 15X and the NJTA 1985-90 Widening and Interchange 6&9 widening. He has been responsible for geotechnical analyses and design, scour analyses and preparing geotechnical and foundation reports and pavement recommendations. He is thoroughly familiar with the geotechnical computer software such as LPILE, GROUP, GRL-WEAP, EMBANK, BEAR, COM624, STABL, S-PILE, and others. Having worked on similar projects, Mr. Wadeer gained extensive knowledge of all technical aspects of soil exploration, embankment and foundation design, scour analysis, pavement design.

EXPERIENCE

NJDOT | ROUTE 206 OVER STONY BROOK | PRINCETON, NJ | 2016 - 2017 | GEOTECHNICAL ENGINEER TASK LEADER.
Built in 1792, the Stone Arch Bridge over Stony Brook in Princeton is the oldest state owned bridge in New Jersey still in use. The triple arch stone bridge was built by local masons using stone from nearby quarries and currently carries Route 206 vehicular traffic in Mercer County. The rehabilitation of the Stone Arch Bridge consisted of removing the fill above the arches, rebuilding out of plumb walls with the same stone using a lime based historically appropriate mortar, and constructing concrete saddles and walls within the roadway fill to strengthen the arch. The fill of the roadway above the arches was constructed with lightweight concrete to eliminate water infiltration. The replacement of the Flood Channel Bridge consisted of a single span, prestressed concrete box beam bridge. The abutments were faced with a similar ashlar stone to blend in with the environment and provide a connection to the history ofthe two bridges and the Worth Mill RuinWall. Mr. Wadeer was the Lead Geotechnical engineer responsible for preparation of the subsurface exploration program overseeing the execution of it, as well as overseeing the geotechnical analysis and design, and preparation of the Geotechnical Engineering Foundation Report. He also oversaw the foundation analysis and design as well as the dewatering system for the underpinning of the foundations for the existing arches.

ROUTE 7 DRAINAGE | KEARNY, NJ | 2014 - 2015 | GEOTECHNICAL ENGINEER TASK LEADER.
The Route 7 Drainage Project involved the construction of 4 pump stations constructed approximately 25 ft.+ below the groundwater elevation, and multiple sheet pile walls to raise the grade of the road in an effort help reduce flooding. Mr. Wadeer was the Lead Geotechnical Engineer responsible for preparation of the subsurface exploration program overseeing the execution of it, as well as overseeing the geotechnical analysis and design, and preparation of the Geotechnical Engineering Foundation Report. He performed a pile capacity analysis consisting of axial resistance and uplift resistance calculations for a single pile and group condition. He also evaluated liquefaction. Mr. Wadeer was also responsible for the design of the sheet pile walls.

Kwabena O. Wadeer, P.E.

Geotechnical Engineering

EXPERIENCE CONTINUED

NJDOT | PROSPECT STREET OVER NEW JERSEY TRANSIT | DOVER | 2016 | GEOTECHNICAL ENGINEER TASK LEADER.

The New Jersey Department of Transportation retained Arora and Associates, P.C. to provide final design and construction support for the replacement of the Prospect Street Bridge, CR 513 (Structure No. 1464 157) over Morristown Line in the Town of Dover, Morris County, New Jersey. The Arora project team worked closely with the County, Town of Dover, New Jersey State Historic Preservation Office (SHPO), New Jersey Transit and Utility companies to successfully deliver the completed bridge replacement and two new catenary structures. The project involved the replacement of the Prospect Street Bridge superstructure and capping the existing stone masonry abutments. Mr. Wadeer was the Lead Geotechnical Engineer for this project. The geotechnical involvement consisted of a subsurface exploration program inspected by ARORA personnel. Mr. Wadeer oversaw the exploration program as well as the preparation of the Geotechnical foundation report. Also, an extensive inspection program was performed to settlement and condition of the stone masonry walls to be reused as part of the bridge rehabilitation. Several voids were observed in the stone walls and pointing was used to stabilize them.

NJ ROUTE 54 ROUTE 322 OVER CAPE MAY POINT BRANCH | CAPE MAY, NJ | 2010 - 2014 | GEOTECHNICAL ENGINEER TASK LEADER.

Mr. Wadeer was the Geotechnical Task Leader for the complex alignment and widening of Route 54 from Route 322 to Cape May Point Branch Railroad. The project involved elimination of the existing grade separated interchange with Route 322 with an at grade signalized intersection. Kwabena was responsible for preparation of the Foundation Subsurface Soil Exploration program, and scheduling and overseeing the exploration work. Based on the soil borings, the Foundation Report included Foundation Design and recommendations for the bridges, retaining walls, noise walls, sign structures and temporary Sheet Pile wall, as applicable. The Route 54 bridge over Railroad and Hospitality Creek requires Pile Wave Equation, Pile Drivability and Pile Dynamic Analysis for pile foundations. Due to the presence of soft subsoil in the project vicinity including granular soils, the roadway embankment and retaining wall design considered Ground Improvement Techniques such as vibroflotation and stone columns. Embankment and retaining walls require Settlement and Slope Stability Analysis. Reference: Amy Kennard (609) 530- 2709.

NJDOT | ROUTE US 46 AT HOLLYWOOD AVENUE INTERCHANGE RECONSTRUCTION | ESSEX COUNTY | 2008 - 2010 | GEOTECHNICAL ENGINEER TASK LEADER.

Geotechnical Team Leader for the reconstructed ramps, widened Hollywood Avenue and structural improvements including a retaining wall. The scope required soil exploration and testing program including a soil boring contract. The project required embankment stability and settlement analysis. Total project cost $15 million. Reference: Brian Mulcahy, 609 530 2983.

OPS P3296 GARDEN STATE PARKWAY DESIGN SERVICES FOR INSTALLATION OF VMS | 2009 - 2011 | GEOTECHNICAL ENGINEER TASK LEADER.

Lead geotechnical engineer for final design of over 65 Variable Message Signs along the entire length of the Parkway in three construction contracts P600.102E, P600.102F and T600.102D. He wasresponsible for the soil boring exploration and testing program at each of the sites. He performed the geotechnical and foundation analysis and prepared individual foundation recommendation at each of the 65 locations. Some of the locations also required retaining wall design. The project involved two VMSs within the limits of this project at MP39.86 SB and 38.00 NB and 17 within the 30 80 Widening Program. As such he is thoroughly familiar with the foundation conditions expected within this project and specifically at the bridges to be widened. Reference: Nisha Patel, PE, x8285.

NJTA | INTERCHANGE 6 TO 9 WIDENING PROGRAM | EAST WINDSOR, NJ | 2008 - 2009 | GEOTECHNICAL ENGINEER TASK LEADER.

Geotechnical Engineer responsible for geotechnical engineering designs related to the NJ Turnpike Interchange 6 to 9 widening program. Responsibilities included preparation of geotechnical reports for numerous retaining walls, bridges and sign structures involved in this project.

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REGISTRATION CERTIFICATE

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WADEER KWABENA O

87(2)(b)

is registered to practice in New York State through 12/31/2024 as a(n)
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FEE PROPOSAL

ASSUMPTIONS AND EXCLUSIONS

The following are the assumptions and exclusions that were utilized when building out the fee proposal and the project management plan:

1. NYCEDC will initiate the PDC process prior to NTP based on the 100% Design Development drawings
2. The existing conditions, as defined by the survey update, will not require a broad redesign from 100% Design Development Documents.
3. Based on the careful review of the Design Development Documents and other supporting documents, it is estimated that the design is progressed to about 25% of the Final Contract Documents
4. 100% Design Development Documents are assumed to be the basis for development of Preliminary Design, Final Design and Constriction Documents. The fees do not include major redesign efforts, if the present conditions significantly differs from the conditions at the time of completion of 100% Design Development Documents.
5. It is assumed that Phase I and Phase II ESA study is completed and will result in a "Negative" declaration. If it results in a positive declaration, additional services will be provided at an additional cost. This will also impact the schedule.
6. We assume that Topographic Survey performed by Control Point Associates, Inc., included in the 100% Design Development set from is 100% accurate, and the documents represent the current state of the project and no significant topographic changes to grading, layout, etc have occurred. The survey fee is based on the performance of the UAV Data Acquistion and Research and Site inspection. It is our understanding that no significant changes have been made to the site since the previous survey was issued. If significant changes have taken place, such as site regrading etc, or the NYCEDC requires a complete new topographic survey, the fee will have to be revised to accommodate such a change.
7. The surveyor's tree survey will not include tree species determined by an arborist, canopy locations, root locations or tree tag cataloging.
8. There will only be 3 days of subsurface utility investigation required (Quality Level B). There will be no requirement for Quality Level A SUE.
9. There will be no requirement for Sewer Video Inspection, except if there is a direct tie in to the Sewer within Project Limits. Based on preliminary information, there are 2 days of video pipe inspection allocated.
10. The precise location of all underground utilities cannot be guaranteed. In some cases, regardless of the methods employed utility lines may not be detected and may require more investigative measures such as vacuum excavation to confirm.
11. The accessibility of site features may be impacted by the presence of snow. If the survey is performed during a period when the ground is snow covered, only site features and utility structures visible on the date of field survey will be located. The survey plan will include a note that snow was present and a statement describing this limitation.
12. The Phase 2 Environmental Report shows Findings and Recommendations for the Hazardous Material found on site. Since this was included with the RFP documents, it is our understanding that this is acceptable by the NYCEDC. If there is reason to believe that a new hazardous material survey will need to occur, or if it is required by NYCEDC, there will be an additional fee.
13. As stated in the RFP, ULURP will not be required. If it is determined that ULURP approval is required, we will provide the services at an additional cost and time.
14. Removal of existing trees will not require permits for NYC Department of Parks & Recreation & tree restitution will not be required.
15. It is assumed that no deep borings (with blow counts) are avaialble. New borings (with blow counts) will be obtained to determine the foundation design criteria for the bridge, retaining wall foundations, viewing platform foundsations, elevation walkway foundations, etc.
16. It is assumed that the access to the site and locations for borings, test pits, survey etc, will be clear. We will not remove trees, tracks or any other obstructions.
17. It is our understanding that the reports and supporting documents that have been provided with the RFP are considered to be valid and current and to be used as basis for the Preliminary and Final Design. If the involved agencies or designer feel during the design process that these require substantial revision, there will be an associated fee and time extension required to update the documents.

TECHNO CONSULT COST PROPOSAL

QueensWay Phase 1

FEE SCHEDULE TASK 1 - 12

Task 1	**Technical Surveys and Data Gathering**		
	1a. Data Gathering	$	11,383
	1b. Topographic Survey	$	42,432
	1c. Metes and Bounds Survey	$	4,097
	1d. Utility Survey	$	15,663
	1e. Sewer Investigation	$	17,376
	1f. Geotechnical Investigation	$	300,872
	1g. Tree Survey	$	12,043
	1h. Hazardous Material Survey	$	583
	Total Task 1: Technical Surveys and Data Gathering	$	**404,449**
Task 2	**Environmental Review**		
	2a. Review Phase I/Phase II	$	33,261
	2b. HASP/RAP/CHASP	$	45,833
	2c. CAMP	$	13,708
	2d. EAS	$	70,350
	Total Task 2: Environmental Review	$	**163,152**
Task 3	**Community Engagement**		
	Total Task 3: Community Engagement	$	**86,823**
Task 4	**Conceptual Design**		
	Not applicable	N/A	
Task 5	**Schematic Design**		
	Not applicable	N/A	
Task 6	**Preliminary Design**		
	Total Task 6: Preliminary Design (50% Contract Documents)	$	**795,711**
Task 7	**Final Design**		
	7a. 75% Design Documents	$	877,330
	7b. 90% Design Documents	$	361,104
	7c. 100% Design Documents	$	296,909
	Total Task 7: Final Design	$	**1,535,343**
Task 8	**Operations and Maintenance Manual**		
	Total Task 8: Operations and Maintenance Manual	$	**63,911**
Task 9	**Review and Analysis of Bids**		
	Total Task 9: Review and Analysis of Bids	$	**63,406**
Task 10	**Construction Administration and Shop Drawing Review**		
	Total Task 10: Construction Administration and Shop Drawing Review	$	**840,184**
Task 11	**Public Art**		
	Not Applicable	N/A	
Task 12	**Project Closeout**		
	Total Task 12: Project Closeout	$	**43,520**
SUBTOTAL	**TASKS 1 - 12**	$	**3,996,498**
ALLOWANCES			
	Application Fees	$	20,000.00
SUBTOTAL	**ALLOWANCES**	$	**20,000.00**
TOTAL	**TASKS 1 - 12 + ALLOWANCES**	$	**4,016,498.33**
Allowable Additional Costs*		N/A	

*All Allowable Additional Costs must be included as part of the proposed costs of the Task.

E FEE PROPOSAL (BY TASK)

Prime: Techno Consult Inc
Subconsultant:
Project ID: Queensway Phase 1
Date:

			PROJECT MANAGEMENT						
			Project Executive	Project Manager	PLS/Branch Manager	Survey Manager	Assistant Project Manager	Survey Tech	Coordinator/Researcher
		Loaded Rates	311.08	$ 194.43	$ 250.00	$ 230.00	$ 160.00	$ 140.00	$ 130.00
Task No.	Sub Task No.	Task Description							
1		TECHNICAL SURVEYS AND DATA GATHERING	**4**	**10**	**10**	**15**	**14**	**84**	**14**
	a.	Data Gathering	0.5	2	3	3	3	17	15
	b.	Topographic Survey	0.5	2	3	7	6	41	0
	c.	Metes & Bounds Survey	0.5	1	3	2	3	12	0
	d.	Utility Survey	0.5	1	0	0	0	0	0
	e.	Sewer Investigation	0.5	1	0	0	0	0	0
	f.	Geotechnical Investigation	0.5	1	0	0	0	0	0
	g.	Tree Survey	0.5	1	1	3	3	15	0
	h.	Hazardous Material Survey	0.5	1	0	0	0	0	0
2		ENVIRONMENTAL REVIEW	**2**	**48**	**0**	**0**	**4**	**0**	**0**
	a.	Review Phase I/Phase II	0.5	24	0	0	0	0	0
	b.	HASP/RAP/CHASP	0.5	4	0	0	0	0	0
	c.	CAMP	0.5	4	0	0	0	0	0
	d.	EAS	0.5	16	0	0	0	0	0
3		COMMUNITY ENGAGEMENT	**26**	**88**	**0**	**0**	**0**	**0**	**0**
4		N/A							
5		N/A							
6		PRELIMINARY DESIGN	**9**	**220**	**0**	**0**	**0**	**0**	**0**
		50% Contract Documents	9	220	0	0	0	0	0
7		FINAL DESIGN	**35**	**528**	**0**	**0**	**0**	**0**	**0**
		75% Design Documents	18	264	0	0	0	0	0
		90% Design Documents	9	132	0	0	0	0	0
		100% Design Documents	9	132	0	0	0	0	0
8		REVIEW AND ANALYSIS OF BIDS	**1**	**25**	**0**	**0**	**0**	**0**	**0**
9		OPERATIONS AND MAINTENANCE MANUAL	**2**	**17**	**0**	**0**	**0**	**0**	**0**
10		CONSTRUCTION ADMINISTRATION AND SHOP	**24**	**300**	**0**	**0**	**0**	**0**	**0**
11		N/A							
12		PROJECT CLOSEOUT	**1**	**10**	**0**	**0**	**0**	**0**	**0**
TOTAL DESIGN	**HOURS**								

TOTAL DESIGN FEE

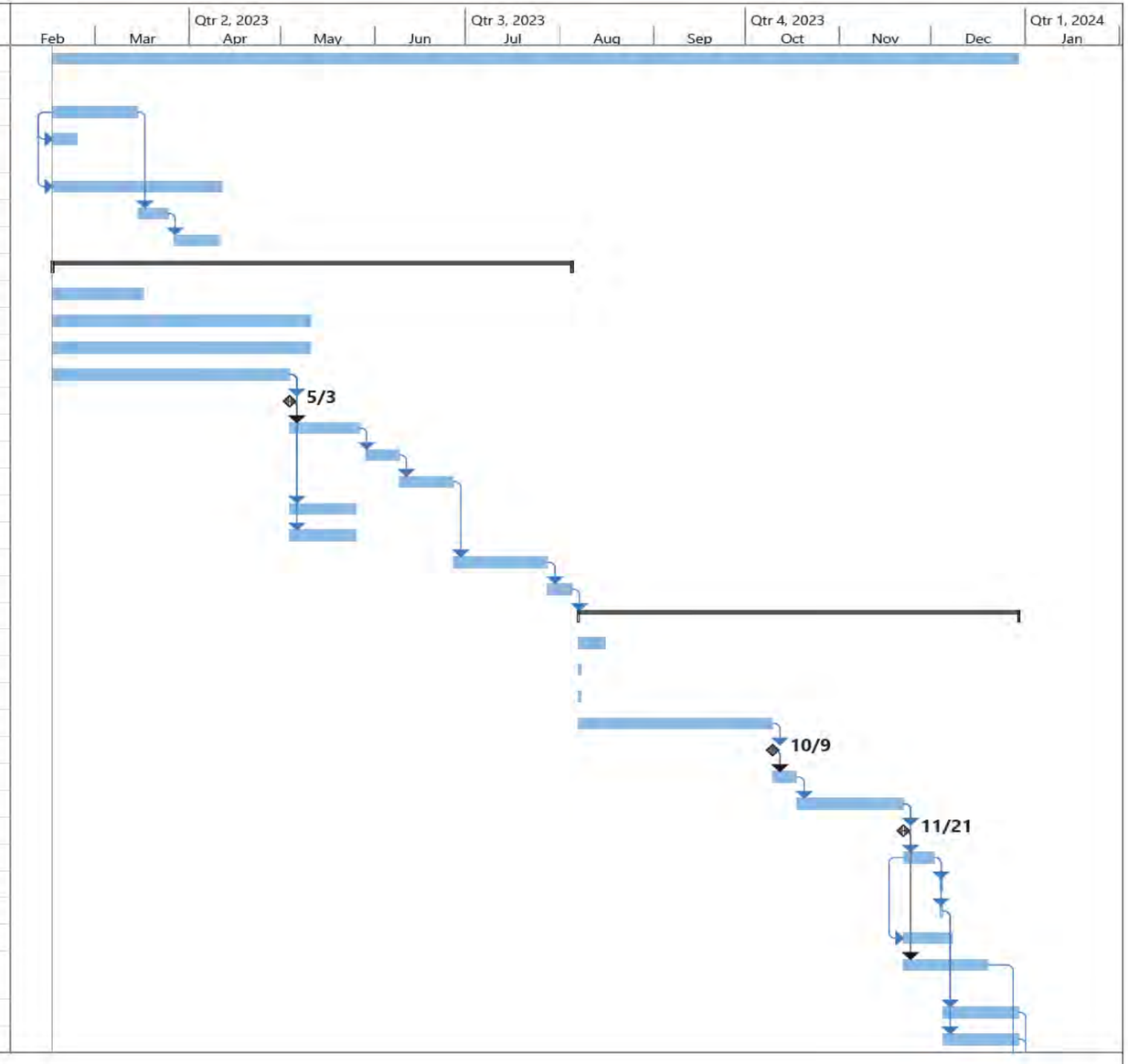
TOPOGRAPHIC SURVEY								CIVIL ENGINEERING			STRUCTURAL DESI	
CAD Drafter	Field Crew Chief & IO	Field Crew OT Chief & IO	UAV Pilot	UAV Pilot OT	UAV Manager	UAV Tech	UAV Coordinator	Senior Civil Engineer	Civil Engineer	Junior Engineer (Civil)	Sr. Structural Engineer	Structural Engineer
$ 115.00	$ 240.00	$ 360.00	$ 140.00	$ 210.00	$ 160.00	$ 115.00	$ 150.00	$ 115.00	$ 150.00	$ 156.57	$ 310.66	$ 226.27
0	**81**	**20**	**12**	**3**	**9**	**29**	**13**	**0**	**0**	**0**	**0**	**0**
0	12	3	0	0	0	0	0	0	0	0	0	0
0	46	12	12	3	9	29	13	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0
0	23	6	0	0	0	0	0	0	0	0	0	0
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0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**8**	**0**
0	0	0	0	0	0	0	0	0	0	0	0	0
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0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**92**	**0**	**0**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**35**	**79**	**268**	**251**	**376**
0	0	0	0	0	0	0	0	35	79	268	251	376
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**35**	**70**	**299**	**290**	**502**
0	0	0	0	0	0	0	0	18	35	158	106	229
0	0	0	0	0	0	0	0	9	18	70	97	136
0	0	0	0	0	0	0	0	9	18	70	88	136
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**32**	**63**	**63**	**4**	**0**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**66**	**0**	**66**	**0**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**330**	**458**	**330**	**330**	**275**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24**

GN	GEOTECH ENGINEERING				LANDSCAPE ARCHITECTURE					LIGHTING DESIGN		
Junior Str. Engineer	Geotech Project Manager	Sr. Geotech Engineer	Geotech Engineer	Geotech Drafter	Principal Landscape Architect	Sr. Landscape Architect	Landscape Architect	Jr. Landscape Architect	Arborist	Sr. Lighting Specialist	Jr. Lighting Specoialist	Electrical Engineer
$ 168.50	$ 300.00	$ 235.00	$ 140.00	$ 122.00	$ 350.00	$ 175.00	$ 150.00	$ 125.00				
0	**77**	**280**	**696**	**135**	**2**	**12**	**24**	**12**	**0**	**0**	**0**	**0**
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2	12	24	12	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	77	280	696	135	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0
0		**0**	**0**	**0**	**4**	**40**	**56**	**56**	**0**	**0**	**0**	**0**
0	0	0	0	0	2	16	24	24	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2	24	32	32	0	0	0	0
0	0	**0**	**0**	**0**	**32**	**42**	**60**	**74**	**0**	**0**	**0**	**0**
572	**13**	**48**	**120**	**23**	**45**	**301**	**482**	**640**	**0**	**0**	**0**	**0**
572	13	48	120	23	45	301	482	640	0	0	0	0
1140	**8**	**29**	**72**	**14**	**90**	**482**	**660**	**937**	**0**	**0**	**0**	**0**
506	8	29	72	14	77	341	449	585	0	0	0	0
352	0	0	0	0	8	88	132	220	0	0	0	0
282	0	0	0	0	5	53	79	132	0	0	0	0
0	**0**	**0**	**0**	**0**	**8**	**59**	**59**	**55**	**0**	**0**	**0**	**0**
0	**0**	**0**	**0**	**0**	**0**	**18**	**18**	**0**	**0**	**0**	**0**	**0**
275	**0**	**0**	**0**	**0**	**35**	**409**	**453**	**625**	**0**	**0**	**0**	**0**
98	**0**	**0**	**0**	**0**	**5**	**39**	**39**	**39**	**0**	**0**	**0**	**0**

ENVIRONMENTAL ENGINEERING				CADD	PROJECT CONTROLS				
Sr Enviro Engineer	Enviro Engineer	Jr. Enviro Engineer	Cert. Industrial Hygienist	CADD Operator	Project Estimator	Project Scheduler	QA/QC	Total Hrs Per Task	Total
				$ 160.73	$ 133.29	$ 172.57	233.31		
0	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**1488**	**$ 404,449**
0	0	0	0	0	0	0	1	59	$ 11,383
0	0	0	0	0	0	0	1	233	$ 42,432
0	0	0	0	0	0	0	1	22	$ 4,097
0	0	0	0	0	0	0	1	3	$ 15,663
0	0	0	0	0	0	0	1	3	$ 17,376
0	0	0	0	0	0	0	1	1191	$ 300,872
0	0	0	0	0	0	0	1	53	$ 12,043
0	0	0	0	0	0	0	1	3	$ 583
0	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**230**	**$ 163,152**
0	0	0	0	0	0	0	1	92	$ 33,261
0	0	0	0	0	0	0	1	6	$ 45,833
0	0	0	0	0	0	0	1	22	$ 13,708
0	0	0	0	0	0	0	1	108	$ 70,350
0	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**416**	**$ 86,823**
0	**0**	**0**	**0**	**502**	**191**	**191**	**44**	**4412**	**$ 795,711**
0	0	0	0	502	191	191	44	4412	$ 795,711
0	**0**	**0**	**0**	**1142**	**411**	**367**	**79**	**7191**	**$ 1,535,343**
0	0	0	0	539	191	191	44	3874	$ 877,330
0	0	0	0	326	88	88	18	1790	$ 361,104
0	0	0	0	277	132	88	18	1527	$ 296,909
0	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**370**	**$ 63,911**
0	**0**	**0**	**0**	**66**	**0**	**0**	**0**	**252**	**$ 63,406**
0	**0**	**0**	**0**	**0**	**238**	**119**	**114**	**4315**	**$ 840,184**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**255**	**$ 43,520**
								18928	
									$ 3,996,498

SCHEDULE OF SERVICES

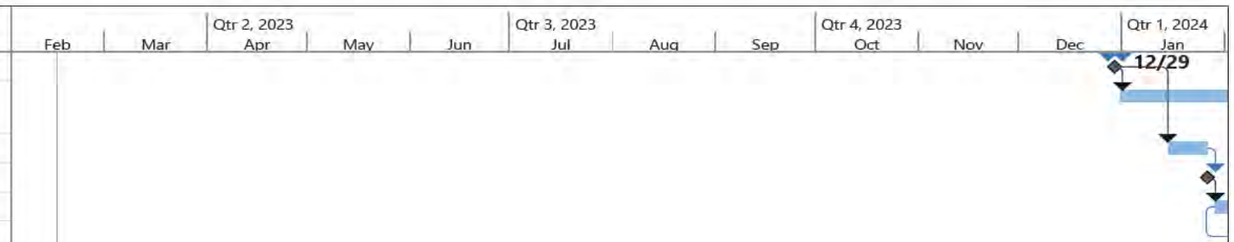
ID	Task Name	Duration	Start	Finish	Predecessors
1	Project Schedule: QueensWay Phase 1:	221 days	Wed 2/15/23	Fri 12/29/23	
2	Notice to Proceed (NTP)	0 days	Wed 2/15/23	Wed 2/15/23	
3	Review of Design Development Documents	19 days	Wed 2/15/23	Tue 3/14/23	2
4	Review of Completed Phase I/Phase II ESA Documents	6 days	Wed 2/15/23	Wed 2/22/23	3SS
5	Technical Surveys and Data Gathering	39 days	Wed 2/15/23	Tue 4/11/23	3SS
6	Present Findings to EDC	8 days	Wed 3/15/23	Fri 3/24/23	3
7	Design Concurrence from EDC	11 days	Mon 3/27/23	Mon 4/10/23	6
8	**Preliminary Design**	**120 days**	**Wed 2/15/23**	**Fri 8/4/23**	
9	Environmental Investigations	21 days	Wed 2/15/23	Thu 3/16/23	
10	CEQR Review and Application	60 days	Wed 2/15/23	Wed 5/10/23	
11	SEQRA Review and Application	60 days	Wed 2/15/23	Wed 5/10/23	
12	Develop Preliminary Design Documents	55 days	Wed 2/15/23	Wed 5/3/23	
13	Submit Preliminary Design Documents	0 days	Wed 5/3/23	Wed 5/3/23	12
14	EDC Review & Comments	16 days	Thu 5/4/23	Fri 5/26/23	13
15	CB Presentation and Concurrence	9 days	Mon 5/29/23	Thu 6/8/23	14
16	PDC Presentation and Approval	12 days	Fri 6/9/23	Mon 6/26/23	15
17	Preliminary Design Estimate	15 days	Thu 5/4/23	Thu 5/25/23	12
18	Preliminary Design Specifications	15 days	Thu 5/4/23	Thu 5/25/23	12
19	Submit Final Preliminary Design to EDC	22 days	Tue 6/27/23	Thu 7/27/23	16
20	EDC Review & Concurrence	6 days	Fri 7/28/23	Fri 8/4/23	19
21	**Final Design**	**101 days**	**Mon 8/7/23**	**Fri 12/29/23**	**20**
22	Finalize Environmental Reports & Specs	7 days	Mon 8/7/23	Tue 8/15/23	
23	CEQR Approval	1 day	Mon 8/7/23	Mon 8/7/23	
24	SEQRA Approval	1 day	Mon 8/7/23	Mon 8/7/23	
25	Develop 75% Design Documents	45 days	Mon 8/7/23	Mon 10/9/23	
26	Submit 75 % Final Design to EDC	0 days	Mon 10/9/23	Mon 10/9/23	25
27	EDC Review & Comments	6 days	Tue 10/10/23	Tue 10/17/23	26
28	Develop 90% Design Documents	25 days	Wed 10/18/23	Tue 11/21/23	27
29	Submit 90% Design to EDC	0 days	Tue 11/21/23	Tue 11/21/23	28
30	EDC Review & Comments	6 days	Wed 11/22/23	Fri 12/1/23	28
31	CB Presentation and Concurrence -Final Design	1 day	Mon 12/4/23	Mon 12/4/23	30
32	PDC Presentation and Approval-Final Design	1 day	Mon 12/4/23	Mon 12/4/23	30
33	Develop Operations and Maintenance Manual	10 days	Wed 11/22/23	Thu 12/7/23	30SS
34	Develop 100% Final Design Contract Documents	18 days	Wed 11/22/23	Tue 12/19/23	29
35	Develop 100% Final Design Itemized Estimate	18 days	Tue 12/5/23	Fri 12/29/23	32
36	Develop 100% Final Design Specifications	18 days	Tue 12/5/23	Fri 12/29/23	32



Queens Way Phase 1
Design Schedule
Date: Tue 12/6/22

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

ID	Task Name	Duration	Start	Finish	Predecessors
37	Submit 100% Final Design Documents to EDC	0 days	Fri 12/29/23	Fri 12/29/23	34,35,36
38	**Construction Administration & Shop Drawing Review**	523 days	Mon 1/1/24	Wed 12/31/25	37
39	Start Advertisement	10 days	Mon 1/15/24	Fri 1/26/24	37FS+10 days
40	Bid Date	0 days	Fri 1/26/24	Fri 1/26/24	39
41	Bid Analysis/Recommendation for Award	10 days	Mon 1/29/24	Fri 2/9/24	40
42	NTP for Construction	0 days	Fri 3/8/24	Fri 3/8/24	41SS+30 days
43	Construction Activities	670 days	Mon 3/11/24	Fri 10/2/26	42
44	Substantial Completeion	0 days	Fri 10/2/26	Fri 10/2/26	43
45	Punchlist Work	45 days	Mon 10/5/26	Fri 12/4/26	44
46	Final Completion	0 days	Fri 12/4/26	Fri 12/4/26	45
47	Contract Close-out	75 days	Mon 12/7/26	Fri 3/19/27	46



Queens Way Phase 1
Design Schedule
Date: Tue 12/6/22

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

SUBCONTRACTOR PARTICIPATION PLAN (SSP)

MWBE/DBE Participation Plan

12/8/2022

The purpose of this form is to ensure that appropriate planning and consideration go into the consultant and contractor utilization process, and to serve as documentation of your commitment to attain the level of MWBE/DBE Participation set forth in this plan. The solicitation materials indicate whether MWBE or DBE goals apply for this contract and this form should be filled out accordingly. Please complete the forms and return (1) an Excel copy of the form and (2) an executed PDF to opportunityMWDBE@nycedc.com. Any questions should also be directed to this email address.

I affirm that the following statements are true and accurate:

1. I will make and thoroughly document every good faith effort to meet the MWBE/DBE Participation Goal set forth herein.
2. This MWBE/DBE Participation Plan lists all consultants and contractors that are expected to work on this project as of the date above, whether MWBE/DBE or not.
3. I have verified that firms listed as MWBE/DBE below are certified by the appropriate entity.
4. I have included an **Intent to Perform as Subcontractor Form** for each firm listed below as part of this submission.

x _____	Zubia Mallick, PE, Vice President	12/8/2022	
Signature of Authorized Representative/Preparer	Name & Title	Date	
NYCEDC Approval : x _____	_____	_____	
Signature of NYCEDC Opportunity M/W/DBE Representative	Name & Title	Date	

Cells in orange are filled in automatically

Project Information		Project Calculations	
Contract #	10273	Project Award Amount	$3,996,426.00
Project Name	QUEENSWAY PHASE 1		
Business Name	TECHNO CONSULT, INC.	Total Amount to Count toward MWBE/DBE Goal	$3,996,426.00
Email	kmallick@techno-eng.com		
Phone	212.465.8100	Projected MWBE/DBE Goal Attainment	100.00%

Contractor/Consultant Award Information

Contractor/ Consultant	MWBE/DBE? ("Y" or "N")	Award Amount	Services to be Provided	Contracting Party *Please indicate the name of the party subcontracting for the services*	Is Contracting Party MWBE/DBE? ("Y" or "N")	Amount to Count
TECHNO CONSULT, INC.	Y	$3,996,426.00		N/A	N	$3,996,426.00
TETRATECH	N	$355,500.00	Environmental and Electrical Services			$0
SASAKI	N	$905,000.00	Landscape Architecture and Community Engagement			$0
CONTROL POINT ASSOCIATES	N	$79,504.00	Survey		0	$0
ARORA	Y	$338,935.00	Geotechnical Services		0	$0

TECHNO

ENGINEERS & CONSTRUCTION MANAGERS



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