REQUEST FOR PROPOSAL

CMF-004 WORK ORDER NO. 01
DCA RESILIENT COMMUNITIES





DPMC PROJECT #J0405-00 | MAY 7, 2024

Michael Baker
INTERNATIONAL

SUBMITTED TO
DEPARTMENT OF THE TREASURY, DIVISION OF
PROPERTY MANAGEMENT & CONSTRUCTION

Michael Baker
INTERNATIONAL

CMF-004 WO1
DCA RESILIENT COMMUNITIES
PROGRAM (GROUP 1)

May 7, 2024

State of New Jersey
Department of the Treasury
Division of Property Management & Construction
33 West State Street, 9th Floor, Plan Room
P.O. Box 039
Trenton, New Jersey 08625-0039

Attn: Jennifer Roeckel, Contract Procurement Unit

Re: DPMC PROJECT #J0405-00, TERM CONTRACT CMF-004
Work Order No. 1 - DCA RESILIENT COMMUNITIES (Group 1)
CONSTRUCTION MANAGEMENT FIRM

Dear Selection Committee:

Michael Baker International, Inc. (Michael Baker) is pleased to submit our proposal for Construction Management Firm (CMF) for the five (5) HUD-CDBG funded State agency projects identified in this RFP that include engagements involving oversight of environmental permitting, design and construction of stormwater management and buildings/structures for flood mitigation/resiliency projects as designated by the Division of Property Management and Construction (DPMC), and as stated within the RFP documents.

During Michael Baker's more than 80 years of providing professional services, our approach to multi-tasked, multi-discipline assignments has proven to be highly successful. More specifically, Michael Baker brings forward over 35 years of working in New Jersey on some of the most important infrastructure projects in the State. This experience will directly benefit the State of New Jersey on this contract. The Michael Baker team will be managed by Peter J. Senus, PMP as the Senior Project Manager. He has proven success coordinating with federal and state agencies by serving as Project Manager on multiple past DPMC work order assignments under the CMF 003 Hurricane Sandy IDIQ throughout the region.

To complement our strengths and to help meet the 25% SBE goal for the program, Michael Baker has teamed with our long standing partner Churchill Consulting Engineers. This firm has the multi-disciplinary construction management capabilities and DPMC experience, which allows Michael Baker to fully utilize their talents toward delivering a consistent, on-time, budget-conscious, quality project. The Michael Baker team is thoroughly familiar with assisting DPMC and DCA in administering federally-funded programs. **Over the past eight (8) successful years**, Michael Baker has been serving as the CMF for multiple CMF 003 IDIQ work orders. In doing so, we have already developed a proven system to manage the tasks outlined in the scope of work. There will be **no "learning curve" or "down-time"** when dealing with Michael Baker. We have established professional relationships with Mr. Sam Viavattine and Ms. Nancy Diehl along with all their other great staff at DCA. We look forward to your favorable review of our proposal and the opportunity to work on this noteworthy program.

We have attached our cost proposal separately as requested. To establish our level of effort, we have developed an estimated preliminary Program Schedule based on the noted 3-year estimated duration once the grants are executed noted in the responses in Addendum B **(refer to Appendix A)**. There are many factors, however, that will change this schedule once the Program starts and as more information becomes available. This should only be used as guide to demonstrate a potential path in meeting the Program's ultimate end date of September 2029 and as a cost estimation guide for our price proposal .

Sincerely,

MICHAEL BAKER INTERNATIONAL, INC.

Gilberto Bosque

Gilberto R. Bosque, P.E.
Vice President / Contract Executive
e: gbosque@mbakerintl.com
t: 609-807-9532

FIRM/TEAM ORGANIZATION/SUBCONSULTANTS

Michael Baker –a full-service construction management, planning, engineering, architecture, and information technology company– has been working in New Jersey with the local municipalities to become more resilient as a result of past, present, and future natural disasters and health pandemics. Most recently, we all experienced the devastating 2021 Hurricane IDA flooding that affected 12 New Jersey counties and was coupled with the ever growing post health and financial impacts of the COVID-19 pandemic. New Jersey has been given many federal grants to help deal with the damaging lingering effects of these events; as well as planning to the future to deal with new disasters and pandemics. Michael Baker is very familiar with the HUD CDBG-DR funded Hurricane Ida Action Plan and associated Resilient Communities program. We are prepared **RIGHT NOW** to assist the New Jersey Division Department of Property Management and Construction (DPMC) manage those funds and associated projects. With offices in Hamilton and Newark, New Jersey, Michael Baker has over 150 planners, architects, engineers, and construction management/inspection professionals with experience in the State of New Jersey. Michael Baker's local offices are supported by more than 4,000 employees in the U.S. and abroad, including nationally and internationally recognized subject matter experts. Michael Baker is currently finishing similar work orders under the **CMF 003 IDIQ (FHRRR and ACRP)**. Many of the projects associated with this work order (North Arlington RC100055, Hudson County RC100031, Guttenberg RC100043, Passaic RC100037, and Greenwich RC100019) include pump station upgrades, trash rakes, bulkheads, outfalls, stormwater drainage upgrades etc. Michael Baker successfully oversaw the design and construction of these same type of projects under the CMF 003 work orders referenced. It is noted that there is one project in Greenwich Township that will involve the construction of a new municipal complex that will house emergency response resources. Michael Baker recently managed construction of three (3) state of the art NJ State Police Barracks throughout New Jersey. These facilities incorporated all the latest information technology, security and building material advances that will certainly be used in this very similar proposed municipal complex project identified in this work order.

Since 2016, Michael Baker developed the "Key" standard operating procedure manuals and checklists for all of the activities identified in this Scope of Work such as bidding and procurement for both professional services and contractors, invoicing reviews, independent cost estimating, scheduling, statement of assurances (SOA)compliance and project Close-Out. These manuals were developed for the current program directors (PD) under the previous CMF 003 IDIQ to make running these similar programs uniform and "by the book" to ultimately provide the backup HUD will require when they conduct their routine audits.

Our approach to building a team for this important assignment was focused on several key elements. These elements are summarized below and will be elaborated throughout this section:

- Provide a **dedicated New Jersey based team** that can quickly assign local expert staff for each assignment;
- Provide **recognized experts across the range of disciplines** required from Feasibility/NEPA through Construction Management;
- Provide **experienced leadership** skilled at Program Management and knowledgeable in the entire project life cycle;
- Provide a team that has **worked together successfully with DPMC/DCA**;
- Provide a team that **knows DPMC and assigned Project Directors at DCA** and is located in **close proximity to Trenton**;
- Provide a team with in-depth knowledge of the strict grant requirements associated federal programs such **HUD CDBG-DR**; and
- Provide a team with the **depth and breadth of resources** to keep the scope, schedule, budget, and quality of the Program on track.

As evidenced in our staff resumes and relevant project experience, the Michael Baker team has all the required experience and will successfully navigate DPMC and DCA through the post-Hurricane IDA Resilient Communities infrastructure program.

ORGANIZATIONAL CHART

TERM CONTRACT CMF 004 WO NO. 1 RESILIENT COMMUNITIES PROGRAM
STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY
DIVISION OF PROPERTY MANAGEMENT AND CONSTRUCTION

CONTRACT EXECUTIVE
Gilberto R. Bosque, PE*

SENIOR PROJECT MANAGER
Peter Senus, NICET IV, PMP*

QA/QC MANAGER
Rebecca Lyne, PWS, CE*

PROJECT MANAGER
Sean Kahn, PE*

ENVIRONMENTAL PLANNING
Jessica Jahre, AICP, CFM*

Environmental Documentation & Permitting
Ebony Washington*

Coastal Flood Mitigation & Resiliency Planning
Jessica Jahre, AICP, CFM*

Cost / Benefit Analysis
Jessica Jahre, AICP, CFM

DESIGN
Joseph Danyo, PE, PP

Architect
David Tudryn. AIA*

Constructability Reviews
David Tudryn, AIA
Peter Senus, NICET IV, PMP

Value Engineering
David Tudryn, AIA*
Joseph Danyo, PE, PP*

Site / Roadway Engineering
Sylvester Fryc, PE*

Stormwater Management
Lori Wade, PE, CPSWQ*

Structural Engineering
Hamid Ikram, PE*

Geotechnical Engineering
Michael Yang, PE, PhD*

CONSTRUCTION MANAGEMENT & INSPECTION
Peter Senus, NICET IV, PMP

Construction Monitors
Pat Hicks , NICET IV (CCE)*
Jon Conte, NICET III*
Jaime Boy Jr., NICET II

PROJECT CONTROLS
Sean Kahn, PE

CPM Scheduling
Juan Uribe*

Cost Estimating
Jeffrey Weiss, CCT, CQM-C*

Claims Analysis
Ralph Eberhardt, PE*

Grant Compliance & Management
Peter Senus, NICET IV, PMP*
Sean Kahn, PE

Risk Management
Peter Senus, NICET IV, PMP

***Resumes included**

Subconsultants
Churchill Engineers – SBE (CCE)

RECOGNIZED EXPERTS ACROSS THE RANGE OF DISCIPLINES

Planning/NEPA Process

Michael Baker's strengths begin with planning and concept development services aimed specifically at rebuilding communities with the resiliency to better withstand future events. Michael Baker understands that in the densely populated shores of New Jersey, urban planning practices must be married with coastal engineering fundamentals to make the communities safer while maintaining their thriving economies.

In New Jersey, Michael Baker has already completed a number of planning studies and initiatives that are leading towards stronger infrastructure development. Most recently, Michael Baker performed related work orders under DPMC's CMF 003 IDIQ for Construction Management Services on Rebuild By Design and other NJDEP Flood Mitigation and Environmental infrastructure. Work orders from this IDIQ included the **Resilient New Jersey Program** and the **New Jersey Climate Change Resiliency Strategy & Coastal Resilience Plan.** Michael Baker has also completed a study for the Port Authority of New York and New Jersey (PANYNJ) to assess the vulnerability of their airports from coastal storms, sea level rise, and hydrological changes. Jersey City also enlisted the services of Michael Baker when they received a grant from Together North Jersey to develop storm surge protection solutions for the City. Michael Baker's coastal experts were asked to work with professors at Stevens Institute of Technology to develop visualizations for the flood control engineered concepts. The City relied on Michael Baker to develop context sensitive solutions and to prepare a white paper for next steps. In the white paper, Michael Baker emphasized the need for a benefit-cost analysis, data collection, increased coordination, and available funding sources.

As plans are developed and projects enter the design phase, the Michael Baker Team has extensive capabilities and experience to navigate a project through the complex Local, State, and Federal environmental review and approval processes. The Michael Baker Team has tremendous experience with National Environmental Policy Act (NEPA) documentation and permitting including the ability to complete the many technical studies that are involved in a comprehensive environmental review process as well as the experience and capability to manage and oversee the administration of the NEPA documentation and environmental permit approval processes. **It is also understood that the Environmental Review (ER) process per 24 CFR 58 is the key to obtaining the AUGF (Authorization to Use Grant Funds) for these projects. All projects will require an ER and the level of review (i.e. CEST, EA, EIS, etc.) will need to be determined for each. We will ensure this activity is completed by the Subrecipients and we deliver the completed ER to the PD for processing by HUD.** Michael Baker understands that the environmental process is an iterative process that begins early in project scoping and continues through design and construction. Early identification of environmental resources, applicable regulations, and key stakeholders is a critical component of the process. Identifying project issues early allows adequate time to develop a plan and coordinate with the stakeholders to develop solutions that avoid, minimize or mitigate adverse impacts while still satisfying the project purpose and need. This approach reliably helps avoid schedule delays and increased project costs caused by unanticipated project effects.

Final Design

For over 30 years Michael Baker has been providing final design engineering services in New Jersey. Michael Baker provides full service capability with engineering expertise that is both locally respected and nationally recognized. We optimize our construction management project experience during the design phases of projects through performance of constructability reviews; construction phasing/sequencing; construction bid document reviews to eliminate error/omissions and discrepancies, and construction schedule and cost estimate reviews to ensure that all factors (permit acquisition, long-lead procurements, regulatory review cycles, etc.) are included in the logic-based CPM schedules.

Michael Baker's geotechnical team can assist with necessary investigations on-site to confirm that the walls and hardening of the State's infrastructure can be done and will not fail under the stresses of the next hurricane. Michael Baker's structural team is a leader in innovative structural design with the least impact to the community and cost. Michael Baker's transportation, stormwater, and utility engineers will confirm that designs maintain the community's operations by

addressing, most importantly, stormwater related impacts and future resiliency of existing infrastructure.

Michael Baker recently completed the design and construction support of the iconic Scudder Falls Bridge that many of us use daily coming in and out of the Trenton area. This project involved replacement of the existing four-lane bridge with twin structure carrying six lanes of through traffic (three in each direction), two auxiliary northbound lanes for entry/exit travel, and one auxiliary southbound lane for entry/exit travel over the Delaware River. The project also included complete reconstruction of the deficient Route 29 interchange on the New Jersey side and reconfiguration of the Taylorsville Road interchange in Lower Makefield, Pennsylvania, to improve the safety and efficiency of the interchanges. Michael Baker's design also included a new all electronic tolling (AET) collection system in the southbound direction, consisting of high-speed E-ZPass tag readers and video cameras to identify license plates for purposes of collecting tolls by mail from motorists that did not process an E-ZPass transponder. A four-story support building was constructed to house the AET and ITS equipment, maintenance equipment for the shared use path, DRJTBC's bridge monitoring staff and security personnel.

At the World Trade Center in New York, Michael Baker developed a structural retro-fit for the existing bollards to allow for a flood protection system to be added to that existing framework. Structural engineering innovation worked with the existing environment to create a resilient solution that fits within the facility's existing framework. In Ocean City, NJ a failing drainage network was analyzed and upgraded by Michael Baker with pump stations to improve flood recovery time. Michael Baker is experienced in finding the right-sized solution to reliably address the problem.

STEP 1: FEASIBILITY | STEP 2: DESIGN | STEP 3: BID & AWARD | STEP 4: CONSTRUCTION | STEP 5: PROJECT CLOSEOUT

Construction Management/Inspection

Michael Baker provides construction management services for all the markets we serve. Our clients include federal, state, and local government agencies, as well as private sector clients. Our projects range in size and complexity, and include new or rehabilitation construction, traditional design-bid-build and design-build project deliveries. Most recently, Michael Baker has been DPMC's Construction Management Firm (CMF) **for the CMF 003 IDIQ for Construction Management Services on Rebuild By Design and other NJDEP Flood Mitigation and Environmental infrastructure.** Specific work orders that provided construction management oversight included **WO 03 the Flood Hazard Reduction and Resiliency (FHRR) program and WO 15 the Atlantic City Resiliency Program (ACRP).** Michael Baker's construction experience includes facilities, pump stations, bulkheads, large outfall facilities, highways, bridges, infrastructure rehabilitation, freight and passenger railroads, transit facilities, airports and utilities, just to name a few. Michael Baker's professionals have the training, certifications, and support to manage the full spectrum of construction services to assure each client of a successful delivery. With experience in managing throughout the life cycle of the project, and through our implementation of Lessons Learned, industry-Best Practices and CMMA-based CM Procedures, and Quality and Risk management processes, Michael Baker understands the importance of all aspects involved to successfully complete and deliver safely on time, on budget, and with the quality you demand.

Michael Baker's experienced construction inspection staff provides confirmation that the contractor is performing in accordance with the contract documents as well as confirming the contractor's progress. Michael Baker inspectors verify specified materials are incorporated into the project; assure proper documentation, including tracking of submittals and correspondence; review contractor progress payments and change orders; coordinate with the client and other local agencies; such as DCA for code enforcement; integrate and coordinate on-site personnel, vendors, and subcontractors; coordinate material delivery to jobsites; manage movement of construction equipment around sites to provide a smooth flow throughout the schedule; review and analyze construction schedules; and perform final inspection and project close-out tasks.

Michael Baker produces detailed independent cost estimates for every change order and overall construction cost budget management, always maintaining focus on the client's priorities: time, budget, safety, and quality. Baker's comprehensive life-cycle approach utilizes a standard process to develop estimates, tracking trends and historical indexes, analyzing bids, and assessing the risks and probability of high-impact events and their influence on cost. Through a proactive cost engineering approach, this knowledge is used to identify and predict costs throughout the project. By managing and monitoring project costs from day one, we allow you to better plan, program, acquire, and manage your budget, while adding real value to your project. Michael Baker's breadth of resources, including affiliations with vendors and contractor associations, helps us to better provide estimating services at any stage of the design and construction process, utilizing proven, documented, unit price databases, both internal and published. Escalation is managed through the use of multiple historical indices, monitoring current material and labor trends, and tracking industry market indicators. We also bring these resources to related services such as life cycle costing, value engineering, schedule recovery planning, and analysis of changes and claims.

While the CMF is tasked with many responsibilities that include managing cost and schedule for these projects during the design and construction phases, projects also need a CMF who can assist the Subrecipient (i.e. municipalities) navigate the individual grant requirements such as proper consultant/contractor procurements and related grant reimbursements. **One thing we learned in the previous CMF 003 IDIQ, is that it is not only important to oversee the design consultants and contractors, the Subrecipient also need the proper attention and oversight. Audits can occur on these programs from the federal funding sources such as HUD during the lifetime of the program. Michael Baker knows what it takes to make these programs "Audit Proof" and to assist DPMC in meeting all the requirements of these grants, right down to ensuring all the certified payrolls and fringe backup are collected for each employee to ensure prevailing wage and associated Davis-Bacon rules are being met as an example.**

Combined with our specialty subconsultants, the Michael Baker Team has a very deep bench of construction and design professionals available to service this agreement.

Experienced Program Management Leadership

Michael Baker understands the need for a single vision when coordinating large scale infrastructure design services. As the CMF under the previous CMF 003 IDIQ, Michael Baker understands the challenges of multi-disciplined projects and the need for oversight.

Our Senior Project Manager, Peter J. Senus PMP, has served as the Sr. Program Manager and assisted on several large and similar assignments recently:

- Program Manager - NJDPMC/NJDEP CMF 003 WO 03 FHRRR Program
- Program Manager – NJDPMC/DCA CMF 003 WO 15 Atlantic City Resiliency Program
- Program Manager (Construction Phase Manager) – SJTA Atlantic City Expressway Widening Program

Pete is only as good as his supporting team. ***Sean Kahn, P.E., will resume his role as Project Manager*** and the day to day operation overseer. **Pete and Sean have worked closely for years under the CMF 003 IDIQ and have developed a reputation as the "Go-To Team" for many assignments.** Together, they fine-tuned procedures for running many successful work orders and can carry this over seamlessly to the CMF 004 IDIQ.

In addition, our proposed Contract Executive, Gilberto Bosque, P.E., has been servicing the design/construction industry for decades overseeing major infrastructure reconstruction in New Jersey and will bring this experience to bear on this assignment. The task in front of New Jersey now is complex and extremely challenging. Michael Baker is not only qualified to deliver solutions but is also qualified to coordinate this effort for the communities and the State as their Program Manager and Construction Manager. Michael Baker appreciates the size and complexity of the scope of these projects and fully understands that they will require attentive coordination between the State, local government entities, design stakeholders, and federal stakeholders.

A TEAM THAT HAS WORKED TOGETHER SUCCESSFULLY

Our Subconsultant

Michael Baker chose **Churchill Consulting Engineers** to assist with this work order in construction monitoring and contractor invoice reviews. Michael Baker and Churchill Consulting Engineers **(SBE)** routinely collaborate on design and construction management projects throughout New Jersey. Churchill has built an outstanding reputation as a firm that provides exceptional services for its clients in the planning, design, surveying, permitting and construction management on a broad range of civil and environmental projects. The firm was founded more than 45 years ago, and since its inception has been committed to not merely meeting its client's needs, but exceeding them with both innovative and cost-effective solutions. A consulting engineering firm is built on the education, capabilities, experience and integrity of its professional staff.

For more than four decades, Churchill has maintained a commitment to providing its clients with the highest possible level of staff qualifications. Moreover, Churchill is equally committed to consistently utilizing the best available technologies for all of its work, so that its clients can share in the benefits of technological advances in productivity and precision. Churchill's survey experience includes 40 years of design and construction survey and base mapping for roadway improvements; replacement of long and short span bridges, bridge decks, and sign structures; and improvements to interchanges, ramps, service areas, maintenance districts, and toll plazas. With two (2) professional land surveyors, three (3) survey crews, and state of the art equipment Churchill can adequately address any staffing requirement necessary. They offer extensive capabilities and experience in the following types of surveying projects: Boundary Surveys, Roadway/Topographic Surveys, Utility Surveys, Hydrographic Surveys, Tidal/Tideland Surveys, Construction Layout, Construction Verification Surveys, As-Built Surveys, Tower Surveys (Twist/Plumb), Wetlands Surveys, GPS/GIS/Digital Scanning, Aerial Photogrammetric Control, and ALTA Surveys. Likewise, Churchill also provides construction inspection services with NICET level certified superintendents and inspectors. Their staff have all the applicable NICET, ACI – CCTC, ACI, NJSAT, TCP, and OSHA required certifications.

EXPERIENCE ON PROJECTS OF A SIMILAR SIZE AND NATURE

CMF Experience on Contracts/Projects of a Similar Size & Nature

The Michael Baker Team is thoroughly familiar and more importantly highly successful with assisting the DPMC with large scale Indefinite Delivery and Indefinite Quantity (IDIQ) contracts (i.e. CMF 003 WO 3, 4, 12 & 15) requiring construction management, resiliency planning and multidisciplined design support. For example, and most recently, Michael Baker was selected for the CMF 003 term agreement, that dealt with the catastrophic damage to New Jersey from Super Strom Sandy. Michael Baker quickly proved that they were the "go to" Team to not only navigate the complex HUD CDBG grant requirements, but to be the State's eyes and ears on variety of projects that included large scale pump stations, 60" outfall pipes, bulkheads, building flood proofing, municipal stormwater upgrades, flood gates, and much more. **Michael Baker is the workshop that has the right tool for the right job.** Michael Baker knows it is not enough to just assist the DPMC in administering the programs, but to be the experts in all facets. Since our involvement with the previous CMF 003 IDIQ, we have developed all the manuals, standard operating procedures, and protocols to carry directly over into CMF 004 with a seamless transition for potential projects under this program that might have already started or just gearing up.

During Michael Baker's 80 plus years of providing professional services, our approach to multi-tasked, multi-discipline assignments has proven effective. More specifically, Michael Baker brings forward over 35 years of working in New Jersey on some of the most important infrastructure projects in the State. This experience will directly benefit the State of New Jersey on this contract. Michael Baker's successful oversight and involvement in a variety of construction and program management contracts provides a wealth of on-call task order expertise to execute successful assignments. Our clients select Michael Baker because of our logical approach to meeting project objectives in a cost-effective manner, while providing high-quality technical expertise from our full service Hamilton, New Jersey office supported by other Michael Baker offices and our subconsultants. A critical factor considered in assembling the Michael Baker Team is a shared culture devoted to customer service and rapidly adapting to address client needs that change as a result of funding and/or schedule changes. A large part of our team's previous successes working together is a result of each individual firm's dedication to customer service.

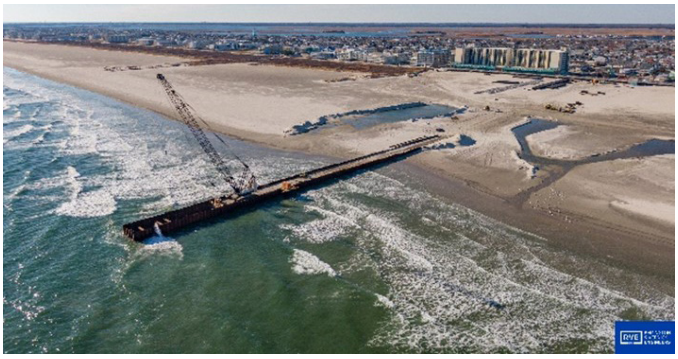
Michael Baker creates value for our clients by delivering innovative and sustainable solutions for infrastructure and the environment. We recognize that the execution of task order contract assignments requires a broad range of expertise and are confident that the depth of Michael Baker's resources, familiarity with governmental processes, and history of successfully working on similar projects in New Jersey and nationally will confirm that Michael Baker consistently provides outstanding support in the execution of even the most challenging assignments. Specific threads of good construction and project management are seen in each of Michael Baker's successes. Among them are: active management of the project on behalf of the client; experienced leadership; knowledgeable and seasoned subject matter experts, experienced design, permitting and construction professionals; open, honest communication among all involved in the day-to-day; timely decision making based on experience and prudent professional judgment; and a common goal to solve problems and keep the project moving to completion. The result invariably is a high-quality project completed on time and at a reasonable cost.

RELEVANT PROJECT EXAMPLES

PROJECT: CMF 003 WO#03 - Program Management for Flood Hazard Risk Reduction and Resiliency Grant Program (2016-Present)
LOCATION: Multiple Municipalities, New Jersey
CLIENT: NJ Department of Property Management and Construction (DPMC)/ NJ Department of Environmental Protection (NJDEP)
PROGRAM BUDGET: $50 million

Michael Baker was selected as the CMF Program Manager for the Flood Hazard Risk Reduction and Resiliency Grant Program (Grant Program) for the State of New Jersey. Under this Grant Program, the NJDEP/DCA funded projects that would continue the efforts to protect vulnerable communities from the impacts of future storms along flood prone areas. **There were a total of seven projects involved in the program: Wildwood NJ Pacific Ave. Pump Station & Outfall, N. Wildwood Hereford Inlet Pump Station, Atlantic City Baltic Ave. Phase II Pump Station, Brigantine 3 Pumps Stations, Belmar Lake Como Outfall Pipe, Spring Lake Wreck Pond Outfall Pipe, and Little Ferry Losen Slote Tide Gate w/ Trash Rakes.** Due to Michael Baker's extensive construction management and design experience with large multi-faceted construction and resiliency projects, our team was selected to assist the NJDEP with monitoring and oversight tasks for selected resiliency projects throughout coastal New Jersey.

Key tasks include:



- Monthly Reporting
- Design Oversight
- Bidding/Procurement Reviews
- Contractor Deliverable Reviews
- Bi-weekly Field inspections
- Independent Cost Estimating
- Master Project Scheduling and Forecasting
- HUD Reporting and Compliance
- Contractor Recordkeeping Compliance Assistance
- Assist with Integrity Monitoring

Accountability for project submittals and issue resolution were diligently tracked and recorded to guard against delays and minimize the NJDEP's liability in the event of a claim. Baker actively communicated with the NJDEP and tracking project correspondence from preconstruction through closeout by maintaining detailed logs and checklists that enable us to assign and track ball-in-court responsibility for Subrecipients and project deliverables. Michael Baker provided timely reviews of invoices and progress reports with proper record keeping to match pace with the Subrecipient's contractor deliverable submission schedule. These tasks were accomplished through the use of a "uniform" deliverable tracking system. The tracking system provided overall monitoring of all schedules, invoices, progress reports, HUD compliance forms and project closeout documentation. In addition to this mandatory tracking, Michael Baker offered more robust document management solutions. Michael Baker utilized the SIROMS Sharepoint Site as an electronic document library for this project. As such,

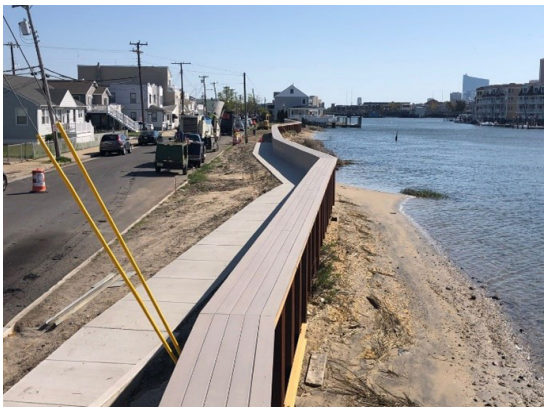
Michael Baker understands the importance of confirming all record keeping are up-to-date with construction projects and contract milestones.

Under the Grant Program, Michael Baker provided Independent Cost Estimates (ICEs) for Subrecipient contractor agreement amendments (change orders). Performing ICEs is a primary example of providing the proper "checks and balances" for the local government contractor. Michael Baker's Licensed Professional Engineers have extensive experience preparing ICEs for all types of construction projects. Michael Baker uses a wide variety of estimating tools that includes comprehensive life-cycle analysis, tracking trends and historical indexes, bid analysis and assessing the risks and probability of high-impact events and their influence on cost.

Since the Grant Program is funded through the Federal Department of Housing and Urban Development (HUD), specialized compliance and monitoring, end-to-end policy development, on-site compliance training with Subrecipients, and operational implementation are required. Michael Baker is experienced in HUD compliance monitoring and a thorough understanding of Federal Labor Standard regulations including Davis-Bacon and Related Acts, Hatch Act, and Section 3 to comply with HUD grant funding requirements. Michael Baker is utilizing an extensive compliance "toolbox" containing regulatory, operational, and financial processes for use on HUD-funded Community Development Block Grant Disaster Recovery (CDBG-DR) programs. These templates are assisting in "quick start" program compliance.

PROJECT: CMF 003 WO#15 Program Management for Atlantic City Resiliency Program (2020-Present)
LOCATION: Atlantic County, New Jersey
CLIENT: NJ Department of Property Management and Construction (NJ DPMC)/ NJ Department of Community Affairs (NJDCA)
PROGRAM BUDGET: $20 million

Michael Baker was selected as the Program Manager for the Atlantic City Resiliency Program for the State of New Jersey. Under this Hurricane Sandy CDBG-DR Grant Program, the NJDCA is funding projects that will continue the efforts to protect vulnerable communities from the impacts of future storms along flood prone areas. **There are a total of seven projects involved in the program: Traffic Signal Equipment Upgrades, City Hall Flood Proofing, Check Valve Replacements, Lower Chelsea Bulkheads, South Blvd. Bulkheads, Gardner's Basin Dredging & Bulkheads, and Chelsea/Ducktown Bulkhead projects.** Due to Michael Baker's extensive construction management and design experience with large multi-faceted construction and resiliency projects, our team was selected to assist the NJDCA with monitoring and oversight tasks for selected resiliency projects throughout coastal New Jersey.



Key tasks include:

- Monthly Reporting
- Design Oversight
- Bidding/Procurement Reviews
- Contractor Deliverable Reviews
- Bi-weekly Field inspection
- Independent Cost Estimating
- Master Project Scheduling and Forecasting
- HUD Reporting and Compliance
- Contractor Recordkeeping Compliance Assistance
- Assist with Integrity Monitoring

Accountability for project submittals and issue resolution were diligently tracked and recorded to guard against delays and minimize the NJDEP's liability in the event of a claim. Baker actively communicated with the NJDEP and tracking project correspondence from preconstruction through closeout by maintaining detailed logs and checklists that enable us to assign and track ball-in-court responsibility for Subrecipients and project deliverables. Michael Baker provided timely reviews of invoices and progress reports with proper record keeping to match pace with the Subrecipients contractor deliverable submission schedule. These tasks were accomplished through the use of a "uniform" deliverable tracking system. The tracking system provided overall monitoring of all schedules, invoices, progress reports, HUD compliance forms and project

closeout documentation. In addition to this mandatory tracking, Michael Baker offered more robust document management solutions. Michael Baker utilized the SIROMS Sharepoint Site as an electronic document library for this project. As such, Michael Baker understands the importance of confirming all record keeping are up-to-date with construction projects and contract milestones.

Under the Grant Program, Michael Baker provided Independent Cost Estimates (ICEs) for Subrecipient contractor agreement amendments (change orders). Performing ICEs is a primary example of providing the proper "checks and balances" for the local government contractor. Michael Baker's Licensed Professional Engineers have extensive experience preparing ICEs for all types of construction projects. Michael Baker uses a wide variety of estimating tools that includes comprehensive life-cycle analysis, tracking trends and historical indexes, bid analysis and assessing the risks and probability of high-impact events and their influence on cost.

Since the Grant Program is funded through the Federal Department of Housing and Urban Development (HUD), specialized compliance and monitoring, end-to-end policy development, on-site compliance training with Subrecipients, and operational implementation are required. Michael Baker is experienced in HUD compliance monitoring and a thorough understanding of Federal Labor Standard regulations including Davis-Bacon and Related Acts, Hatch Act, and Section 3 to comply with HUD grant funding requirements. Michael Baker is utilizing an extensive compliance "toolbox" containing regulatory, operational, and financial processes for use on HUD-funded Community Development Block Grant Disaster Recovery (CDBG-DR) programs. These templates are assisting in "quick start" program compliance.

PROJECT: Hoboken Northwest Resiliency Park (2019-2023)
LOCATION: City of Hoboken, New Jersey
CLIENT: City of Hoboken
PROJECT COST: $47M

Michael Baker is providing full-time construction management for the construction of a 5.4 acre interactive urban park in the city of Hoboken, which incorporates sustainable design and extensive stormwater management features, including collection and storage of all storm runoff into an underground, one-million -gallon stormwater storage tank. As part of the project, Michael Baker oversees extensive soil sampling and testing of the former industrial site, coordination with local sewer authority for pump station construction, and management of construction of numerous park features, including play equipment, building structures, athletic facilities, and other interactive features. Michael Baker will perform utility coordination, supervise the construction of a stormwater sewer system, and manage the construction of a park building and community room. Additionally, it will oversee the attainment of SITES v2 sustainability certification, conduct public engagement, update the project website, and complete and submit all close-out documents.

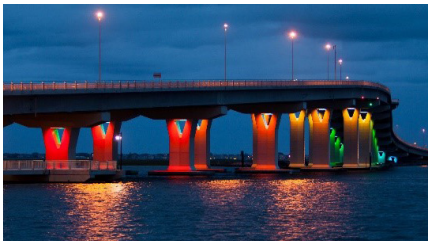
The Northwest Resiliency Park sits on 5.4 acres of land that was previously used by the Henkel Chemical plant, which closed in 2007. Before that, it was a marshland that had been filled in during the late 19th and early 20th centuries and was subject to frequent flooding. Following Superstore Sandy in 2017 the U.S. Department of Housing and Urban Development and the City's 2014 Green Infrastructure Strategic Plan identified the area as a potential flood management park. The site was remediated to EPA standards, capped in 2016, and used as a temporary pop- up par k starting in 2017.

The project called for the implementation of several landscaped basins around the perimeter of the park, as well as stormwater basins under the basketball court and athletic field. The most significant component, located 25 feet underground, is a precast one-million -gallon stormwater storage tank and retention system that combats (loading by storing and filtering rainwater. Michael Baker supervised the installation of the tank and the supporting excavation system, which is comprised of fully braced, 80-foot sheet piles and a perimeter of 700 linear feet. Approximately 30,000 cubic yards of excavation to subgrade will occur next, followed by the installation of 98 H-piles, dense-graded aggregate, a mud slab, and the tank. Throughout construction, substantial dewatering of groundwater will occur. Following construction of the tank, the site will be turned over to the local sewer authority, which will construct a pump station that will control the release of stored stormwater into the local stormwater network.

PROJECT: Replacement of the Turnpike's District 6 Maintenance Facility and (3) State Police Stations (2013-2015)
LOCATION: Newark, Moorestown, and Galloway Township, New Jersey
CLIENT: New Jersey Turnpike Authority
PROJECT COST: $60M

Michael Baker is providing construction management and inspection services for approximately $60 Million of construction associated with Contract Nos. T500.192, T500.272, and A500.274. The antiquated Troop D Stations will be brought up to contemporary law enforcement agency standards to meet today's requirements and future needs. The improvements include new buildings, expansion of parking and site development, new underground motor fuel tanks, new utility services (electrical, water, sewer, etc.) including emergency generators, HVAC, and a helipad at Moorestown. The new District 8 Maintenance Facility building will provide updated equipment, expanded capabilities, and contemporary amenities for Turnpike Maintenance personnel to replace the overcrowded and obsolete facility. This is the prototype for the proposed improvements and replacement buildings for the Turnpike and Parkway maintenance yards. Michael Baker proactively maintains continuous lines of communication with the Authority (maintenance, construction, & engineering) to maintain the yard's operational functions and address design changes originating from field conditions and engineering as the program evolves. Michael Baker is managing multiple, concurrent sites, and coordinating with the NJDCA and utilities. Work on these sites will be substantially complete prior to the bulk of the current facility design sites going into construction and our staffing plan adequately addresses this transition.

PROJECT: Route 52 Causeway Replacement (2002-2012)
LOCATION: Ocean City and Somers Point, NJ
CLIENT: New Jersey Department of Transportation
PROJECT COST: $400M



Michael Baker led the effort for alternatives analysis, preliminary design, environmental services, final design, and construction support for this multi-faceted, 3-mile transportation improvement project over Great Egg Harbor in NJ. This Michael Baker design project is one of the largest projects undertaken by the New Jersey Department of Transportation (NJDOT), with a construction cost exceeding $400M. The Route 52 Causeway is located in an environmentally sensitive area and provides a vital link between the two shore communities of Somers Point and Ocean City, NJ. The project consists of approximately 10,000 ft. of dual concrete bridge structures (20,000' total) between high level, low level, and curved bridge alignment sections, which also includes a continuous 10' wide multi-use path on the bridge. The project also includes approximately 7,000 ft. of new and widened roadway construction.

The design included many complex structural features including continuous spliced girder designs, post-tensioned segmental concrete structures, Cast In Place post-tensioned continuous concrete structure, precast concrete elements, bulkheads and cofferdams in extreme tidal zones. In-depth analyses were performed for ship/vessel collisions, ice loadings, scour, and a site specific seismic response spectrum and seismic foundation stiffness matrix was developed. The subsurface exploration program included extensive lab testing of the soil properties leading to an optimal (shorter) pile length reducing construction costs and duration of pile driving activities. The project involved preparing bid documents for two alternative designs for each of Contracts A and B. Michael Baker further implemented an innovative strategy of preparing partial alternative design bid packages to save time and cost.

PROJECT: NJTA Facilities Improvement Program, Final Design Services (2013-2020)
LOCATION: NJ Turnpike North
CLIENT: New Jersey Turnpike Authority
PROJECT COST: $70M

Michael Baker's Hamilton Office provided Final Design Services for Contract Nos. T500.356 and T500.363 which included the design of three new multi-use buildings (TMD 4, 6, & 9), one new prefabricated materials storage building (TMD 9), two new salt sheds (TMD 4 & 9), and the rehabilitation of five existing maintenance buildings (TMD 4, 6, 7, & 10). Facility scope included full architectural space programming

and design, structural design, Department of Community Affairs (DCA) permitting, MEP and fire protection design, design of building security components, design of back-up generators, CSI specifications, and post design/construction administration. Site/civil design included full site lighting, parking lot layouts, engine block heaters, MgCl upgrades, brine station relocation, geotechnical engineering (building and site), retaining walls, pavement, fencing/gates, SWM / basin design, utilities engineering, and site power/communications. Environmental approvals/permits included NJ Executive Order (EO) 215 EIS and EA documentation for five sites, hazmat investigations, Soil Erosion and Sediment Control (SESC), Freshwater Wetlands permits, and Flood Hazard permitting. All of the projects require the development and preparation of construction documents for full compliance with NJDCA.

PROJECT: Scudder Falls Bridge Replacement (2017-2022)
LOCATION: Route 295 NJ/PA Border
CLIENT: Delaware River Joint Toll Bridge Commission
PROJECT COST: $425,000,000.00

Michael Baker provided final design and post-design services for the Scudder Falls Bridge Replacement project.

The existing four-lane bridge over the Delaware River is functionally obsolete and needed to be replaced to alleviate recurring current peak-period and emergency-incident traffic congestion and projected future traffic. Numerous commuter safety and operational upgrades are also needed at the bridge and adjoining highway segments and interchanges in both New Jersey and Pennsylvania.

The project involved replacement of the existing four-lane bridge with a twin-span structure carrying six lanes of through traffic (three in each direction), two auxiliary northbound lanes for entry/exit travel, and one auxiliary southbound lane for entry/exit travel. The project also included complete reconstruction of the deficient Route 29/175 interchange on the New Jersey side and reconfiguration of the Taylorsville Road interchange in Lower Makefield, Pennsylvania, to improve the safety and efficiency of the interchange. Two roundabouts are introduced on the New Jersey side to improve the efficiency and safety of the interchange. Their design followed Federal Highway Administration (FHWA) Roundabouts: An Informational Guide, and NCHRP 672. Roadway work also includes widening of approximately 2 miles of I-95 on both approaches of the bridge. The effort included evaluation of existing guide rail and design of the appropriate roadside protection for the proposed improvements. A key element of the design is the roundabouts within the Route 29 Interchange.

Michael Baker's scope of work also included drainage upgrades and other improvements along the approach highway between the Route 29/175 interchange and Bear Tavern Road in New Jersey, and widening of the Pennsylvania approach highway between the Route 332 exit and the bridge by adding an additional lane in each direction. Michael Baker also designed a bicycle/pedestrian walkway connecting the recreational canal paths on both sides of the river. New bridge inside shoulders are sized to allow for future mass transit service. Michael Baker also designed a new all electronic tolling (AET) collection system in the southbound direction, consisting of high-speed E-ZPass tag readers and video cameras to identify license plates for purposes of collecting tolls by mail from motorists who do not have E-ZPass. Noise-abatement walls are designed along the approach roadways leading to and from the bridge.

Additionally, Michael Baker designed an intelligent transportation system (ITS) equipment building for the installation of the AET equipment. The building is sized to house the proposed AET system equipment with consideration for possible future equipment needs. Equipment housed in the toll building includes lane controller cabinets; E-ZPass reader equipment cabinets; and electrical, HVAC, generator control/monitoring, and network cabinets. The client currently uses a leased fiber optic system for connectivity between toll collection facilities. The provider of the leased fiber optic system will extend its service to the new building. Space will be included in the toll equipment building for other leased communications systems for T1 connectivity, such as video surveillance systems, and for vendor demarcation and their associated equipment. A stand-by generator was provided to support the AET equipment and associated building systems in the event of power failure. The generator and automatic transfer switch is located adjacent to the toll equipment building in a secure, weatherproof enclosure. Annunciation for remote alarm monitoring is provided. The distribution system for the generator included an uninterruptible power supply (UPS) system to eliminate disruption in AET system service. The UPS maintains power during generator start-up.

PROJECT: Atlantic City International Airport Deicing Facility (2013-Present)
LOCATION: Egg Harbor Township, New Jersey
CLIENT: SJTA
PROJECT COST: $37M

SJTA enlisted Michael Baker to complete the design and perform the construction inspection of a new deicing pad and the associated airfield infrastructure at ACY. SJTA proposes to construct a centralized deicing pad adjacent to Taxiway P. This frees up valuable space on the terminal apron (where deicing currently occurs) and allows the aircraft to be closer to the departing runways to reduce holdover times. A Part 77 airspace analysis was performed to ensure no aircraft will penetrate the imaginary surface. Adjacent to the deicing pad is a paved area that will house the (clean) deicing fluid tanks, filling lanes for the deicing vehicles, a deicing control building, spent glycol fluid collection pump and lift station, and a parking area for the deicing vehicles and support staff. A line of sight analysis was performed to ensure there were no issues from the air traffic control tower (ATCT). Runoff from the deicing pad will be collected in a trench drain, and then directed, with the use of diversion chambers, to a glycol collection system. Michael Baker coordinated closely with SJTA to obtain approvals from the NJ Pinelands. This included identifying grassland and New Jersey Pollutant Discharge Elimination System (NJPDES) 5G3 Request for Authorization. A 10,000-gallon oil/water separator will also be provided to prevent oil-laden contaminates from entering the stormwater system, as fueling operations are planned for the pad. Michael Baker also provided geotechnical services to develop the pavement design. The Michael Baker team met with representatives from SJTA, OPS, and FBO MidAtlantic Jet to gather information on existing deicing activities and to further refine the goals and conceptual layout of the project. Michael Baker has provided bid documents, procurement support, construction administration services, and record drawing preparation for Phases 1-4 for both Base Bids and Add Alternates. Michael Baker is actively providing CM/CI for all Phases. The CM/CI includes reviewing monthly schedule updates, reviewing extra work items, preparing change orders and independent cost estimates (ICE), reviewing submittals, responding to Request for Information (RFIs), as-built plan preparation, final quantities and approving Contractor monthly pay applications with certified payrolls (Davis Bacon and Related Acts).

PROJECT: Rehabilitation of the Turnpike's Toll Plaza Utility Buildings and Tunnels (2013-2015)
LOCATION: Various Locations on the NJ Turnpike
CLIENT: New Jersey Turnpike Authority
PROJECT COST: $15.5M

Michael Baker completed construction management and inspection services for the rehabilitation of 25 Toll Plaza Utility Buildings spread across 3 contracts: South, Central and North on the NJ Turnpike. These contracts address the toll plaza's immediate needs for functionality such as stand-by power (utility building & ETC huts), public health (water, sewer, etc.), improved working conditions for the employees (HVAC, waterproofing, avoidance of mold, asbestos abatement), electrical/ lighting, security upgrades (doors windows, lighting, etc.), and structural repairs (slab replacements/repairs, tunnel repairs, roofs, etc.). Michael Baker proactively shifts resources between the 25 discreet sites to manage a spectrum of issues while keeping toll plaza operations unaffected. Work on the toll utility buildings will be complete this year.

PROJECT APPROACH TO SCOPE OF WORK

New Jersey was impacted by Hurricane Ida in September 2021, which caused devastating flooding across 12 New Jersey counties. This work order will address five municipalities: North Arlington, Hudson County-Secaucus, Town of Guttenberg, Passaic City and Greenwich Township. The proposed projects will implement resiliency strategies that were studied during Hurricane Sandy as well as the recent Hurricane Ida. Many of these projects will focus on "moving" water away from key infrastructure in these localities to ensure safe passage for the general public and access for our emergency response teams in these areas. Many of these project include upgrades to existing pump stations, new stormwater conveyance systems, bulkheads, outfalls, and the incorporation eco-friendly rain gardens and impervious pavers to better convey/store water in a environmentally safe way. There is also going to be a new state of the art municipal complex that will house emergency responders and operation centers to ensure the surrounding community has better access to them during the next major storm. As the CMF for this wide array of projects, there are common goals for all the projects that Michael Baker will ensure is achieved by the end of the Program:

- The #1 Goal - Safety for the surrounding public and workers during construction.
- Provide a clear and manageable path for each Subrecipient to navigate the HUD-CDBG requirements.
- Eliminate any Waste, Fraud and Abuse of governmental HUD funds.
- Reduce costs associated with unnecessary contractor delays and claims.
- Maintain open communications with all stakeholders.
- Provide and maintain ALL project documentation in well-organized manner.

And when all of these are achieved...

We will have an "Audit Proof" Program that all can share the success in.

LESSONS LEARNED FORM PAST CMF WORK ORDERS

Over the past **eight (8) years** that Michael Baker has served as the CMF for similar work orders. We have learned what "pitfalls" are always lurking behind every corner. Knowing what to look for is half the battle. We have learned a lot in the past eight years and understand that small details can quickly turn into large problems if you don't address them early on. We have assembled a list of some of the more significant items to look for early on and throughout the program to avoid costly delays:

- **Uniform Relocation Act:** *"The Uniform Relocation Assistance and Real Property Acquisition Policies Act (URA), is a federal law that establishes minimum standards for federally funded programs and projects that require the acquisition of real property (real estate) or displace persons from their homes, businesses, or farms. The URA's protections and assistance apply to the acquisition, rehabilitation, or demolition of real property for federal or federally funded projects. 49 CFR Part 24 is the government-wide regulation that implements the URA."* During the preliminary design phase of any project, property ownership needs to be identified for any potential impacts. If this task lags, the consequences can magnify. We have seen that required acquisitions can add over a year in some instances and delay the progress on final design and bidding. This can be corrected by requiring certifications from the Subrecipient and Design Firm to confirm the property acquisition requirements prior to advancing too far into the design phase. We also found that simply including this agenda item on all bi-weekly status meetings helps too. We have found that regular status meetings during the design process with all stakeholders is a "must" and that items like this can be discussed regularly and not missed on anyone's "radar." Too often projects can get "lulled" into thinking everything is going smoothly if the right questions are not be asking.
- **Utility Relocations:** Utility companies can sometimes be difficult to coordinate with during the design process. The Design Firms need to be diligent in establishing communication with these companies and ensure that ALL utilities have been identified before the Final Bid packages are advertised. Leaving the utility coordination up to the contractors is not the best way handle any relocation. The reason is, this can create a delay for the contractor that can potentially seek additional contract time and associated costs. Our solution to this is to hold Design Firms accountable during the design phase to ensure no bid package is prepared until written verification and/or agreements with utility companies have been prepared. Similar to property acquisition discussed above, this should be an agenda item at every meeting during the design phase. We will keep asking the questions and ensure the Design Firm is engaging the utility companies during design until this task is completed.
- **Michael Baker has learned from previous work orders** that meticulous tracking and logging in of ALL correspondence including emails, submittals, meeting minutes and other deliverables can pay big dividends in settling disputes down the road. On numerous occasions, Michael Baker was asked to create timelines for issues that arose with Subrecipients and

their associated consultants. Our team was able to provide specific dates of actual e-mail notifications and responses to issues that began (even up to over 2 years prior). These timelines and backup documentation can then be used as a resource to settle potential disputes. With a program such as this, there will be up to five separate: Subrecipients, design firms, and contractors. That will generate a lot of emails, meetings and correspondence. The CMF needs to be well organized to track this information and know what is important to "hold on to." We have witnessed many occurrences of project details being either misplaced or forgotten about by a subrecipient or consultant. Again, the task of document control may seem like administrative item that is put off, however, the Michael Baker team knows otherwise and is why they place a great importance on this task.

- **Permitting:** Another huge schedule "buster" are permits. The Environmental Review process is the first step in identifying potential permit requirements. It is up to the Design Firms to then engage the NJDEP, USCOE, etc., to apply for the permits. It always a good idea to have a Pre-Application meeting with NJDEP for exapmle, to describe the project and ensure the right permits are being pursued. Like URA above, missing a permit or not applying for the right one can add 9-12 months to a project schedule in some cases. Again, as experts in the NEPA process, we will ensure this is discussed early on at progress meetings with the Design Firm to ensure this is not taken a back seat to other activities and to hold them accountable. Although the CMF's role is to facilitate the permitting process, but knowing when to apply pressure and to ask the right questions is where we excel and this will help alleviate the potential pitfalls.

Throughout the Environmental Review Phase, Design Phase, and Construction Phase for projects of this magnitude, there is a large amount of coordination, scheduling, reviews, oversight, inspection, and cost considerations that need to be completed. The DPMC needs a skilled multi-disciplinary team of experienced professionals to rely upon for these tasks, paying close attention to quality, schedule, and costs. The CMF Consultant will be the DPMC's and assigned Project Director's (PD) representative and maintain their expectations and goals as the primary objective.

We know that the CMF consultant will be asked to take on assignments on short notice and provide the complete range of services needed by the DPMC and PD through the various phases of the project. The DPMC and PD need an experienced and capable consultant team that can maintain and monitor high-quality projects following the design standards and requirements while working with limited oversight by the assigned PD's staff. The Michael Baker Team is well versed in these topics and possesses the technical experts needed to fulfill these requirements throughout the phases of the projects.

Services Provided by the CMF

Professional, Technical, Administrative, and Clerical services are provided throughout the phases of a project. In general, those services include:

- Scheduling and Organizing Progress Meetings;
- Design Reviews;
- Budget and Cost Reviews;
- Agency Coordination;
- Compliance Reporting per funding source (i.e. HUD, FEMA, etc.); and
- Construction Management and Inspection.
- Project Close-Out.

PROJECT TASKS

Michael Baker is very familiar with the individual tasks identified in the scope of work as they are similar to the tasks under CMF-003 Work Orders No. 3 - Flood Hazard Risk Reduction and Resiliency Grant Program and Work Order No. 15 Atlantic City Resiliency Program. Our Team currently has a system of handling and tracking all identified tasks in an organized and concise way that has been time tested for over eight years.

TASK 1: DESIGN OVERSIGHT

Michael Baker understands this Work Order not only requires experienced knowledge of construction management, but also design. Without a thorough knowledge of the scope of work during the design phase, one cannot perform effective construction management. Under this Work Order there are five projects that will require equal knowledge from the design phase through construction. As highlighted in our Project Experience, Michael Baker is skilled in performing independent cost estimates to analyze budgets prepared by the Subrecipient's Design Firm. In addition to project budgets, Michal Baker understands the design requirements for the five projects identified under this Work Order. Our expertise will allow us to play an active role as required, to assist with value engineering of design alternatives to ensure budgets are met and solutions fulfill the project needs and required functions. Under this task, Michael Baker will closely monitor the following:

- Projects remain within eligible scope
- The design phase is proceeding per project and Master Schedule
- Permit, regulatory, and code compliance requirements are met
- URA is being reviewed and any project acquisitions are being properly obtained
- Utility coordination is being conducted as required
- Documents are ready for permit review by the DCA, DEP, USCOE and/or applicable regulatory agency
- Safety and security responsibilities are clear and appropriate in the contract documents

It is also understood that the Environmental Review (ER) process per 24 CFR 58 is the key to obtaining the AUGF (Authorization to Use Grant Funds) for these projects. All projects will require an ER and the level of review (i.e. CEST, EA, EIS, etc.) will need to be determined for each. We will ensure this activity is completed by the Subrecipients and we deliver the completed ER to the PD for processing by HUD. Permitting will drive the final design schedule. Our permitting technical expert, Ebony Washington, will review the permitting progress to verify that each Subrecipient's engineer consultant is on track with submissions to ensure timely permits. **Based on some preliminary investigations of the proposed projects, we anticipate the following permits and Michael Baker coordination efforts: NJDEP Waterfront Development Individual Permit and Flood Hazard Area Control Act Rule compliance will be required for work below and within 500' of the MHWL and impacts to the tidal flood hazard area., NJDEP Freshwater Wetlands Permit, Meadowlands District, under the jurisdiction of the NJ Sports and Exposition Authority which may require zoning certificate review, Penhorn Creek is claimed tidelands and may require a Tidelands Lease, NJDEP Flood Hazard Area permit, the Highlands Preservation Area, and the Green Acres program.** Michael Baker will provide necessary oversight of the Subrecipient's Design Firm consultant, requiring attendance at regularly scheduled design progress meetings. Formal memorandums will be prepared, and the master project schedule will be updated accordingly to accurately track each project's progress. Most importantly, these progress meetings will ensure the PD stays informed of any potential critical issues or problems. Michael Baker will offer potential solutions to aid the PD with any decision-making requirements to progress the projects to ensure a timely completion by the to be determined project end dates.

TASK 2: GENERAL REPORTING REQUIREMENTS

Michael Baker has already developed multiple tracking tools, checklists and handbook guides that can be used under this task. Michael Baker sees Task 2 as a critical path task with the goal of expediting the overall program. Providing timely reviews with proper record keeping matching pace with the local government contractor deliverable submission schedule is the key to successful grant management. Monthly reporting is one of the key communication methods for a consultant to keep an owner informed. The DCA PD is relying on the CMF to ensure that the project is meeting scope, schedule, and budget goals established for the project. Monthly progress reports will be submitted by the 15th of each month. The report will summarize in a clear concise manner the following:

- Monthly inspections reports with photos once construction starts
- Invoices and change orders
- Meetings (coordination meetings and site meetings) along with minutes
- Contract amendments
- Procurements (professional and construction)

- Master Schedule updates (refer to Task 6 Master Project Schedule)
- Issues with Subrecipients meeting the State of Assurances requirements
- Projected work for the next month

The Michael Baker Team is poised to provide an effective, uniform deliverable tracking system capable of handling multiple projects. The tracking system will provide overall monitoring of all procurements, amendments, invoices, change orders, coordination meetings, site visits, photo logs (for each site visit), monthly labor monitoring (including HUD-11s), Independent Cost Estimates (ICEs), project closeout and other deliverables requested for review by the NJDCA not specified in the RFP. Michael Baker will verify required contract specific deliverables are complete, accurate, and are being submitted in a timely fashion for the necessary technical reviews in order to avoid unwarranted project delays.

Michael Baker has developed two tracking spreadsheets in addition to the Master Project Schedule that will be submitted monthly. These spreadsheets were specially designed for under CMF-003 Work Orders No. 3 & 15 and have been well received by DCA and can be effectively utilized for this work order. The first tracking spreadsheet is called the "Monthly Status Update." This spreadsheet will have tabs for each project and track the items listed above. Michael Baker will include key dates when items are received and will involve daily e-mail logs as required. This has proven to be very beneficial for tracking progress and developing timelines for key project milestones. The second spreadsheet is entitled "Monthly Issues Update." Michael Baker developed this stand-alone tracking tool to document key issues that may arise and will indicate what the issue is, date it was initiated, impact to project, ball-in-court, tracking comments, and when the issue was resolved. Michael Baker has the technical staff with qualifications ready to support the task and meet the unpredictable "highs and lows" of the contractor submittal process. The tracking system will provide the DCA with clear and concise updates for every monthly progress update.

Michael Baker understands that each step in a project's life cycle requires unique forms and supporting documentation. We have developed a series of checklists for every step of the way. These checklists were utilized for CMf-003 Work Orders No. 3 & 15 and can be easily transferred to this project for a seamless transition. The checklists developed include:

- Procurement Packages (both professional and contractor)
- Invoice Reviews
- Bid Document Plans and Specification Reviews
- Independent Cost Estimates
- Closeout

Michael Baker will include a checklist with each review conducted which will be updated regularly as items are received. There is also a column to indicates where the forms can be found in SIROMS for easy access. In addition to the checklists, Michael Baker has also developed handbooks for each step in a project's life cycle that include:

- Bid Package Preparation Handbooks (both professional and contractor)
- Preconstruction Conference (incl. Davis Bacon guide) Handbook
- Invoice Review Checklist
- Closeout Handbook

These handbooks are distributed early in the project to the Subrecipients and their consultants and include not only the above-mentioned checklists, but all the blank forms as well for reference. Michael Baker found that distributing these handbooks early on will eliminate any surprises for the contractors and consultants as to what is expected for each bid package, invoice, change order, and closeout.

A key critical task for successfully managing the grant award projects for this Work Order will be record keeping. Michael Baker understands that all documents and records produced by the local government contractor or CMF are to be submitted to the Sandy Integrated Recovery Operations and Management System (SIROMS) FHRR Document Library. In addition to this mandatory tracking, Michael Baker offers more robust document management solutions as detailed above.

Please refer to the following two pages that depict "Checklists" for Contractor Procurement and Invoice Reviews to demonstrate our thorough knowledge of the Program's requirements:

SAMPLE CONTRACTOR SUBRECIPIENT BID PACKAGE CHECKLIST

CMF 004 WO No. 01 Resilient Communities Program

Prime Contractor Bid Package Checklist

Project Name: Date:

Preparer:

Bid Package	Yes	No	N/A	Comments
Required w/ Submitted Bid Packages				
Bidder Qualifications (Bidder to provide "Resume" of similar projects)	☐	☐	☐	
FORM #1 - General Contractor's Schedule of Small, Women's, Minority, and Veteran Owned Business Enterprise Utilization Worksheet Sandy CDBG-DR Economic Revitalization	☐	☐	☐	
FORM #2 - Verification of Contractor Eligibility	☐	☐	☐	
FORM #3 - Notice of Contract Award (Signed Contract between Prime Contractor and Subrecipient)	☐	☐	☐	
FORM #4 - Certification of Subrecipient and General Contractor Affirmative Action/ EEO/ Section 3/ Prevailing Wage SWMVBEs Addendum to Construction and Bid Documents	☐	☐	☐	
Bid Bond	☐	☐	☐	
FORM #5 – HUD 4720 Project Wage Rate Sheet	☐	☐	☐	
FORM #6 - AA Form 1 – Initial Construction Project Workforce Manning Report	☐	☐	☐	
New Jersey *Public Works Contractor Registration & NJ Business Registration Certificate*	☐	☐	☐	
FORM #8 – Ownership Disclosure Form	☐	☐	☐	
FORM #9 – Disclosure of Investigation and other actions involving Bidder Form	☐	☐	☐	
FORM #10 - Disclosure of Investment Activities in Iran	☐	☐	☐	
FORM #12 - Anti-Lobbying Certification	☐	☐	☐	
FORM #13 - AIA G703 or Similar – 1992 Continuation Sheet – Contract Schedule of Values	☐	☐	☐	
FORM #14 - HUD-50070 Certification for a Drug-free Workplace	☐	☐	☐	
Sample #5 - Certificates of Insurance	☐	☐	☐	
Sample #6 - Performance Bonds	☐	☐	☐	
Sample #7 - Payment Bond	☐	☐	☐	
FORM #15 - Certification Regarding Equal Employment Opportunity	☐	☐	☐	
Form #16 SWMVBE Contract & Subcontract Activity Report X Quarter 2021	☐	☐	☐	To be submitted quarterly after award.
FORM #17 - WH347 - Certified Payroll	☐	☐	☐	To be submitted weekly after award.
FORM #19 - Monthly Project Workforce Report	☐	☐	☐	To be submitted monthly after award.
FORM #22 - Section 3 Utilization Plan	☐	☐	☐	To be submitted after award.
FORM #23 - Certification of Bidder Regarding Section 3 and Segregated Facilities	☐	☐	☐	To be submitted after award.
FORM #24 - Section 3 Certification for Subrecipients Receiving More than $100,000	☐	☐	☐	To be submitted after award.
FORM #25 - Section 3 Resident Certification Form	☐	☐	☐	To be submitted after award.
Form #26 Section 3 Utilization Plan for the X Quarter 202X	☐	☐	☐	
Section 3 Monthly Reports For Invoicing	☐	☐	☐	
Form #27 Disclosure of Prohibited Activities in Russia Belarus	☐	☐	☐	
Non-Collusion Affidavit	☐	☐	☐	
Attachment P- Debarment & Suspension Certification	☐	☐	☐	

SAMPLE INVOICE REVIEW CHECKLIST

Invoice Package Documents

CMF 004 WO No. 1 Resilient Communities Program
Invoice Package Checklist

Project Name: _____ Project Location: _____

Name: _____ Date: _____

Subrecipient Agreement	Yes	No	N/A	SIROMS File Location	Comment
Cover Letter	☐	☐	☐		
State Payment Voucher (if applicable)	☐	☐	☐	Construction Management / CDBG Invoices with Supporting Documents	
347/348 (CPRs) w/**Pay Stubs	☐	☐	☐	Labor Monitoring / WH-347	**Pay stubs needed for first invoice from Contractor/Subs. Once paystubs are received and verified against first invoice 347s, they will not be required again unless determined necessary.
Union & Cash Fringe Back-Up	☐	☐	☐	Labor Monitoring / WH-347	
Wage Rates	☐	☐	☐	Labor Monitoring / WH-347	
Pay Application used between Subrecipient and Contractor	☐	☐	☐	Construction Management / Borough Payments in Support of the Project	
Cancelled Check/Electronic Wire Proof from Subrecipient and Contractor for previous Invoice	☐	☐	☐	Construction Management / Cancelled Check	
Schedule of Values **(Schedule K);**	☐	☐	☐	Contractor Invoice	
Stored Material Tracking (If Applicable)	☐	☐	☐	Contractor Invoice	
Engineer's Certificate No. 1 **(Attachment L);**	☐	☐	☐	Contractor Invoice	
Request for Information (RFI) Log	☐	☐	☐	Contractor Invoice	
Submittal Log	☐	☐	☐	Contractor Invoice	
Material backup documentation	☐	☐	☐	Contractor Invoice	
Monthly Inspection Summary reports	☐	☐	☐	Contractor Invoice	
Contractor's Form AA-202	☐	☐	☐	Labor Monitoring / Monthly Project Workforce Report	
HUD 11s	☐	☐	☐	Labor Monitoring / HUD 11 - Record of Employee Interview	
Contractor's Form #16 SWMVBE Contract & Subcontract Activity Report X Quarter 2024	☐	☐	☐	Contractor Invoice	
Contractor Section 3 Monthly Report	☐	☐	☐	Contractor Invoice	
Contractor's Form #26 Section 3 Utilization Plan for the X Quarter 2024	☐	☐	☐	Contractor Invoice	
Contractor's letter authorizing signatory for CPRs	☐	☐	☐	Labor Monitoring / WH-347	Ensure this was obtained prior to first invoice.

TASK 3: INSPECTIONS AND PHOTOGRAPHS

An important aspect of the inspection services is to provide continuous routine onsite inspection as identified in the RFP to ensure the DCA that the installed construction materials meets all of the quality requirements of the contract documents, including applicable codes and standards. Project plans, specifications and material submittals will be obtained from the Design Firm and ensure that all inspection staff are familiar with them prior to conducting their review. The Michael Baker Team will inspect the work and report any irregularities, based on report format with photos attached.

The Michael Baker Team will schedule inspection activities to support the project schedule and coordinate inspection of other consultants and agencies. The inspectors assigned to the work will monitor the materials, equipment and techniques used during construction. The inspector will advise the contractor of any materials or equipment which has not been approved and should not be installed, and any installation that does not meet the requirements of the contract. If corrective action is not taken by the contractor, the Superintendent/Resident Engineer will advise the DPMC of the non-conforming condition and any disputes arising over improper installation.

All non-conforming or unacceptable work will be reported on the Monthly Inspection Reports and a log maintained to document corrections is completed, in accordance with the requirements. Monthly digital progress photos will be taken by the Teams inspector to document the progress of the work, equipment installation and other key aspects of the work. Exterior photographs of all structures will be taken on a monthly basis from each side of the structure from the same locations. Preconstruction photographs will be taken to document the existing conditions prior to construction. The inspector will set up an electronic file that records the key data for each photo so that photos can be used in the future. As work progresses, photos will be taken to record work progress and completion of installed pipes, equipment, systems and finishes. Our inspectors will also use digital photographs to document installation work and link these photos to their Daily Diary Report. Other important activities will be documented through site photographs such as subsurface site conditions, concrete placement activities, site housekeeping conditions, disputed work items, etc. Documentation of such activities through photographs will be beneficial in any actions, questions, complaints or disputes, which may arise later.

As-built drawings will be reviewed and documented in conjunction with the Design Firm's engineer to ensure all field changes are captured properly. We will also ensure that the contractor complete an as-built survey to ensure all elevations of buildings, platforms and equipment are built to the required flood elevations.

TASK 4: CONTRACTOR DELIVERABLE REVIEW

This task represents the center of the "universe" in relation to the overall Program. All the other tasks identified in this work order revolve around this one. As the CMF, Michael Baker knows that without a proven, precise and organized system to review all the associated documentation, the Program cannot succeed. The guidelines set forth by HUD are complex and sometimes overwhelming if you are not familiar of what they mean and what is required for documentation. We know these guidelines as almost second nature since we have providing reviews in similar work orders through NJDPMC for the past eight (8) years. We have developed handbooks, checklists and other standard operating procedures to ensure not only we understand the process but have also made it easy for the Subrecipients and their contractors to understand and follow.

At the start of every phase in this Program, we will hold meetings with Subrecipients and Contractors to review these checklists to ensure they understand what will be expected to provide as backup documentation. We have also learned that it is also important to include these in the bid packages so Contractors are aware of what is required before they are awarded the contracts. For example, invoice reviews almost always seem to be a trouble spot for contractors when they submit their invoices and end holding up payments due missing documents. For example, Contractors need to know they are to provide the required CPRs, wage rates, and monthly fringe backup documentation with every invoice just to name a few. Knowing that these types of items are required before the award provides some assurances, they know what they are in for if they are selected. Therefor we realized this type of information should be "spelled out" when possible, for them rather than relying on them to sift through the Federal guidelines (it is still understood they are ultimately responsible to follow all guidelines but we will try to make it easier for them.)

Knowing what to look for is the key to identifying any deficiencies. This is why we developed these handbooks and checklists. This Program could not make it through an audit without them. We are also very familiar with the SIROMS system (for over 8 years now)for record keeping. We can assist with setting up the required folders to store all this documentation as well when the time comes.

TASK 5: PROVIDE INDEPENDENT COST ESTIMATES (ICE)

The primary goal of Task 5 is to estimate costs and fees of local government contractor agreement amendments (change orders) at the request of the NJDCA. Performing independent cost estimates is a primary example of providing the proper checks and balances for the local government contractor. Michael Baker understands that certain complex issues often arise during construction served by considering multiple solutions or assumptions and sometimes require amendments to successfully complete a project. Michael Baker knows the value of developing Independent Cost Estimates (ICE) during every phase of the project and not just during construction. Not only is this a requirement from federal agencies such HUD as outlined in **2 CFR A 200.324** for their grants, but it is also the primary tool in keeping the Contractor "in check" during the change order process. Since Michael Baker has the "experts" in Design and Construction Management, we are well acquainted with pitfalls of accepting change orders from Contractors without an independent check. Often, this step can save the Client on unacceptable "markups" or hidden costs. As always, Michael Baker will act in the best interest of the Program first and far most.

Michael Baker's New Jersey-licensed professional engineers have extensive experience preparing ICEs and know that requested ICEs must be completed in a timely manner. The Michael Baker Team is highly skilled in estimating the man-hours, equipment and material required to complete change orders proposed by local government contractors. We have the expertise for any type of project that includes buildings, stormwater conveyance, pump stations, bulkheads and general construction items. Michael Baker understands the importance of ICEs for evaluating local government contractor fee proposals since discrepancies between the two may result in negotiations with the local government contractor. Michael Baker is prepared to provide cost reasonable analyses should explanations be required for differences between the ICE and fee proposal.

Michael Baker's comprehensive life-cycle approach utilizes a standard process to develop estimates, tracking trends and historical indexes, analyzing bids, and assessing the risks and probability of high-impact events and their influence on cost. This includes maintaining relationships with local resources, including affiliations with contractors and construction associations. Michael Baker maintains a dedicated, multi-disciplined estimating staff, including Certified Construction Managers, cost engineers, and professional estimators. Our estimating staff includes Certified Construction Managers and Associate Value Specialists, as well as professionals affiliated with the American Society of Professional Estimators and the Association for the Advancement of Cost Engineering

We understand that cost control is a very important component of project delivery. A design to cost approach will be applied correlating change order construction costs with available budget. Should deviations be observed, we will immediately alert and work with you to refine the design to work within the available funding. Michael Baker will perform cost reasonable analyses and explain any differences between ICEs and fee proposals. Standard procedures will be developed by Michael Baker to systematically review, analyze, and assess estimates. This procedure will include the development of technical independent estimates, constructability input, and management concurrence. The procedure will be formalized through project specific checklists submitted to the DPMC and NJDCA with the recommendations.

TASK 6: SCHEDULING, MASTER SCHEDULE

The Michael Baker Team firmly believes that CPM schedules are an essential and powerful tool in completing a project on-time and within budget. The development of the Master Project Schedule is very dynamic, and the Michael Baker Team will help ensure the overall program's schedule path is clear of obstacles and optimizes the project delivery process to ensure all contracts are completed by September 2029 or earlier. Michael Baker will review the initial and final network schedules submitted by the Design Firms during design and the contractors during construction for each project and, in concert with the Subrecipient and DCA, make recommendations for acceptance, revision, or rejection.

Michael Baker is currently using a master schedule that was specifically developed to track similar progress and fiscal expenditures for CMF 003 Work Orders No. 3 & 15. This master schedule tracks the design phase through the construction phase and will also include monthly/quarterly anticipated expenditures versus actual expenditures. This schedule can be easily reformatted with the five proposed projects for a seamless transition into a working schedule. The Master Project Schedule is only part of driving the project. Accountability for project submittals and issue resolution must be diligently tracked and recorded to guard against delays and minimize the Subrecipient liability in the event of a claim.

Another lesson learned that could be added to list noted above, is the requirement of the Subrecipient to the contractor, to insist on monthly schedule updates during construction. Often, we saw that the Subrecipient did not hold the contractors accountable routinely to provide schedule updates. What happens in these instances, is that if a delay occurs, the contractor needs to show the impact to the schedule at the time of the delay. Waiting to the end of the project to assess delays is usually

too late and potential claims can arise from the contractor. We have seen from other State governmental agencies that their general specifications require contractors to make monthly schedule updates or payment for invoices can be withheld. This is one idea that should be explored with current Subrecipient specifications templates in this Program.

TASK 7: STATEMENT OF ASSURANCES COMPLIANCE

Statement of Assurances Compliance is usually where things get "murky" as many folks may not be familiar with the Davis Bacon rules for paying overtime to employees, how you pay for an employee that works under two job classifications or at what point/threshold does a supervisor or foreman, who is on-site, get paid under specific job classification....just to name a few special cases. Michael Baker knows these answers and more. Another area that can be overlooked are when contractors have subcontractors that may not be SAMs registered. Checking for debarred contractors from not only a State level but through the Federal level via SAMs is one of the important compliance checks a CMF will do. Contractors must be registered with active IDs in SAMs prior to the award of any contract.

Section 3 compliance is also very important and many contractors may not be familiar of the requirements if they have not worked on HUD related federal grant programs. We are aware of the new Section 3 Final Rule that became effective on November 30, 2020 and is codified at 24 CFR part 75. In fact, Michael Baker assisted Ms. Sylvia Johnston at DCA prepare a new Section Plan template for contractor's to use in these programs.

Our Program handbooks and checklists that we developed over the past 8 years for previous work order assignments help Subrecipients become compliant and are easy to understand and use.

TASK 8: PROJECT CMF REVIEW OF CONSTRUCTION CONTRACTOR INVOICES

Michael Baker understands the local contractor is being administered by the Subrecipient. However, under this Program, invoice documentation goes well beyond typical invoice packages that many Subrecipients are not familiar with. Michael Baker has allotted time to review invoices associated with each project on a monthly basis for the task order duration. During this process, contractor invoices will be reviewed to:

- Verify that each payment is consistent with applicable federal, state, and local laws, and that there is no duplication of benefits, process and payment errors, waste, fraud, abuse, malfeasance, or mismanagement of funds.
- Verify that contract deliverables are provided within acceptable timeframes for the duration of the engagement.
- If weaknesses, gaps, or errors are detected, develop recommendations and strategies to ensure maximum federal recoveries, compliance with applicable laws, and prevention of associated risks.
- Verify that all invoices are complete (i.e. including all contract-required documentation), accurate, and have been uploaded to the SIROMS FHRRR Document Library.
- Report findings to NJDCA and DPMC Contracting Officer.

Michael Baker has developed an "Invoice Checklist" under the previous work orders (refer to previous pages above for a sample) that can be used to streamline the review process. In addition, Michael Baker shall assist the PD in any disputes or negotiations with local government contractors as needed. We will also assist the Subrecipient and contractors early on as to what the expectations are for backup documentation.

TASK 9: MEETINGS AND CONFERENCE CALLS

Effective project management starts with good communication. Our approach to this work order is to ensure our key leadership stays "plugged in" into each of the five projects. As such, Project Manager Peter Senus and/or Deputy Project Manager Sean Kahn will attend all meetings, as appropriate. If required, Michael Baker will arrange conference calls (via Teams) and/or on-site meetings with each local government contractor and municipality/county throughout the design and construction phases to discuss progress of the work, critical items affecting the schedule of the project, and change order disputes.

Michael Baker understands that it is our responsibility to prepare an agenda for certain meetings, conduct the proceedings, and prepare the meeting minutes for DCA's PD following the standard meeting minutes format. At other meetings, Michael Baker will be present to document the meeting, schedule changes, budget alterations, and build the lessons learned document. Prior to these meetings and during regular project execution, Michael Baker will inform DCA of any meetings or correspondence with other agencies, government officials, and other stakeholder groups that may be required. Following meetings and at appropriate intervals, Michael Baker will prepare and subsequently update a Weekly To-Do-List that details pertinent activities and deliverables along with assigned responsibility that are critical to the advancement of the projects. This list will be distributed to all team members including NJDCA to clearly communicate project responsibilities and keep

the projects on schedule. **REMEMBER: It is one thing to just attend a meeting. Michael Baker plays an active role in all meetings and will ask the right question....even the hard ones. Sometimes if the right questions are not asked, then critical tasks like URA, utility coordination, change orders, etc.. might go unnoticed. Many times, Contractors will hold back information if it is to their advantage down the road. Our job is bringing this information out early and often.**

TASK 10: CONTRACT MODIFICATIONS

The Michael Baker team understands that Subrecipient and DCA's PD has the sole authority to issue contract modifications. As the CMF, we know that direct interaction with Contractors, for any reason, needs to be approved first by the PD and the Subrecipient as a guideline for any reason or situation. Our role is to collect the information leading up to the potential contract change and to provide the PD with the analysis (reason, cost and schedule) for them to make an informed decision. Change orders and modifications are typically initiated due to changes in field conditions, contract plan clarifications/ errors/additions or by the contractor if they see a better and more economical way of doing the same thing. For most change orders, the contractor and the on-site Superintendent/Resident Engineer will jointly investigate and review the need for a change order. When a change order is necessary, the contractor will prepare the request and justification and submit it to the Superintendent/Resident Engineer for review. This information needs to then be reported to the Design Firm and CMF as soon as possible. Michael Baker has learned that having bi-weekly progress meetings during construction are essential for many reasons including identifying changes in their early stages. Bi-weekly meetings is a great way to pass this information to all stakeholders. The Superintendent/Resident Engineer will prepare a recommendation and estimate of the additional work and submit the recommendation to the Subrecipient/PD/CMF for approval. Where work is in progress and the schedule would be impacted adversely, the Subrecipient/PD will be advised and, upon approval, the work will continue, and Time and Material Records kept until an approval charge order is received.

During the preconstruction phase, Michael Baker will develop project specific procedures to handle these changes. These procedures will detail roles and responsibilities, determining the scope, process for identifying and justifying the changes, steps to process the change, requirements to evaluate cost, schedule and impacts. Identifying the source or reason for the change order is only the first step. Responsible entities will be advised including the Design Firm if it is deemed an error and omission of the contract documents. The priority up front will be to determine cost and schedule impacts. In addition to the required backup from the Contractor, the Design Firm and Michael Baker will perform an ICE to compare to the Contractor's cost. Once all the information is obtained, we will share the information and analysis with the PD to make an informed decision.

TASK 11: PROJECT CLOSEOUT

Project Closeout is as important as the activities that occur while the project is in design and construction. Closeout starts with proper documentation that the punch list was completed by the contractor. Once verified, the following documents will be collected: as-built plans (w/ survey), Operation and Maintenance Manuals, maintenance bonds, Contractor and Subcontractor Release(s) of Liens, Duplication of Benefits, Engineer/Consultant's Certification: For Acceptance and Final Payment, and any other documents required by the Grant Program. Michael Baker developed a "Closeout Handbook" as well for previous work orders that can be utilized similarly under this task to track the progress of each requirement and ensure all documents are received prior to the release of final retainage. In addition, we have found that distributing this Closeout Handbook early in the project's life cycle to the Subrecipient's consultant grant manager is helpful in ensuring these items are obtained in a timely manner.

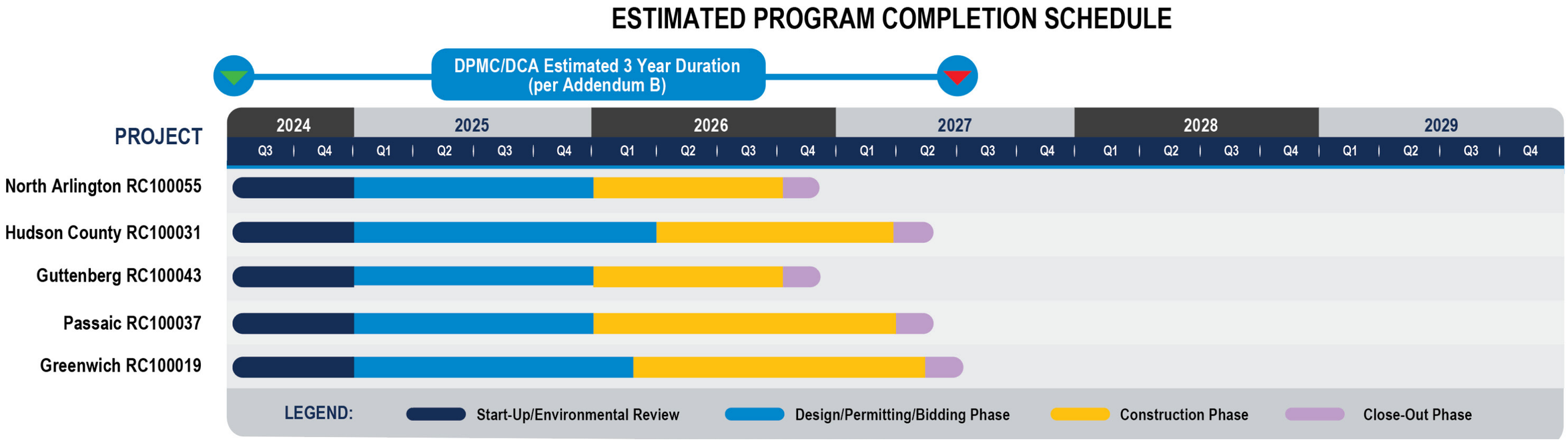
WHY CHOOSE THE MICHAEL BAKER TEAM?

The Michael Baker team is well versed in the requirements of HUD – CDBG of this Work Order due to our experience successfully administering CMF 003 Work Order No. 3 FHRRR & No. 15 Atlantic City Resiliency Program since 2016.

The DPMC will have access to a deep bench of local, multi-disciplinary resources that will efficiently and effectively deliver any number of projects identified– from design and permitting to construction and closeout.

The Michael Baker team will leverage the tools we already developed in previous Work Orders to ensure a seamless transition that enables us to hit the ground running.

APPENDIX A: ESTIMATED PROGRAM SCHEDULE – LEVEL OF EFFORT FOR COST PROPOSAL



NOTE: THIS IS AN ESTIMATED PROGRAM SCHEDULE BASED ON INFORMATION PROVIDED IN ADDENDUM B (I.E. 3 YEAR COMPLETION ESTIMATION). ACTUAL DURATIONS WILL CHANGE ONCE THE PROGRAM BEGINS AND SCHEDULES ARE MODIFIED TO REFLECT INDIVIDUAL PROJECT PROGRESSIONS.

ATTACHMENTS

State of New Jersey
DEPARTMENT OF THE TREASURY
DIVISION OF PROPERTY MANAGEMENT & CONSTRUCTION
P O BOX 034
TRENTON NJ 08625-0034

PHILIP D. MURPHY
Governor

TAHESHA L. WAY
Lt. Governor

ELIZABETH MAHER MUOIO
State Treasurer

CHRISTOPHER CHIANESE
Director

DATE: April 12, 2024

TO: AECOM Technical Services, Inc.
Hill International, Inc.
Jacobs Architects/Engineers, Inc.
Johnson, Mirmiran, Thompson, Inc. (JMT)
Michael Baker International, Inc.
Skanska USA Building, Inc.
STV Construction Inc.
Turner & Townsend Heery

FROM: Christopher R. Geary, Assistant Deputy Director
Contracts & Procurement Unit

SUBJECT: Addendum "A" dated April 12, 2024
DPMC Project #J0405-00, Term Contract CMF-004
DCA Resilient Communities
Construction Management Firm

Enclosed is the above referenced addendum. All competing firms shall acknowledge receipt by returning this form to:

Division of Property Management & Construction
Contracts and Procurement Unit
Attention: Jennifer Roeckel
P.O. Box 034
Trenton, NJ 08625-0034
Fax #: (609) 777-1970
Email: jennifer.roeckel@treas.nj.gov

April 12, 2024
Date Received

Michael Baker International, Inc.
Firm Name

300 American Metro Boulevard, Hamilton, NJ 08619
Address

Gilberto R. Bosque, PE
Signature

Vice President
Title

State of New Jersey
DEPARTMENT OF THE TREASURY
DIVISION OF PROPERTY MANAGEMENT & CONSTRUCTION
P O BOX 034
TRENTON NJ 08625-0034

PHILIP D. MURPHY
Governor

TAHESHA L. WAY
Lt. Governor

ELIZABETH MAHER MUOIO
State Treasurer

CHRISTOPHER CHIANESE
Director

DATE: April 30, 2024

TO: AECOM Technical Services, Inc.
Hill International, Inc.
Jacobs Architects/Engineers, Inc.
Johnson, Mirmiran, Thompson, Inc. (JMT)
Michael Baker International, Inc.
Skanska USA Building, Inc.
STV Construction Inc.
Turner & Townsend Heery

FROM: Christopher R. Geary, Assistant Deputy Director
Contracts & Procurement Unit

SUBJECT: Addendum "B" dated April 30, 2024
DPMC Project #J0405-00, Term Contract CMF-004
DCA Resilient Communities
Construction Management Firm
Work Order #01

Enclosed is the above referenced addendum. All competing firms shall acknowledge receipt by returning this form to:

Division of Property Management & Construction
Contracts and Procurement Unit
Attention: Jennifer Roeckel
P.O. Box 034
Trenton, NJ 08625-0034
Fax #: (609) 777-1970
Email: jennifer.roeckel@treas.nj.gov

4/30/2024
Date Received
Michael Baker International, Inc.
Firm Name
300 American Metro Boulevard, Hamilton, NJ 08619
Address
Signature
Vice President
Title

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CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 04/19/2024

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

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

PRODUCER
Aon Risk Services Central, Inc.
Pittsburgh PA Office
EQT Plaza ~ Suite 2700
625 Liberty Avenue
Pittsburgh PA 15222-3110 USA

CONTACT NAME:
PHONE (A/C. No. Ext): (866) 283-7122 **FAX (A/C. No.):** (800) 363-0105
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	Allied World Surplus Lines Insurance Co	24319
INSURER B:	Zurich American Ins Co	16535
INSURER C:		
INSURER D:		
INSURER E:		
INSURER F:		

INSURED
Michael Baker International Inc.
300 American Metro Blvd.
Suite 154
Hamilton NJ 08619 USA

COVERAGES **CERTIFICATE NUMBER:** 570105140680 **REVISION NUMBER:**

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

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	X COMMERCIAL GENERAL LIABILITY			GLO419728102	08/30/2023	08/30/2024	EACH OCCURRENCE	$2,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						MED EXP (Any one person)	$10,000
	POLICY X PRO-JECT X LOC						PERSONAL & ADV INJURY	$2,000,000
	OTHER:						GENERAL AGGREGATE	$4,000,000
							PRODUCTS - COMP/OP AGG	$4,000,000
B	AUTOMOBILE LIABILITY			BAP 4197284 02	08/30/2023	08/30/2024	COMBINED SINGLE LIMIT (Ea accident)	$2,000,000
	X ANY AUTO						BODILY INJURY (Per person)	
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	
	X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	
	UMBRELLA LIAB OCCUR						EACH OCCURRENCE	
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	
	DED RETENTION							
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			WC419728202 AOS	08/30/2023	08/30/2024	X PER STATUTE / OTH-ER	
B	ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER (Mandatory in NH) Y/N: N — N / A			WC419728502 WI	08/30/2023	08/30/2024	E.L. EACH ACCIDENT	$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE-EA EMPLOYEE	$1,000,000
							E.L. DISEASE-POLICY LIMIT	$1,000,000
A	E&O - Professional Liability - Primary			03124806 Claims Made SIR applies per policy terms & conditions	08/30/2023	08/30/2024	Per Claim	$5,000,000
							Aggregate	$5,000,000

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

CERTIFICATE HOLDER

State of New Jersey
Treasury, Division of Property
Management & Construction Contracts and
Procurement Unit
Trenton NJ 08625-0034 USA

CANCELLATION

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

AUTHORIZED REPRESENTATIVE

Aon Risk Services Central, Inc.

Holder Identifier :

Certificate No : 570105140680

ACORD 25 (2016/03) The ACORD name and logo are registered marks of ACO

RESUMES

CONTRACT EXECUTIVE

Gilberto Bosque, PE

Years experience 23

Gil Bosque brings over 20 years of experience in the design/construction of all types of infrastructure projects and is experienced in overseeing complete contract documents for Multi-disciplined projects including the preparation of project specifications. Gil has a solid technical foundation and his experience on Major infrastructure projects has equipped him with a detailed knowledge of State, County, and Local stakeholders' project delivery processes, including efficiently navigating through the utility agreement process, and ROW/ jurisdiction process. Gil has served as Principal In Charge on a variety of projects including final design of small and large-scale projects, roadway and roadside design, ITS design, lighting design, facility/architecture design including site/civil, drainage and stormwater Management, environmental permitting, and survey and ROW.

RELEVANT EXPERIENCE

CMF-003 W15 Atlantic City Resiliency Program (ACRP). *New Jersey Division of Property Management & Construction.* PRINCIPLE IN CHARGE. Principle-in-Charge responsible for the overall Management of seven construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($25M). Projects included new bulkhead structures, dry flood proofing, check valve replacements and elevation of traffic signal equipment. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

CMF003 WO3 - Flood Hazard, Reduction & Resiliency Contract (FHRRR). *New Jersey Division of Property Management & Construction.* PRINCIPLE IN CHARGE. Principle-in-Charge responsible for the overall Management of eight construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($50M). Projects included new outfall structures, pump stations with generators, tide gate upgrades, local road stormwater upgrades and dredge operations. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

Atlantic City Expressway Third Lane Widening Program Management Consultant Contract (2022- Present). *South Jersey Transportation Authority.* PRINCIPLE-IN-CHARGE. Principle-in-Charge responsible for the overall Management in establishing clear and concise processes and procedures for project controls,Maintaining a Master program schedule, overall program budget, overseeing project administration, coordination of project activities,Managing risk and potential claims, stakeholder relations, public involvement, and coordination with the project team to ensure invoicing and procedures follow SJTA's standards throughout the life of the program. The project improvements consist of widening 13Miles of highway, interchange improvements at Route 42, widening and reconstructing four Mainline bridges, regulated activities requiring coordination (NJDEP, NJ Pinelands, NPS, NJSHPO, USFWS, and Soil Conservation Districts), and constructability solutions. The program is split into Multiple design and construction contracts, requiring coordination with a wide variety of professional service consultants, subconsultants, vendors, and contractors to develop and Monitor clear tools for the various consultants to use and ensure project deliverables are consistent between contracts.

Michael Baker INTERNATIONAL

Education
B.S., 2000, Civil Engineering, New Jersey Institute of Technology

Licenses/ Certifications
Professional Engineer - Civil, New Jersey, 2014, 24GE05151200

Professional Engineer, New York, 2007, 084699

Professional Affiliations
American Council of Engineering Companies (ACEC)

Society of Hispanic Professional Engineers (SHPE)

Gilberto Bosque, PE

CONTRACT EXECUTIVE

RELEVANT EXPERIENCE CONTINUED

2013, 2015, 2017 & 2019 Airport Engineering Consultant Atlantic City International Airport (ACY), Atlantic City, New Jersey (2013-Present). *South Jersey Transportation Authority.* PRINCIPLE-IN-CHARGE. Principle-in-Charge for various engineering services related to the safe and efficient operation of the SJTA's facilities. Gil leads Michael Baker's rapid response team that supports SJTA on task order assignments and serves as an extension of staff in responding to and addressing situations as they arise. He also provides oversight of concept designs, funding evaluations and construction Management and inspection services.

Flood Risk Mapping Technical Support, Statewide, New Jersey. *New Jersey Department of Environmental Protection (DEP).* PRINCIPAL IN CHARGE. Assisted with various floodplain Models to analyze areas that are vulnerable to sea level rise in New Jersey using HEC-RASModeling and providing various engineering and Mapping services including floodplain analyses, studies, outreach, and training initiatives for the New Jersey Department of Environmental Protection, Bureau of Dam Safety and Flood Control. Michael Baker's engineering services have also included site assessments, geotechnical investigations, and hydrologic and hydraulic analyses

West 17th Street Flood Mitigation Concept and Construction Design, Ocean City, NJ. *City of Ocean City.* PRINCIPAL IN CHARGE. This project proposes improvements to address frequent flooding in the West 17th Street residential area in Ocean City, Cape May County, New Jersey. The West 17th Street development is located in a low-lying area prone to chronic flooding during various tidal and rain events. Michael Baker performed conceptual and is currently advancing final design. Lori is overseeing the development of the drainage design and plans that will include the construction of a new stormwater pumpstation, roadway improvements, and installation of new stormwater pipes, and Soil Erosion and Sediment Control Plans.

Roadway Engineering Services for Roadway Maintenance & Operations 2014MES965B & 2016MES094B, Statewide, New Jersey (2014-2016 & 2017-2019). *New Jersey Department of Transportation.* PRINCIPAL IN CHARGE. Provided QA/QC for Multiple on-call task orders, including drainage improvement for failed inlets, slope erosion, and localized ponding issues, roadside safety design, curb ramps,MPT, and traffic signage and striping plans. The agreements include More than 50 on-call projects to be completed within a short duration throughout New Jersey. Recent design solutions include culvert replacements/repairs, culvert and pipe cleaning, headwall replacement, incorporation of Best Management Practices (BMPs) such as small basins and swales, outfall replacements, riprap aprons and embankments, detention and infiltration basin clearing/regrading and outlet repair and adding drainage structures/roadway underdrain throughout a corridor to collect and convey water downstream.

County Route 530 Improvement Project, Burlington County, New Jersey (2005-2019). *Delaware Valley Regional Planning Commission/Burlington County/NJDOT Local Aid.* PROJECT MANAGER AND HIGHWAY DESIGN TEAM LEADER. Responsible charge of the $20M dollar full depth roadway reconstruction and widening of 3.5Miles of urban arterial roadway, including realignment of existing signalized intersection with CR 644 and extension of CR 644 north of its current terminus with CR 530. This project included oversight of all geometric and roadway design, design exceptions,MPT, design of 3 new culverts (H&H design), over 120 ROW impacts (15 full acquisitions), utility relocations, and 3 new traffic signals. The project additionally included extensive stormwater Management facilities in accordance with NJDEP and NJ Pinelands Commission regulations and coordination and development of all NEPA documentation including approval of a CED, Section 106 (Cultural Resources), Section 7 (Threatened and Endangered Species), and Section 4(f).Maintaining access to businesses and pedestrian Movements through the local road network is a high priority for this project.

Mercer County Task Order Engineering Contract Task Order #1 – Traffic Signal Upgrade at Hamilton Avenue and Kuser Road-Ward Avenue,Mercer County, New Jersey (2017-2019). *County of Mercer.* PROJECT MANAGER. Responsible for client coordination, leading project Meetings, and public outreach. Responsible for overseeing the preliminary and final design of roadway, signal, and safety improvements at several intersections along the project corridor. Michael Baker is leading the design efforts for traffic signal upgrades and accident Mitigation, overseeing the preliminary and final design of roadway, signal, and safety improvements at several intersections along the project corridor. This includes the design of two new traffic signals, ADA compliant curb ramps, lane adjustments, utility verification, geometric changes to side street approaches, new signing, and improved striping.

SENIOR PROJECT MANAGER

Peter Senus, PMP

Years experience 33

Peter Senus has over 33 years of experience in program and project Management that includes construction Management, federal grant Management (HUD CDBG-DR), heavy highway transportation design and site development. He has extensive experience with: FAA (Atlantic City Airport/SJTA) construction projects, grant program Management with NJ DCA/NJDEP for resilient infrastructure construction projects, heavy highway construction Management for the South Jersey Transportation Authority and New Jersey Turnpike Authority, and design engineering for the New Jersey Department of Transportation, the Corps of Engineers and Federal Aviation Authority (FAA). His project/construction Management along with inspection experience includes a wide variety of roadway, airfield,Major outfall structures, pump stations and vertical construction projects. His infrastructure engineering experience includes preliminary and final design contract document preparation for a large variety of site, facility and roadway projects including: plans and specification preparation, right-of-way engineering, utility infrastructure coordination, public outreach, cost estimation, project scheduling, sub consultant Management and budget analysis.

RELEVANT EXPERIENCE

CMF-003 W15 Atlantic City Resiliency Program (ACRP). *New Jersey Division of Property Management & Construction.* CONSTRUCTION SENIOR PROGRAM MANAGER. Responsible for the overall Management of seven construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($25M). Projects included new bulkhead structures, dry floodproofing, check valve replacements and elevation of traffic signal equipment. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

CMF003 WO3 - Flood Hazard, Reduction & Resiliency Contract (FHRRR). *New Jersey Division of Property Management & Construction.* CONSTRUCTION SENIOR PROGRAM MANAGER. Responsible for the overall Management of eight construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($50M). Projects included new outfall structures, pump stations with generators, tide gate upgrades, local road stormwater upgrades and dredge operations. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

Atlantic City Airport De-Icing Facility. *South Jersey Transportation Authority.* PROJECT MANAGER/CONSTRUCTION MANAGER. Responsible for the overall construction of a new deicing facility at the Atlantic City Airport ($20M). This project includes a de-icing facility, bituminous and concrete pavement, water quality detention basin with subsurface drainage features, airport lighting and utility relocations. Responsibilities included Management of the overall field construction staff, coordination with airport operations and contractor(s), subcontractor agreements, schedule review, approval of project contract finances and client coordination.

Atlantic City Expressway Third Lane Widening Program Management Consultant Contract (2022- Present). *South Jersey Transportation Authority.* CONSTRUCTIONMANAGER. Responsible for Maintaining a Master construction program schedule, overall construction program budget, and coordination with the project team to ensure invoicing and procedures follow SJTA's standards throughout the life of the program. The program is split into Multiple design and construction

Michael Baker INTERNATIONAL

Education
B.S.C.E., 1991, Civil Engineering, Norwich University

Licenses/ Certifications
Project Management Professional (PMP), 2013

NICET IV Transportation-Highway Construction, New Jersey, 2017, 1

NJ Society of Asphalt Technologists (NJSAT), New Jersey, 2014, 1

Professional Affiliations
American Society of Highway Engineers (ASHE)

Society of American Military Engineers (SAME)

Peter Senus, PMP

SENIOR PROJECT MANAGER

RELEVANT EXPERIENCE CONTINUED

contracts, requiring coordination with a wide variety of professional service consultants, subconsultants, vendors, and contractors. Responsibilities include constructability reviews, schedule Monitoring, bi-weekly progress Meetings, change order reviews, contractor pay application reviews and general reporting to the Client.

Atlantic City Int'l Airport – Phases 1-5 Airport/Terminal Road & Amelia Boulevard Widening Reconstruction. *South Jersey Transportation Authority.* PROJECT MANAGER/ CONSTRUCTION MANAGER. Project Manager/Construction Manager for this roadway improvement project that included full depth pavement replacement and widening, underground utility relocation, upgraded drainage system and traffic signal replacement, street lighting, landscaping. Responsible for overall construction Management and inspection, reviewing schedule updates, reviewing extra work items, preparing change orders and independent cost estimates (ICE), reviewing submittals, responding to Request for Information (RFIs), as-built plan preparation, final quantities and approving Contractor Monthly pay applications with certified payrolls.

Ft.McCoy Central Issue Facility, Sparta, Wisconsin. *U.S. Army Corps of Engineers, Louisville District.* SITE MANAGER. Responsible for final design documents and construction support services of this 65,653 gsf facility. Engineering tasks included coordination of local and state agencies, demolition plan development, geometric site layout, specification development, utility infrastructure design, stormwater pollution prevention plan, site grading, landscaping and overall plan production. The site layout was developed in accordance with current Department of Defense Anti-Terrorism/Force business Protection Measures for Buildings (ATFP). Other responsibilities included Managing of geotechnical and surveying subconsultant contracts, civil related financial budgets and construction support services such as resolving RFI's.

Combined Regional Maintenance Facility, Fort Dix, New Jersey. *U.S. Army Corps of Engineers, Louisville District.* SITE MANAGER. Responsible for developing the final contract documents and construction support services. This 50,400-square-foot facility was a combined vehicle Maintenance shop and training equipment site that provided concrete storage platforms capable of handling tracked combat vehicles, inspection,Maintenance and repair of vehicles and equipment associated with the National Guard. Primary duties included preparing final contract documents and providing field guidance to the Resident Engineer for constructability issues as well as quality control construction inspection reviews.

Army Reserve Equipment Concentration Site w/ Vehicle Maintenance Facility and Warehouse Facility, Lakehurst, New Jersey. *U.S. Army Corps of Engineers, Louisville District.* SITE MANAGER. Responsible for the development of a Design/ Build RFP document for the construction of an Army Reserve Equipment Concentration Site (ECS). Primary facilities included construction of a Tactical Equipment Maintenance Facility (TEMF), warehouse building, organizational parking, anti-terrorism Measures and building information systems. Engineering work included coordination of local and state agencies, geometric site layout, utility infrastructure coordination (mechanical, electrical, plumbing, and fire protection), stormwater pollution prevention plan development, site grading and earthwork analyses and coordination of landscape plan development. The site layout was developed in accordance with current Department of Defense Anti-Terrorism/Force Protection Measures for Buildings (ATFP). Participated in Multiple project design charrette Meetings. Other duties included providing field guidance to the Resident Engineer for constructability issues as well as quality control construction inspection reviews.

Joint Base McGuire-Dix-Lakehurst Site Improvements for Building 2901 87th Airbase Wing Headquarters. *McGuire AFB, New Jersey.* SITE MANAGER. Responsible final design plans and specifications for Building 2901 located at Joint Base McGuire-Dix-Lakehurst, New Jersey, in accordance with anti terrorism force protection (ATFP) standards. The scope of the project was limited to exterior improvements to parking lots, sidewalks, landscape plantings and plazas.

Atlantic City Int'l Airport – AOA Gate 11 & Security Fence. *South Jersey Transportation Authority.* CONSTRUCTION MANAGER. ConstructionManager for this security gate and fence improvement project that included removing existing degraded fencing and replacing with upgraded post and fence with barbed wire. Responsible for overall construction Management and inspection, reviewing schedule updates, reviewing extra work items, preparing change orders and independent cost estimates (ICE), reviewing submittals, responding to Request for Information (RFIs), as-built plan preparation, final quantities and approving Contractor Monthly pay applications with certified payrolls.

PROJECT MANAGER

Sean Kahn, PE

Years experience 11

Sean Kahn, P.E. has over 11 years of experience in program and project Management that includes construction Management, federal grant Management (HUD CDBG-DR), heavy highway transportation design, NEPA documentation and associated permitting. He has extensive experience with: FAA (Atlantic City Airport/SJTA) design projects, construction oversite and grant program Management with NJ DCA/NJDEP for a wide variety of resiliency infrastructure construction projects, heavy highway design Management for the New Jersey Department of Transportation and New Jersey Turnpike Authority. His infrastructure engineering experience includes preliminary and final design contract document preparation for a large variety of site, facility and roadway projects including: plans and specification preparation, right-of-way engineering, utility infrastructure coordination, permitting, public outreach, cost estimation, project scheduling, sub consultant Management and budget analysis.

RELEVANT EXPERIENCE

CMF-003 W15 Atlantic City Resiliency Program (ACRP). *New Jersey Division of Property Management & Construction.* CONSTRUCTION DEPUTY PROGRAM MANAGER. Responsible for the overall Management of seven construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($25M). Projects included new bulkhead structures, dry flood proofing, check valve replacements and elevation of traffic signal equipment. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews. A critical task for this program is record keeping,Mr. Kahn has Managed the state run SIROMS BPM SharePoint to keep all necessary documents organized, which has been proven successful when audited by HUD. Responsibilities also include training the subrecipient and numerous consultants on the standards and procedures necessary to effectively utilize the SIROMS SharePoint site.

CMF003 WO3 - Flood Hazard, Reduction & Resiliency Contract. *New Jersey Division of Property Management & Construction.* CONSTRUCTION DEPUTY PROGRAM MANAGER. Responsible for the overall Management of eight construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($50M). Projects included new outfall structures, pump stations with generators, tide gate upgrades, local road stormwater upgrades and dredge operations. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews. A critical task for this program is record keeping,Mr. Kahn has Managed the state run SIROMS BPM SharePoint to keep all necessary documents organized, which has been proven successful when audited by DCA. Responsibilities also include training the subrecipients and numerous consultants on the standards and procedures necessary to effectively utilize the SIROMS SharePoint site.

Michael Baker INTERNATIONAL

Education
B.S.C.E., Civil Engineering, Rutgers University

Licenses/ Certifications
Professional Engineer (PE). New Jersey

Sean Kahn, PE,

PROJECT MANAGER

RELEVANT EXPERIENCE CONTINUED

Atlantic City Expressway Third Lane Widening Program Management Consultant Contract (2022- Present). *South Jersey Transportation Authority.* PROJECT CONTROLS MANAGER. Responsible for establishing clear and concise processes and procedures for project controls,Maintaining a Master program schedule, overall program budget, overseeing project administration, coordination of project activities,Managing risk and potential claims, stakeholder relations, public involvement, and coordination with the project team to ensure invoicing and procedures follow SJTA's standards throughout the life of the program. The project improvements consist of widening 13Miles of highway, interchange improvements at Route 42, widening and reconstructing four Mainline bridges, regulated activities requiring coordination (NJDEP, NJ Pinelands, NPS, NJSHPO, USFWS, and Soil Conservation Districts), and constructability solutions. The program is split into Multiple design and construction contracts, requiring coordination with a wide variety of professional service consultants, subconsultants, vendors, and contractors to develop and Monitor clear tools for the various consultants to use and ensure project deliverables are consistent between contracts.

Airport Engineering Consultant Atlantic City International Airport (ACY) Contract (2017- Present). *South Jersey Transportation Authority.* DEPUTY PROJECT MANAGER. Responsible for coordinating and Managing task orders on this on-call agreement, including project design elements, coordinating with subconsultants, ensuring compliance with the National Environmental Policy Act (NEPA),Managing the schedules and budgets for each task order, and submitting project deliverables. Through this on-call assignment. Mr. Kahn has demonstrated his ability to tackle projects throughout a range of stages: planning, design, and construction administration, and a range of assignments: including, new taxiway design, escalator replacement design, various concrete apron and emergency repairs. Task orders on previous agreements include Gates 4 and 8 Concrete Repair, Priority Concrete Repairs, Escalator Replacement Survey Report and Design, Frank S. Farley Service Plaza Natural Gas Conversion Phase I and Phase II, Concrete Apron Rehabilitation Alternatives Analysis, and planning investigations for a variety of temporary and permanent cargo facilities.

New Jersey Bridge Deck Reconstruction and Seismic Retrofit Contract (2017-2020). *Greenman-Pedersen Inc.* PROJECT ENGINEER. Responsible for Managing Michael Baker's post-design efforts during construction. Responsibilities include: finalizing and reviewing responses to contractor submittals, RFI's, Change of Plan documents, and coordinating with the construction Management team. Michael Baker provided roadway and structural engineering services for the deck reconstruction of five of Newark Bay-Hudson County Extension's EB roadways. Along with deck reconstruction, the project restored toll plaza pavement at Interchange 14C,Made Miscellaneous structural repairs, and conducted seismic retrofitting between Interchange 14C and the Holland Tunnel Approach. As a subconsultant,Michael Baker was responsible for the roadway improvements, structural repairs, and Maintenance and protection of traffic design.

OPS No. A3715 & OPS. No. A3778 On-Call Stormwater Engineering Services (2019-2020). *New Jersey Turnpike Authority.* TASK LEAD. Responsible for leading the Maintenance and protection of traffic for three drainage repair and rehabilitation contracts on the Garden State Parkway and New Jersey Turnpike. This contract includes a wide variety of task orders for the Maintenance department for design of stormwater drainage and collection systems, asset Management, evaluation of existing drainage infrastructure and supporting CM/CI services. These contracts were identified for drainage repairs based on recent occurrence of immediate response Maintenance repairs, such as flooding and sinkholes and the high density of corrugated Metal pipes within the project limits. Mr. Kahn's primary responsibilities include overseeing MPT designs, development of contract plans, specifications, estimates, schedules and performing constructability reviews to Mitigate potential conflicts with existing infrastructure and other construction projects.

Scudder Falls Bridge Replacement, Final Design Services (2014 – 2020). *Delaware River Joint Toll Bridge Commission.* DESIGNER. Responsible for MPT design for the New Jersey side of the project. Responsibilities included in-depth design of temporary ramps and crossovers which required a full horizontal and vertical geometric design due to the complexity of the project. Additional responsibilities include assisting with Michael Baker's post-design efforts during construction, including: finalizing and reviewing responses to contractor submittals, RFI's, Change of Plan documents, and coordinating with the construction Management team. Michael Baker provided final design and post-design services for the Scudder Falls Bridge Replacement project.

QA/QC MANAGER

Rebecca Lyne, PWS, CE

Years experience 20

Ms. Lyne serves as the Director of Quality Management for the Michael Baker New Jersey Operations. Additionally, Becky brings almost two decades of experience in environmental planning and documentation, including numerous land use, transportation, resiliency, and environmental restoration projects. Becky has successfully delivered numerous complex projects by applying Michael Baker's company-wide Quality Management System and implementing the NJ Operations' policies developed specifically to address our local clients' needs. Michael Baker has established a standard structured project delivery process for all projects.

RELEVANT EXPERIENCE

Floodplain Study Mapping Services Term Contract, Statewide, New Jersey. *New Jersey Department of Environmental Protection.* PROJECT MANAGER. Becky is the Project Manager for two task orders under this agreement, both focusing on the NJDEP's new Code Coordinated Flood Damage Prevention Ordinance. For the Statewide Floodplain Management Training Task,Michael Baker assisted the NJDEP on creating a NJ Floodplain Administrator's Guide. The guide describes the floodplain administer roles and responsibilities, federal, State, and local laws, NJ Construction Codes, ordinances and permits, and provides references. Becky served as Quality Control Manager for this Guide. Michael Baker also developed a Local Design Flood Elevation (LDFE) Worksheet and sample permit application. As part of this task, Becky collaborated with NJDEP staff on training and presented three separate training Modules to introduce the ordinance and permit requirements, provide detailed background for the permit, and provide step by step examples for calculating the LDFE. For the FY 2022 Flood Ordinance Task,Michael Baker is providing administrative support for NJDEP's Flood Damage Prevention Ordinance Initiative. The new ordinance incorporates requirements from NFIP rules as implemented by Local Floodplain Administrators, the NJ Flood Hazard Area Control Act implemented at a state level, and the uniform Construction Code (UCC) implement by the local Construction Official. Currently, only a handful of Municipalities have adopted new ordinances. Michael Baker will assist NJDEP to achieve approximately 300 compliant ordinances by the end of 2022. Tasks include review of submitted ordinances, coordination with Municipalities, and tracking adoption Milestones, and hosting a SharePoint platform to facilitate review by NJDEP and FEMA.

CMF-003 W15 Atlantic City Resiliency Program (ACRP). *New Jersey Division of Property Management & Construction.* QUALITY CONTROL (QA/QC)MANAGER. Responsible implementation of the project specific PMP for this project and conducting quality audits throughout the duration of this program. This program consisted of seven construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($25M). Projects included new bulkhead structures, dry floodproofing, check valve replacements and elevation of traffic signal equipment. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

CMF003 WO3 - Flood Hazard, Reduction & Resiliency Contract (FHRRR). *New Jersey Division of Property Management & Construction.* QUALITY CONTROL (QA/QC) MANAGER. Responsible implementation of the project specific PMP for this project and conducting quality audits throughout the duration of this program. This program consisted of eight construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($50M). Projects included new outfall structures, pump stations with generators, tide gate upgrades, local road stormwater upgrades and dredge operations. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews,

Michael Baker INTERNATIONAL

Education
M.S., 2010, Environmental Studies, University of Pennsylvania

B.S., 2003, Natural Resource Management, Rutgers University

Licenses/Certifications
Certified Ecologist, 2011

Professional Wetland Scientist, 2010, 2071

Professional Affiliations
American Water Resources Association (AWRA)

Ecological Society of America (ESA)

Society of Wetland Scientists (SWS)

Rebecca Lyne, PWS, CE

QA/QC MANAGER

RELEVANT EXPERIENCE CONTINUED

scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

Preliminary Engineering of Bay Avenue Resiliency Project, City of Somers Point, Atlantic County. *City of Somers Point.* PROJECT MANAGER. This project proposed the construction of a berm through beneficial reuse of dredged Material along portions of Bay Avenue in the vicinity ofMaryland Avenue using dredged Material from the City-owned Higbee Pier to address nuisance flooding at low points and to eliminate invasive species. Native shrub plantings were proposed on the berm as well as a 10-foot Multi-use path to provide the public with a scenic walkway. The project involved Conceptual Design, local official and public engagement, agency coordination, development of construction plans, drainage analysis, construction staging, and an engineering cost estimate.

Deicing Pad Design Services, Atlantic City International Airport (ACY). *SJTA.* ENVIRONMENTAL LEAD. Responsible for obtaining required environmental authorizations and approvals. These include FAA NEPA Environmental Reevaluation, demonstrated compliance with the NJ Pinelands Comprehensive Management Plan, Cape-Atlantic Soil Conservation District Certification, NJPDES Significant Indirect User, NJPDES General Stormwater Permit for Construction, and Air Quality Pre-Construction Permit among others. Significant coordination with the NJ Pinelands Commission and NJDEP Division of Fish and Wildlife was required to account for impacts to protected habitat for grassland avian species.

Route 52 Causeway Replacement Project, Ocean City and Somers Point, NJ. *New Jersey Department of Transportation.* ENVIRONMENTAL TEAM LEADER. Environmental Lead overseeing compliance and in responsible charge of preparing applications for NJDEP Green Acres Diversion and numerous Modifications for the previously issued NJDEP Coastal Permits as well the USACE Section 404 Individual Permit. Responsibilities included documentation for required Environmental Re-evaluations, development of soil erosion and sediment control Measures per NJDOT requirements, stormwater Management, incorporating permit conditions into contract documents to ensure compliance, facilitating T&E species surveys, leading shellfish Monitoring, and providing assistance in the wetland compensatory Mitigation effort through construction Monitoring. Mitigation activities included wetland construction and habitat enhancement for the 28acMalibu Beach Wildlife Management Site, construction of over 5,000 LF of bioengineered shoreline stabilization, and construction/ restoration of tidal Marsh wetlands. The bioengineering shoreline stabilization techniques for this project were highlighted in the FHWA Nature-Based Solutions for Coastal Highway Resilience White Paper. The project also included the beneficial reuse of dredged Material from relocated navigation channels to the eroded Malibu Beach. Michael Baker provided comprehensive engineering services for the replacement of the Route 52 Causeway and the reconstruction of approximately 2.8Miles of Route 52 from Route 9 in Somers Point to Bay Avenue in Ocean City crossing Great Egg Harbor Bay.

Rio Grande Avenue Drainage and Roadway Improvements, Wildwood, NJ. *Cape May County.* ENVIRONMENTAL LEAD. Responsible for completion of all environmental studies (environmental screening, wetland delineation, hazardous Materials, cultural resources, etc.) Required for the Concept Development, Preliminary Engineering, and Final Design supporting roadway improvements to Rio Grande Avenue in Wildwood, Cape May County. The project included roadway and drainage improvements to Mitigate a high accident rate, traffic congestion, and frequent roadway flooding including the reconstruction of an existing headwall. Required permits and approvals included NJSHPO Section 106 consultation, NEPA Category Exclusion Document, USACE Nationwide Permit 23, NJDEP Freshwater Wetlands Permit, Waterfront Development Permit, CAFRA Permit, and SESC certification from the Cape-Atlantic Soil Conservation District. All work followed the NJDOT Local Aid Process.

Merion Park Drainage and Roadway Improvements. *City of Ocean City.* ENVIRONMENTAL TASK LEAD. Responsible for environmental investigations and wetland delineation, development of USACE Jurisdictional Determination, USACE Section 404 Permit, NJDEP Coastal Wetlands, Coastal Area Facilities Review Act and Waterfront Development Permits, NJDEP Freshwater Wetlands Protection Act Permit, and developing and executing wetland delineation. Led coordination efforts with NJDEP Division of Fish and Wildlife and USFWS pertaining to threatened and endangered species and the NJ State Historic Preservation Office pertaining to the presence/absence of cultural resources. Michael Baker was contracted to analyze the existing drainage system for the Merion Park area and develop conceptual and final drainage design and roadway improvements. The drainage improvements will rehabilitate the eight drainage systems identified in the neighborhood, including replacement of tideflex valves and the existing bulkhead to reduce flooding as well as design for three pump stations.

FE A SIBILI T Y/ NEPA LE AD

Jessica Jahre, AICP, PP

Years experience 13

Ms. Jahre is a certified professional planner and a certified floodplain Manager with a background in climate resilience and adaptation, flood risk Management, and water resources planning. She has a strong background in program and project Management, communication, and strategic planning. Prior to joining Michael Baker,Ms. Jahre worked with NJ Department of Environmental Protection to expand its Climate Resilience Program and create the state's first climate resilience strategy. She has also previously worked in the private sector on hazard Mitigation plans, resilience plans, NEPA compliance, and flood risk reduction planning.

RELEVANT EXPERIENCE

New Jersey State Hazard Mitigation Plan Update. *NJ Office of Emergency Management.* PROJECT MANAGER. Ms. Jahre is leading the 2024 update to the NJ State Hazard Mitigation Plan. This project will include coordination with over 25 state agencies and plan participants. Michael Baker was contracted for the 2024 update after successfully updating the plan in 2019. This planning process will be the first state update that uses climate projections to analyze future risk to critical and state-owned assets. The enhanced risk assessment being performed will look at impacts of natural hazards on the built environment, socially vulnerable populations and the economy, and natural lands and ecosystems. This plan update also includes significant outreach to non-state organizations and participants to enhance our understanding of Mitigation capabilities across the state.

Climate Change Interagency Council Advisory Group Facilitation. *NJ Department of Environmental Protection.* PROJECT MANAGER. The Interagency Council on Climate Resilience is required to update progress on the NJ Climate Resilience Strategy every two years. The Council seeks to satisfy this requirement by creating Resilience Action Plans on specific impacts or concerns related to Climate Change. In 2022,Michael Baker was retained by NJ Department of Environmental Protection to assist in the development of the first Resilience Action Plan. As the Project Manager,Ms. Jahre is working with NJDEP to facilitate external advisory groups for these Action Plans. The first advisory group comprised of seven national experts on extreme heat and climate adaptation will convene Multiple times in 2023 to provide key feedback to state agencies on addressing extreme heat. In addition,Michael Baker is supporting the public outreach and feedback for the development of the Resilient Action Plan on Extreme Heat.

Hoboken Building Design Guidelines Addendum. *City of Hoboken.* PROJECT MANAGER. Ms. Jahre worked with the City of Hoboken to provide non-regulatory guidance on strategies for homeowners to address increased flooding associated with intensive precipitation events. This document is an addendum to the regulatory design guidelines adopted by the City in 2015. This project included a public survey and virtual public Meeting to gather feedback from residents. Ms. Jahre also led the development of the original building design guidelines at her previous firm.

Climate Resilience Independent Review. *Port Authority of New York and New Jersey (PANYNJ).* DEPUTY PROJECT MANAGER. Ms. Jahre conducted research and analysis for an independent assessment of the Authority's current state of climate resilience in the agency by evaluating the Authority's approach including projects, programs, policies, guidelines, and governance. Ms. Jahre worked to craft a resilience framework based on ongoing efforts within PANYNJ and best practices across the industry. This included research on the current Industry Practice, including the programmatic approach to resilience taken by peer agencies nationally and internationally using existing literature and other secondary data as it relates to aspects pertinent to the review of the Authority's resilience. Ms. Jahre worked with team Members to review the Authority's programs focused on and relevant to enhancing agency resilience, including emergency response/operations; capital planning; project design and delivery; studies, plans, and assessments; grants and funding; Enterprise Risk Management; risk disclosures, insurance, and financing; asset Management; workforce engagement and incentives;Media/ communications strategy; and government and community relations. Based on these findings. Ms. Jahre developed key recommendations

Michael Baker INTERNATIONAL

Education
M.R.C.P., 2010, City and Regional Planning, Rutgers University

Licenses/ Certifications
American Institute of Certified Planners, 2015

Certified Floodplain Manager, 2014

Professional Affiliations
American Institute of Certified Planners (AICP)

Association of State Floodplain Managers (ASFPM)

Jessica Jahre, AICP, PP

FEASIBILITY/NEPA LEAD

RELEVANT EXPERIENCE CONTINUED

for enhancement Measures to PANYNJ's current resilience program and identified solutions.

Non-Michael Baker Project Experience

NJ Climate Change Resilience Strategy. *New Jersey Department of Environmental Protection (NJDEP).* DEPUTY PROJECT MANAGER AND CO-AUTHOR. Co-authored New Jersey's inaugural Climate Change Adaptation Plan in response to Executive Order 89. This strategy provides a suite of forward-looking policy options to promote the long-term resilience of New Jersey to climate change. As a framework for policy, regulatory, and operational changes, the Resilience Strategy presents actions that New Jersey's Executive Branch can take to support the resilience of the state's communities, economy, and infrastructure. The Resilience Strategy includes 125 recommended actions across six priority areas. Under the guidance of the Chief Resilience Officer, she collaborated with staff across the Inter-agency Council on Climate Resilience to develop the priority areas and recommendations. Additionally, facilitated interagency workshops, stakeholder Meetings, and public Meetings to gather input on plan. Oversaw the technical contractor,Managed timelines and budget to deliver the plan within budget and with Minimal delays due to the public health crisis.

Resilient NJ Program. *New Jersey Department of Environmental Protection (NJDEP).* PLANNING PROGRAMS MANAGER. Oversaw the development of the Resilient NJ program. Resilient NJ is an assistance program to support local and regional climate resilience planning. Using the best available science on precipitation, temperature, and sea-level rise, Resilient NJ provides grants, tools, and technical assistance to communities to plan for how the changing climate May affect residents, businesses, and the natural and built environments. Led the launch of this Multi-faceted program over three years. During her tenure the program launched the first four regional resilience planning projects in New Jersey to address sea-level rise and precipitation-driven flood risk. Additionally, the program released the state's first guidance tool for planning for climate change at the local level. This guidance is a resource for individuals who represent, work, or volunteer for a Municipal or county government in New Jersey to understand how their community can proactively plan for the changing climate and build resilience into their local governance. Created this guidance for Municipalities to their obligations for the Municipal Land Use Law requirements, state Hazard Mitigation Plan requirements, and Plan Endorsement requirements. The resources also help communities to integrate equity considerations into climate resilience planning. Managed budgets, workflows, program staff, and technical oversight for all contracts and projects related to the Resilient NJ program. Also developed new grant proposal concepts and application Materials for federal grant opportunities, including a new funding partnership with the Department of Defense.

A Seat at the Table New Jersey Department of Environmental Protection. *(NJDEP).* PROJECT MANAGER. While all people living in the United States are affected by climate change, some communities and some populations are more vulnerable to changing climate conditions than others. While at NJDEP, oversaw several initiatives to enhance equity considerations in the Department's resilience planning efforts. These initiatives included a NOAA-funded project, executed by researchers from Rutgers University. This project identified opportunities to address needs of socially vulnerable populations as part of coastal community climate resilience planning, and policy options for efforts to address needs of socially vulnerable populations in community resilience efforts. Additionally, this project resulted in an online training Module for planning practitioners to incorporate best practices into resilience planning efforts, which was incorporated into the Resilient NJ toolkit.

Moodna Watershed Flood Mitigation Assessment. *Orange County, New York.* SENIOR PLANNER. Using funds from a 2016 grant program sponsored by the New England Interstate Waters Pollution Control Commission (NEIWPCC) and the New York State Department of Environmental Conservation-Hudson River Estuary Program (HREP), this project executed a flood assessment and flood Mitigation analysis using climate change projections for the communities within the Lower Moodna watershed (Cornwall, New Windsor, Cornwall-on-Hudson, and Woodbury). The project team assessed the facilities, infrastructure, and urban development that are at risk from flooding along the Moodna Creek and its tributaries within the study area; and second, developing a series of hydrologic and hydraulic Models to assess the extent of potential flooding from the 10 percent, 1 percent, and 0.2 percent, often referred to as the 10-year, 100-year, and 500-year, respectively, storm recurrence intervals within the study area. The Modeling included flows for these storm events under existing conditions and also hypothetical scenarios with predicted increases in precipitation and population growth. Conducted land use analysis, solution identification and impact analysis, as well as drafted the final project report.

DESIGN LEAD

Joseph Danyo, PE, PP

Years experience 44

Joe Danyo is the Chief Engineer and brings 44 years of experience in infrastructure design and construction Management, involving bridge design/rehabilitation, roadway widening/restoration, highway design, complex staging, environmental permitting, ITS, buildings/facilities, toll plazas, and construction supervision. He has successfully supervised the design of some of New Jersey's Most significant infrastructure improvement projects and has extensive knowledge with the State's administrative procedures, technical requirements, and operations, as well as overall experience in Managing Multi-discipline projects. With Joe, there is no learning curve – Joe knows what the clients expects from design consultants and has successfully delivered on past projects. in the transportation and building construction industry, including several projects in coastal environments and flood Mitigation. This experience provides him the ability to address issues early on so they do not become field issues or claims in the field.

RELEVANT EXPERIENCE

Facilities Improvement Program, Final Design Services, Turnpike North, New Jersey. *New Jersey Turnpike Authority.* PROJECT MANAGER. Responsible for final design for the replacement/rehabilitation of numerous Maintenance yards and facilities along the Turnpike. The project includes the replacement/rehab of Maintenance buildings, storage facilities, salt facilities, and other structures in the Maintenance yards specifically along the Turnpike North. This project is part of the overall Facilities Improvement Program to bring the Authority's Maintenance facilities on both the Turnpike and Parkway into a good state of repair. Michael Baker's contract for the Turnpike North includes six (6) new buildings and the rehabilitation of five (5) buildings, including administrative offices,Multi-use buildings, salt storage buildings, and Materials storage buildings. The scope of work includes architectural design;Mechanical, electrical and plumbing design; site/civil design; environmental permitting and hazmat investigations; stormwater Management; site lighting; geotechnical engineering and retaining walls; utilities engineering; and construction staging. Site-work is also required at the sites, in the form of rehabilitation and/or replacement of driveways, parking lots, and outside storage areas.

Combined Regional Maintenance Facility, Fort Dix, New Jersey. *U.S. Army Corps of Engineers.* CIVIL/HIGHWAY QA/QC REVIEWER. Michael Baker provided final design services for a $15M Combined Regional Maintenance Facility (CMF) at Fort Dix, NJ. The 50,400-square-foot facility is a combined vehicle Maintenance shop, and Mobilization and training equipment site that provides for the storage, inspection,Maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard, Army, Marine, and Navy Reserve units. Scope included site design including survey, drainage/SWM, utility extensions to serve the new facility, parking lots and yard areas, local roadway improvements, pavement design, security fencing, grading, and environmental permits.

Scudder Falls Bridge Replacement, Intelligent Transportation System Building. *Delaware River Joint Toll Bridge Commission.* DEPUTY PROJECT MANAGER/PROJECT MANAGER. Deputy Project Manager/Project Manager for final design and post-design services for the $390M replacement of the existing four-lane Scudder Falls Bridge over the Delaware River with a twin-span 1,800 ft. structure carrying six lanes of through traffic (three in each direction), and associated auxiliary lanes for entry/exit travel, and a pedestrian and bike shared use path connecting the two historic canals toe paths on each side of the river. The scope of work design services for the $2M Bridge Monitor and All Electronic Tolling (AET) equipment building in conjunction with the Scudders Falls Bridge design. The building will support the proposed AET system equipment, bridge security/monitoring, and Maintenance equipment and storage, with consideration for possible future equipment needs. It provides access to the AET gantry structure via in interior stair and roof access to a catwalk for vendor system access.

New Jersey Turnpike Secaucus Interchange, Sections No. 1 & 2, Contract Nos. SIP-101, 102, & 202. *New Jersey Turnpike Authority.* PROJECT MANAGER. Project Manager for above contracts on the $180M Interchange 15X.

Michael Baker INTERNATIONAL

Education
B.S., Civil Engineering, Rutgers University

Licenses/ Certifications
Professional Engineer, New Jersey

Professional Planner, New Jersey

Value Engineering Course, New Jersey Department of Transportation

48-Hour Hazardous Waste Operations and Emergency Response Training

ASHE

ASCE

Joseph Danyo, PE, PP

DESIGN LEAD

RELEVANT EXPERIENCE CONTINUED

Responsibilities associated with the building construction for the final design of the $15M SIP-202 Contract included site layout, grading, drainage/stormwater Management including Mechanical water treatment devices, site lighting designs, right-of-way plans, utility services, landscaping, constructability reviews, and a new 4,000-square-foot utility building with an elevator, and a 9-lane toll plaza and access tunnel, which included DCA reviews. Utility services involved routing the services approximately 1/2Mile to connect to existing facilities and included a sanitary force main with a wet well and pump station.

Replacement of District 6Maintenance Facility and Three State Police Stations, New Jersey. *New Jersey Turnpike Authority.* QA/QC MANAGER. Michael Baker provided supervision of construction services for replacement of the Maintenance building at Turnpike District 6 Yard and construction of Troop "D" Newark,Moorestown, and Galloway State Police Stations. The State Police Stations were brought up to contemporary law enforcement agency standards to Meet today's requirements and future needs, including the addition of fitness room and locker room facilities for female troopers. The new District 6Maintenance Yard provides updated equipment, expanded capabilities, and contemporary amenities for Turnpike Maintenance personnel to replace the overcrowded and obsolete facility. Michael Baker provided inspection staff, daily coordination, and negotiations with contractors; electronic document control; change order review and analysis; safety and incident Management;Meetings facilitation; and claims avoidance/resolution.

Rehabilitation of the Turnpike's Toll Plaza Utility Buildings and Tunnels. *New Jersey Turnpike Authority.* QA/QC MANAGER. QA/QC Manager for the Construction Management and Inspection services for the rehabilitation of 25 Toll Plaza Utility Buildings spread across 3 contracts; South, Central and North on the NJ Turnpike for approximately $16M in construction. These contracts address the toll plaza immediate needs for functionality such as stand-by power (utility building & ETC huts), public health (water, sewer, etc.), improved working conditions for the employees (HVAC-AC/heat/positive air), electrical/lighting, waterproofing, avoidance of Mold, asbestos abatement, security upgrades (doors windows, lighting, etc.), and structural repairs (slab replacements/repairs, tunnel repairs, roofs, etc.).

Route 52 Causeway Replacement. *New Jersey Department of Transportation.* QA/QC MANAGER. Responsible for oversight of feasibility studies, preliminary design, final design and construction support services for this $400MMulti-faceted, 3-mile transportation improvement project involving realignment and widening of the Route 52 Causeway and elimination of the Somers Point Circle. The project included a 3,500-sq. ft. new Visitor Center with associated utilities, parking lots, waterfront access ramps, and fishing piers with direct pedestrian access.

Roebling Station Park-and-Ride Facility, Florence Township, Burlington County, New Jersey. *New Jersey Transit (NJT)/ Agate Construction Company, Inc.* PROJECT MANAGER. Responsible for a design/build project involving a 220-space parking facility to be constructed on the site of the old Roebling Steel Plant which was a U.S. EPA Superfund site. The parking lot served the Roebling Station on NJT's Camden to Trenton light rail line. Design, included drainage/SWM basin that needed to be a closed system (separated from the contaminated soils), architectural block retaining wall, lighting, signing/striping, walkways, survey, cultural resources/SHPO coordination, environmental services and building rehabilitation of the weight station structure.

Northeast Inlet Redevelopment Area Infrastructure System Project, Atlantic County, NJ (1989-1993). *Client: Atlantic City Engineering Department.* PROJECT ENGINEER. Responsible for performing final design and construction Management/ inspection services for the redevelopment of the City's 75 acre Northeast Inlet section, which included the raising/ reconstruction of roadways to avoid flooding, installation of traffic signals,Modifications and upgrades to the stormwater drainage system, new/modifications to the water distribution system, landscaped promenade walkways, and the installation of new 2,500 feet of timber bulkheads. This work included coordinating/scheduling contractors, utilities, and developers; generating plans, CAFRA permit, EIS, specifications, and cost estimates; and reviewing/approving construction documents, shop drawings, field design changes, and contractor invoices for payment.

Union Lake Dam Rehabilitation,Millville, NJ. *New Jersey Division of Building and Construction.* CONSTRUCTION MANAGER. Responsible for concrete restoration work at the Union Lake Dam, a 35-foot-high, 2,000-foot-long earthen dam with a 200-foot-longMass concrete Main spillway. Work included vertical concrete spall repairs and the injection crack sealing of concrete on the spillway structure using Portadam containments (cofferdams), the installation of concrete baffle blocks, and channel scour prevention Modifications in a riprap area located immediately downstream of the stilling basin.

ENVIRONMENTAL DOCUMENTATION/PERMITTING, PERMIT COORDINATOR

Ebony Washington

Years experience 16

Ms. Washington has 16 years of experience as an environmental permitting specialist and has served as the environmental lead for numerous bridge and highway projects in New Jersey. Ms. Washington has practical experience and training in the implementation of the National Environmental Policy Act of 1969 (NEPA), Executive Order 215, ecological assessments, wetland delineations, environmental studies, socioeconomic and environmental justice analyses, and environmental permitting for public-sector projects, including the preparation of applications, plans, and reports supporting local, state, and federal permits. Ms. Washington has prepared numerous state (New Jersey and Pennsylvania) and federal permit applications, including New Jersey Department of Environmental Protection (NJDEP) freshwater wetlands; CAFRA; waterfront development; coastal wetlands; Delaware and Raritan Canal Commission; Green Acres; New Jersey Pinelands; U.S. Coast Guard Bridge; U.S. Army Corps of Engineers Section 404/10; and PADEP chapter 105 permits.

Through the environmental permitting process,Ms. Washington has developed relationships with reviewers at the regulatory agencies and has worked with these agencies to identify issues and develop agreeable resolutions efficiently. Additionally, collaborating with the engineers and planners,Ms. Washington has been heavily involved in evaluating proposed alternatives in regards to regulated resources. Her involvement is essential in developing a permittable solution that Minimizes environmental impacts while Meeting the project's purpose and need.

RELEVANT EXPERIENCE

Atlantic City Offshore Wind O&M Facility, Atlantic City, NJ. *Orsted.* PROJECT MANAGER. Responsible for providing environmental services for a proposed offshore wind operations and Maintenance facility in Atlantic City's inlet area. The project will build an in-water and Marine support facility, replace a failing bulkhead, install Moorings and floating docks, and prepare the property to support loading and training cranes. An access platform,Marine fueling facilities, construction trailers, and utilities are also part of the project. Ms. Washington managed the permitting and licensing effort for the development of an operation and Maintenance facility for an offshore wind developer. As part of her role on this job,Ms. Washington focused primarily on preparing the NJDEP land use and Atlantic City permits. The Atlantic City permit approval effort included obtaining site plan approval from the Atlantic City Planning Board Zoning Board, which required provisions for public hearings, responding to public comments, and requests for information from various public officials.

Ocean Wind 2 Construction and Operations Plan and Permitting,Monmouth County, NJ. *Orsted.* PROJECT MANAGER. The project includes providing environmental services for a proposed offshore wind operations and Maintenance facility in Monmouth County, NJ. As part of the project, geotechnical borings will be sited within the NJDEP defined coastal zone Management area and will require authorization through the NJDEP Division of Land Resource Protection in accordance with the Coastal Zone Management Rules (N.J.A.C. 7:7).Ms. Washington's effort included preparation of the NJDEP the land use permits required for the project's geotechnical investigation program. Ms. Washington also developed the required compliance documentation and site plan/impact drawings required for NJDEP review and permit issuance.

Facilities Improvement Program Maintenance District TMD 4, East Windsor Township,Mercer County, NJ. *Client New Jersey Turnpike Authority.* ENVIRONMENTAL SPECIALIST. Responsible for the preparation of a NJDEP Division of Land Use Regulation permits for Freshwater Wetlands General Permits 6 and 7 for the proposed improvements to New Jersey Turnpike Maintenance District 4 – (TMD 4) Hightstown. Also responsible for the preparation of a Delaware and Raritan Canal Commission (DRCC) Approval application for proposed project activities located within Review Zone B of the DRCC jurisdiction.

Wetland Delineation and Environmental Permitting,Mileposts 112 to 113 (NJTA OPS No. P3782),Middletown Township,Monmouth County, New Jersey. *New Jersey Turnpike Authority.* PROJECT MANAGER. Ms. Washington was Project Manager responsible for the preparation of the environmental screening report, wetland delineation, and NJDEP Land Use Permits. The wetland delineation was performed in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989). NJDEP Flood Hazard Area Control Act (FHACA) and Freshwater Wetlands General Permit 10B were procured for this project. In addition,Ms. Washington also prepared a riparian Mitigation

Michael Baker INTERNATIONAL

Education
M.U.P., 2009, Environmental Planning and Technology, New York University

B.A., 2005, Environmental Engineering, Lafayette College

Professional Affiliations
American Planning Association (APA)

Women's Transportation Seminar (WTS)

Ebony Washington

ENVIRONMENTAL DOCUMENTATION/PERMITTING, PERMIT COORDINATOR

RELEVANT EXPERIENCE CONTINUED

plan which included coordination with the Marsh Bog Brook I & II Mitigation Bank, NJDEP Mitigation Unit, and the New Jersey Turnpike Authority. This project entailed the rehabilitation and repair of two 120-inch corrugated Metal pipe (CMP) culverts, replacement of a 66-inch CMP culvert, and replacement of additional connecting CMPs within the project limits. All of these culverts convey a tributary of Nut Swamp Brook along the Garden State Parkway (GSP¬).

Wetland Delineation and Environmental Permitting, Rehabilitation of County Bridge R-24Mill Road over Rockaway Creek Readington Township, Hunterdon County, NJ. *Client: Hunterdon County.* ENVIRONMENTAL TEAM LEAD. Responsible for the preparation of NJDEP Land Use Permits for the original project scope involving the replacement of County Bridge R-24. Prepared NJDEP Permits including a Freshwater Wetlands General Permit 10A and NJDEP Flood Hazard Area Control Act Individual Permit as part of the permitting process. Ms. Washington also conducted a wetland delineation for regulated wetlands and State open waters following the procedures in the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands. She prepared an NJDEP Application for a Line Verification Letter of Interpretation. Other responsibilities include coordinating SHPO Section 106 Consultation and oversight of the Historic Architecture and Phase 1A Archaeological surveys and reports.

Wetland Delineation and Environmental Permitting, FREC Access Road Bridge Replacement over Toms River, Structure No. 3489-001, Jackson Township, Ocean County, NJ. *New Jersey Department of Transportation.* ENVIRONMENTAL TEAM LEAD. Responsible for conducting a wetland delineation, preparing the wetland delineation report and wetland plans during the Preliminary Engineering phase of this bridge deck replacement project. The wetlands delineation was performed in accordance with the Federal Manual for Identifying and Delineating Jurisdictional wetlands (1989) and the NJ Pinelands Commission Manual for Identifying and Delineating Pinelands Area Wetlands (1991). During Final Design,Ms. Washington prepared an NJDEP Freshwater Wetlands General Permit, an NJDEP Flood Hazard Area Individual Permit, and a NJ Pinelands Commission Development Approval for the bridge replacement.

Wetland Delineation and Environmental Permitting, Route 130 Westfield Avenue toMain Street Pavement Reconstruction Project, East Windsor Township,Mercer County, NJ, Cranbury Township,Middlesex County, NJ. *New Jersey Department of Transportation.* ENVIRONMENTAL TEAM LEAD. Responsible for the Management and preparation of NJDEP Land Use Permits. Preparation of NJDEP Land Use Permits including Freshwater Wetlands General Permits 2 and 10 and NJDEP Flood Hazard Area Control Act Individual Permit. Conducted wetland delineation, and prepared wetland delineation report, for regulated wetlands and State open waters following the procedures in the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands. Also responsible for the preparation of a Delaware and Raritan Canal Commission (DRCC) Approval application for proposed project activities location within Review Zone B of the DRCC jurisdiction.

Environmental Permitting, County Road 530, Southampton Township, Pemberton Township, and Pemberton Borough, New Jersey. *Burlington County.* ENVIRONMENTAL TASK LEAD. Responsible for preparation of NJDEP Individual Freshwater Wetlands and Flood Hazard Area Control Act Permits, and NJDEP Green Acres Diversion Application, Section 106 SHPO Consultation, and NJDEP Project Authorization under New Jersey Register of Historic Places Act for replacement of the existing culvert and hydraulic opening design for Goldy's Run under Magnolia Road, and the rehabilitation and extension of existing culverts for Goldy's Run and Birch Run under Route 530. All work was completed in accordance with FHWA, County, DVRPC Policies and Procedures, the NJDOT Procedures Manual, the Local Aid NJDOT Project Delivery Process, and State and Federal environmental regulations.

Environmental Permitting, Delancy Street Roadway Improvements. *City of Newark.* ENVIRONMENTAL TASK LEAD. Responsible for preparing and securing NJDEP Land Use permits for Freshwater Wetlands General Permits #10A and #11, Waterfront Development (In-water and Upland), Coastal Wetland Permit, and Flood Hazard Area Control Act Individual Permit associated with culvert reconstruction activities and stream cleaning. Aided in NEPA Environmental Reevaluation. Coordinated preparation of Hazardous Waste Site Investigation Report, PAECE Reports, and Remedial Action Work Plan. All work was completed in accordance with NJDOT Procedures Manual and State and Federal regulations.

ARCHITECT

David Tudryn, RA, AIA, LEED GREEN ASSOCIATE

Years experience 36

Mr. Tudryn currently represents Michael Baker as Vice-President, Department Manager for the northeast regions' architectural practice. He has overseen both small and large transit design teams that involve highly technical projects with extensive agency coordination and public involvement. His notable roles include Project Manager for Connecticut DOT's Eleven Hartford Line Rail Stations; Architect-of-Record for WMATA's Bladensburg Design-Build BEB-ready bus facility that will accommodate a fleet of 300 transit vehicles; Project Manager for CTDOT's New Haven's 300,000-square-foot Bus Facility; and Project Manager for the Jacksonville Transportation Authority's Transit Center which was a Construction Manager-at Risk (CMR), a $64Mcombined mass transit hub.

RELEVANT EXPERIENCE

Hurricane Sandy Emergency Services, Various Locations, East Coast. *FEMA.* SENIOR ARCHITECT. Managed the design team which developed concepts for flood mitigation measures and analyzed the potential flow of floodwaters through new high-rise structures at the World Trade Center. After the enormous calamity of Hurricane Sandy in 2012, many federal, state, and municipal agencies needed assistance to aid them in the mammoth cleanup effort and assist them in planning for future prevention. Michael Baker was tasked by several agencies to support them in their efforts. Assignments included ad-hoc GIS mapping and spatial data analysis for FEMA, including incorporation of datasets into various web services used to disseminate data to the public; emergency bridge inspection support services for the New Jersey and Virginia Departments of Transportation; a comprehensive water intrusion protection plan for the new World Trade Center in New York City; and detailed inundation mapping for the New Jersey Turnpike (NJTP) and Garden State Parkway (GSP).

Route 52 Causeway Replacement Project, Ocean City and Somers Point, New Jersey. *New Jersey Department of Transportation (NJDOT).* QA/QC. Responsible for providing quality assurance check of architectural plans. Michael Baker provided comprehensive engineering services for the replacement of the Route 52 Causeway and the reconstruction of approximately 2.8 miles of Route 52 from Route 9 in Somers Point to Bay Avenue in Ocean City crossing Great Egg Harbor Bay. Michael Baker's services included bridge and roadway design, environmental permitting, lighting design, traffic and intelligent transportation system design, utility relocation, community outreach, and construction management and inspection.

Facilities Improvement Program Final Design Services, New Jersey. *New Jersey Turnpike Authority.* ARCHITECT OF RECORD. Michael Baker provided final design services for the replacement or rehabilitation of maintenance buildings, storage facilities, salt facilities, and other structures in the maintenance yards specifically along the New Jersey Turnpike North. Michael Baker's contract included design for six new buildings and rehabilitation of five buildings. The scope of work included architectural design; mechanical, electrical, and plumbing design; site/civil design; environmental permitting and hazmat investigations; stormwater management; site lighting; geotechnical engineering and retaining walls; utilities engineering; and construction staging.

Concept Development Study for New Pedestrian Bridge and Rail Platform Expansion, New Brunswick, New Jersey. *New Jersey Transit Corporation.* ARCHITECT OF RECORD. Provided architectural design support and assisted in the coordination of the overall project with the railroads. Michael Baker performed a concept development study for the construction of a pedestrian bridge and walkway to connect a 1,275-space parking garage with the New Brunswick Train Station on the Northeast Corridor Line.

Highway Operations Control Center Renovation, Newington, Connecticut. *Connecticut Department of Transportation.* PROJECT MANAGER. Michael Baker is provided final design and construction phase support for approximately 14,000 square feet of control center renovations. Its services included architectural, mechanical, electrical, plumbing, and information technology systems (ITS) upgrades, as well as selections for furniture and consoles. The first renovated area is a former daycare center, which is being converted into approximately 8,400 square feet of office space for highway operations with a 50-foot-long

Michael Baker INTERNATIONAL

Education

Master's Certificate, 2008, Project Management, Drexel University

M.Arch., 2008, Architecture, University of Maryland

B.S., 1991, Architecture, Northeastern University

Coursework, 1990, Architecture, Boston Architectural College

Licenses/ Certifications

Registered Architect, New Jersey, 2012, 21AI01912900

Professional Affiliations

American Institute of Architects (AIA)

National Council of Architectural Registration Boards (NCARB)

David Tudryn, RA, AIA, LEED GREEN ASSOCIATE

ARCHITECT

RELEVANT EXPERIENCE CONTINUED

video wall and spaces for ITS staffing and support. This area includes three private offices, a library, a kitchenette, two bathrooms, and its own exterior entrance. The second renovated space is the former operations area, which Michael Baker converted into a traffic incident area with a traffic incident room containing a 20-foot-long video wall, a system support room, two conference rooms, and areas for storage and a nurse's station. Michael Baker also developed complex staging plans to maintain operations in these spaces during construction.

Scudder Falls Bridge Replacement, Final Design Services, Bucks County, Pennsylvania. *Delaware River Joint Toll Bridge Commission.* ARCHITECT. Michael Baker provided final design and post-design services for the Scudder Falls Bridge Replacement project. The existing four-lane bridge over the Delaware River was functionally obsolete and needed to be replaced to alleviate recurring current peak-period and emergency-incident traffic congestion and projected future traffic. Michael Baker designed replacement of the existing bridge with a twin-span structure carrying six lanes of through traffic (three in each direction), two auxiliary northbound lanes for entry/exit travel, and one auxiliary southbound lane for entry/exit travel. The scope of work also included drainage upgrades, approach widening, a bicycle/pedestrian walkway, new bridge inside shoulders, a new all-electronic toll (AET) collection system, an intelligent transportation system (ITS) equipment building, and noise-abatement walls.

CTL - NDC Newark. *CenturyLink.* ARCHITECT OF RECORD. Provided architectural oversight, technical review and code compliance review and served as architect-of-record for assignments in the State of New Jersey for CenturyLink.

Wells, Water Treatment, and Transmission Main Project, Beverly Hills, California. *City of Beverly Hills.* QA/QC. Responsible for providing oversight of the task order team and general quality assurance checking for the deliverable. Michael Baker provided engineering services to investigate the hydraulic, water quality, and physical requirements of a water exchange project to expand local water supply/production by developing groundwater in the La Brea Subarea, located primarily outside of Beverly Hills city limits within the City of Los Angeles.

CTTransit Hartford Dispatch Center, Connecticut. *CTTRANSIT.* PROJECT MANAGER. Responsible for providing technical oversight of the project team. Michael Baker developed full contract documents for renovations and HVAC, fire protection and electrical upgrades to CTTRANSIT's Busway Operations Center including their dispatch room, bus operations center, server, and telephone rooms.

Amtrak Nationwide AE Services IDIQ, Nationwide. *Amtrak.* ARCHITECT OF RECORD. Served as the Architect-of-Record. Michael Baker is providing architectural and engineering design and construction-phase services at various Amtrak stations nationwide. Each station includes a mixture of Americans with Disabilities Act (ADA) and state-of-good-repair (SOGR) station and platform improvements. Michael Baker's services have included schematic design, construction documentation and administration for architectural, structural, civil, stormwater, mechanical, and electrical engineering, along with cost estimating, bid review, construction administration, renderings, and presentations. Additionally, this project required coordination with the FRA, an SHPO review, and other third-party entities.

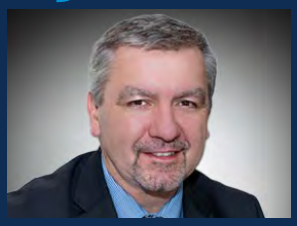
Improvements to Stamford Transportation Center, Stamford, Connecticut. *Connecticut Department of Transportation.* PROJECT DIRECTOR. Michael Baker is providing master planning and design services for renovations at the Stamford Transportation Center. The station is the busiest in Connecticut, providing train service for Metro North, Amtrak, and Shoreline East as well as bus services to New York City and throughout Connecticut. The first phase of the project began with an investigative study of passenger circulation through the station. Michael Baker led a team to inspect 17 escalators and five elevators to gather information on existing conditions and develop proposed options for modernization and improvements to the passenger experience. Future phases will include review and modernization of station mechanical and electrical systems, wayfinding signage, passenger tunnel investigation and improvements, overall station architecture, and other improvements to station infrastructure.

Fairfax County Department of Public Works and Environmental Services Consolidation, Fairfax, Virginia. *Fairfax County, DPW & ES.* ARCHITECT. Developed the approved architectural building elevation concept. Michael Baker is providing full construction documentation for site and architecture for Fairfax County's consolidation of its Department of Public Works and Environmental Services Stormwater Planning and Management Divisions with the Wastewater Collection Division into one facility located at the existing Wastewater Division's 14.39-acre site combined with an adjacent site. Michael Baker began assisting the county in 2013 by evaluating nine separate potential sites, ultimately providing the evaluations that would allow the county to select the highest and best site for the project. After the site was selected, Michael Baker team provided conceptual design options based on interviews and charrettes with the division personnel who will ultimately occupy the facility. The team is currently working on conceptual site and architecture designs

SITE/ROADWAY ENGINEERING

Sylvester Fryc, PE

Years experience 35



Mr. Fryc brings many years of experience in various aspects of engineering and has extensive knowledge of the challenges of roadway design. His experience includes oversight and development of roadway geometry, roadside protection design, drainage design, Right of Way impacts, and utility relocation schemes. Mr. Fryc is experienced in developing complete contract documents for multi-disciplined projects. His experience includes preparation of horizontal and vertical alignments, guiderail and barrier design, complex staging and Maintenance and Protection of Traffic plans, typical sections, cross sections, grading, earthwork and cost estimates. Mr. Fryc has seen numerous projects through from concept design to construction and understands the importance of producing a quality product.

RELEVANT EXPERIENCE

Scudder Falls Bridge Replacement, Final Design Services, Bucks County, Pennsylvania. *Delaware River Joint Toll Bridge Commission.* PROJECT ENGINEER. Roadway Design Task Leader responsible for final design and post-design services for the project. Michael Baker is providing final design and post-design services for the Scudder Falls Bridge Replacement project. The existing four-lane bridge over the Delaware River is functionally obsolete and needs to be replaced to alleviate recurring current peak-period and emergency-incident traffic congestion and projected future traffic. Michael Baker is designing replacement of the existing bridge with a twin-span structure carrying six lanes of through traffic (three in each direction), two auxiliary northbound lanes for entry/exit travel, and one auxiliary southbound lane for entry/exit travel. The scope of work also includes drainage upgrades, approach widening, a bicycle/pedestrian walkway, new bridge inside shoulders, a new all-electronic toll (AET) collection system, an intelligent transportation system (ITS) equipment building, and noise-abatement walls.

I-95/I-295 Re-designation Sign. *New Jersey Department of Transportation (NJDOT).* PROJECT MANAGER. Responsible for leading design team in various aspects of roadway design, oversight and development of signing plans, construction staging and scheduling, and utility relocation schemes. Responsibilities included development of complete contract documents including Contact Plans, Specifications, Construction Schedule and Construction Cost Estimate.

Rio Grande Avenue Road Improvements, Wildwood, New Jersey. *Cape May County.* PROJECT MANAGER. Responsible for project oversight. Michael Baker is providing design and engineering services for the widening of and improvements to Rio Grande Avenue. The purpose of the project is to reduce traffic congestion by providing two-way left-turn lanes, raise the roadway profile, improve the deficient drainage system, install a regional pump station, and enhance the gateway by adding streetscaping elements and destination signing. Michael Baker's services have included roadway and drainage design, pump station design, right-of-way plans, streetscape design, wayfinding, traffic engineering, environmental services, permitting, and grant administration support.

Route 1 and 9 at Haynes Avenue Bridge Replacement and Interchange Reconfiguration, Newark, New Jersey. *New Jersey Department of Transportation (NJDOT).* PROJECT ENGINEER. Highway Design Team Lead in responsible charge of horizontal and vertical geometric design, preparation of Maintenance and Protection of Traffic plans, preparation of Soil Erosion and Sediment Control Plans and environmental assessments to identify environmental resources and potential impacts. Michael Baker managed the reconfiguration of the Route 1 and 9 interchange at Haynes Avenue and the replacement of the bridge on Haynes Avenue over Waverly Yards. Michael Baker's services included roadway design, geotechnical design, structure design, highway lighting design, intelligent transportation system design, and right-of-way plan development. Signing and pavement markings were designed in accordance with the MUTCD and standard NJDOT practices, and included freeway segments, ramps, local streets, and a proposed roundabout construction.

Route 52 Causeway Replacement Project, Ocean City and Somers Point, New Jersey. *New Jersey Department of Transportation (NJDOT).* ASSISTANT PROJECT MANAGER. Responsible for geometric design (horizontal and vertical design), highway section design and design exceptions. Highway design involved the development of complex construction staging

Michael Baker INTERNATIONAL

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

A.A.S., 1987, Civil Engineering Technology, Mercer County Community College

Licenses/ Certifications
18.1.1 Value Engineering, 2016

3.1.1 Route Studies & Schematic Design - Minor Roadways, New Jersey

3.2.1 Route Studies & Schematic Design - Major Roadways, New Jersey

3.3.1 Route Studies & Schematic Design - Complex Highways, New Jersey

3.4.1 Minor Bridge Layouts, New Jersey

3.5.1 Major Bridge Layouts, New Jersey

Sylvester Fryc, PE

SITE/ROADWAY ENGINEERING

RELEVANT EXPERIENCE CONTINUED

plans and Maintenance and Protection of Traffic plans. Developed traffic signage and striping plans. Developed conceptual alternatives for configuration of ramps, elimination of the traffic circle, and avoidance of sensitive wildlife habitats and residences. Developed overall Access Summary Report and Access Cut-Out Plans for affected properties along the project corridor in accordance with the NJ State Highway Access Management Code. Michael Baker provided comprehensive engineering services for the replacement of the Route 52 Causeway and the reconstruction of approximately 2.8 miles of Route 52 from Route 9 in Somers Point to Bay Avenue in Ocean City crossing Great Egg Harbor Bay. Michael Baker's services included bridge and roadway design, environmental permitting, lighting design, traffic and intelligent transportation system design, utility relocation, community outreach, and construction management and inspection.

I-95/295 Redesignation Sign Replacement, New Jersey. *New Jersey Department of Transportation (NJDOT).* PROJECT MANAGER. Responsible for leading design team in various aspects of roadway design, oversight and development signing plans, construction staging and scheduling, and utility relocation schemes. Responsibilities included development of complete contract documents including Contact Plans, Specifications, Construction Schedule and Construction Cost Estimate. Michael Baker developed sign design and plans for the replacement sign panels; developed traffic control details; conducted additional field investigation of the sign structures to determine structural attachments required; and developed construction details for the I-95/295 redesignation sign replacement project. Additionally, Michael Baker prepared final structures documents and final roadway plans; completed signing plans; developed construction cost estimates, specifications, and construction schedule; prepared the final design submission package; submitted the PS&E package; and performed construction.

Merion Park Drainage Conceptual Design, Ocean City, New Jersey. *City of Ocean City, New Jersey.* PROJECT MANAGER. Responsible for the analysis of the existing drainage system for the Merion Park area and development of a conceptual and final drainage design and roadway improvements for the entire area. Michael Baker performed a detailed review and analysis of the existing drainage system for the Merion Park area and developed a conceptual drainage design. The proposed improvements were based on a number of assumptions due to limited information available (e.g., survey limitations, existing utilities information, etc.). Michael Baker provided a proposal to develop final design documents for the new drainage system and roadway improvements to reduce flooding. Michael Baker also prepared applications for required permits.

Route 280/21 Interchange Improvements, Newark, New Jersey. *New Jersey Department of Transportation (NJDOT).* QA/QC. QA/QC reviewer for the final design for this complex urban interchange. Michael Baker provided final design services for a complex urban interchange reconstruction. The project includes intricate ramp design and flyovers in a confined urban area; five new bridges, including one curved girder structure; and 10 soldier pile retaining walls in an area that is currently experiencing settlement issues. Design included managing the geotechnical exploration program in conjunction with hazardous material sampling; extensive utility relocations; pavement design; design exceptions; right-of-way; lighting; intelligent transportation system; four traffic signals; and environmental permitting.

I-80 EB, Retaining Wall Replacement Mileposts 1.2 – 1.5 in Hardwick and Knowlton Townships, Warren County. *NJDOT.* TECHNICAL ADVISOR. Michael Baker has been contracted to provide emergency design services and preliminary engineering services for the I-80EB Wall along the Delaware River in Hardwick and Knowlton Townships, Warren County. In April 2022, emergency repairs were completed at the wall to address the undermined foundation section and restore the embankment. Michael Baker prepared the New Jersey Department of Environmental Protection Flood Hazard Area Control Act Individual Permit. No work was proposed below the ordinary high-water line or within wetlands.

STORMWATER MANAGEMENT

Lori Wade, PE, CPSWQ

Years experience 21

Lori Wade is a Civil Engineer and Certified Professional in Stormwater Quality with over 18 years of experience in water resources engineering, including Stormwater Management, floodplain management, and drainage design for local, state, and federal government projects. She is experienced in designing drainage systems in tidally influenced areas including design for tide check valves and stormwater pump stations. She designs stormwater BMPs including infiltration and detention basins, swales, and water quality treatment devices and is on the forefront of implementing green infrastructure such as curb bump outs, bio swales and trenches to the maximum extent feasible. Lori is responsible for the Final Design submission of plans, specifications, and cost estimates as well as submitting for various permitting agencies such as the Soil Conservation Districts for Soil Erosion and Sediment Control applications and the New Jersey Department of Environmental Protection for Flood Hazard Area (FHA) Individual and general permits. She knows the requirements set forth in the latest NJ Stormwater Management Rules effective March 2, 2021 and understands how to demonstrate compliance for the project. She has worked on numerous flood control projects from concept design through construction.

RELEVANT EXPERIENCE

West 17th Street Flood Mitigation Concept and Construction Design, Ocean City, NJ. *City of Ocean City.* LEAD DRAINAGE ENGINEER. This project proposes improvements to address frequent flooding in the West 17th Street residential area in Ocean City, Cape May County, New Jersey. The West 17th Street development is located in a low-lying area prone to chronic flooding during various tidal and rain events. Michael Baker performed conceptual and is currently advancing final design. Lori is overseeing the development of the drainage design and plans that will include the construction of a new stormwater pumpstation, roadway improvements, and installation of new stormwater pipes, and Soil Erosion and Sediment Control Plans.

Merion Park Drainage and Roadway Improvements, Ocean City, New Jersey. *City of Ocean City, New Jersey.* LEAD DRAINAGE ENGINEER. Responsible for evaluating an existing drainage system in the residential Merion Park neighborhood, a low lying area that is prone to flooding during storm events and daily high tides. For the Conceptual Design Study, Michael Baker provided inlet/spread and pipe capacity analysis, modeling, and conceptual layout and report for drainage and grading improvements to eight outfall locations. The Phase 1 Design project rehabilitated four of the neighborhood's eight drainage systems and included roadway improvements, existing drainage inlet and pipe replacement, and three pump stations to facilitate efficient drainage and minimize existing utilities' relocation. Michael Baker developed final design plans, including typical sections; construction, drainage, and utility plans; profiles; bulkhead replacement plans; pump station design; electrical design; construction details; and outfall cross sections. Work required NJDEP permits in accordance with the NJDEP Storm Water Management Regulations and FHA Control Act.

Scudder Falls Bridge Replacement, Final Design Services, Bucks County, Pennsylvania. *Delaware River Joint Toll Bridge Commission.* TASK MANAGER. Responsible for leading the task of finalizing the stormwater management and drainage design. In Pennsylvania, low impact/ green infrastructure practices will be implemented through the design of rain gardens and grass swales along the majority of the interstate accounting for over 1,000 feet of linear stormwater conveyance. In addition, three new basins are proposed in addition to the retrofitting of an existing basin to increase its efficiency. In NJ, right-of-way is limited. Vegetated swales are proposed where feasible to supplement the construction of three new large stormwater basins to meet the NJ Department of Environmental Protection Stormwater Management Rules (N.J.A.C. 7:8). In addition to stormwater management and drainage design, will provide quality control of the hydrologic and hydraulic model for the new pier alignment for the Scudder Falls Bridge including the oversight of net fill calculations for fill in the regulated flood hazard area. Proposed design includes coordination with regulations of various agencies including NJDEP, NJDOT, Delaware and Raritan Canal Commission and Soil Conservation Districts in Pennsylvania and New Jersey. Michael Baker is providing final design and post-design services for the Scudder Falls Bridge Replacement project. The existing four-lane bridge over the Delaware River is functionally obsolete and needs to be replaced to alleviate

Michael Baker INTERNATIONAL

Education
B.S., 2003, Civil Engineer, The Pennsylvania State University

Licenses/ Certifications

Professional Engineer, New Jersey, 2011, 24GE04953400

Certified Professional Storm Water Quality, Worldwide, 2014, 1001

Professional Affiliations
American Council of Engineering Companies (ACEC) Water and Wastewater Committee Chair

American Society of Highway Engineers (ASHE) Past President Southern NJ Chapter

Lori Wade, PE, CPSWQ

STORMWATER MANAGEMENT

RELEVANT EXPERIENCE CONTINUED

recurring current peak-period and emergency-incident traffic congestion and projected future traffic. Michael Baker is designing replacement of the existing bridge with a twin-span structure carrying six lanes of through traffic (three in each direction), two auxiliary northbound lanes for entry/exit travel, and one auxiliary southbound lane for entry/exit travel. The scope of work also includes drainage upgrades, approach widening, a bicycle/pedestrian walkway, new bridge inside shoulders, a new all-electronic toll (AET) collection system, an intelligent transportation system (ITS) equipment building, and noise-abatement walls.

26th – 34th Street Flood Reduction Improvement Project, Ocean City, New Jersey. *City of Ocean City.* DRAINAGE DESIGN LEAD. Michael Baker provided modeling and design services for drainage improvements for a 280-acre section of the City between the Bay and West Avenues and 26th – 34th street that has suffered from regular tidal and nuisance flooding. Michael Baker modeled the one-, two-, five-, and 10-year storm events and developed outflow curves that were paired with pump stations to achieve efficient sizing of a new system with offline pump capacity. The drainage team then developed final design plans, including typical sections; construction, drainage, and utility plans; profiles; design for four new pump stations; electrical design; construction details; and outfall cross sections.

South Street and Adams Street Drainage Improvements, Newark, New Jersey. *City of Newark.* PROJECT MANAGER. Managed a comprehensive drainage study and design for the combined sewer overflow (CSO) community of Ironbound surrounding the South and Adams Street corridor. The area suffers from frequent flooding that is stifling business growth, creating toxic environments from CSOs and causing property and personal damage. Michael Baker studied the roadway drainage and overall drainage patterns of the network of ditches draining to Newark Bay. Design included replacement of over 4,000 linear feet of drainage pipe, cleaning existing drainage systems, pump station, tide control check valve, and installation of green infrastructure to retain rainfall. The design was coordinated closely with the Ironbound Community Corporation and incorporating the Green Streets Initiative.

Rio Grande Avenue Drainage and Roadway Improvements, Wildwood, NJ. *Cape May County.* TECHNICAL LEAD. Drainage design manager for the pump and pipe system in Wildwood, New Jersey. This project had several constraints due to outfall locations and numerous utilities in this shore area. Michael Baker is providing design and engineering services for the widening of and improvements to Rio Grande Avenue. The purpose of the project is to reduce traffic congestion by providing two-way left-turn lanes, raise the roadway profile, improve the deficient drainage system, install a regional pump station, and enhance the gateway by adding streetscaping elements and destination signing. Michael Baker's services have included roadway and drainage design, pump station design, right-of-way plans, streetscape design, wayfinding, traffic engineering, environmental services, permitting, and grant administration support.

Route 52 Causeway Bridge Replacement Project with 9th Street Drainage Improvements, Ocean City and Somers Point, NJ. *New Jersey Department of Transportation.* DRAINAGE AND SWM LEAD. Responsible for drainage and SWM design including new pipes, bicycle and eco safe inlets accommodating ADA curb ramps and drainage at various commercial access driveways, manholes, scuppers, seventeen (17) bioretention, infiltration and extended detention basins, and 3 water quality treatment devices in accordance with the NJDOT drainage design manual and NJDEP BMP Manual to meet NJDEP stormwater quality requirements. She was also responsible for conducting scour analysis at pier for the bridge. As well as raising the roadway over a foot in some locations along 9th Street in Ocean City to reduce the frequency of roadway flooding/road closures without adversely impacting offsite drainage and addressing contaminated groundwater along 9th Street by proposing HDPE pipe with baffles (to address buoyancy/pipe uplift) to prevent the contaminated groundwater from entering the drainage system and discharging to the bay.

Delancy Street Roadway Improvements, Newark, NJ. *City of Newark, NJ.* DRAINAGE ENGINEER. Responsible for laying out a proposed drainage design in this flat, low lying area with tidal impacts including new pipes, inlets, and manholes in accordance with the NJDOT Design Manual and recommendations set by the City of Newark. Close coordination of utilities and ROW was also required. Responsible for SWM design which included manufactured treatment devices and a detention basin along the project to meet water quality requirements and reduce peaks to existing outfalls in accordance with the NJDEP SWM Rules. Michael Baker provided engineering and environmental services for comprehensive improvements to Delancy Street, a two-lane arterial roadway located in the southeastern section of the Ironbound neighborhood. Michael Baker completed plans for horizontal and vertical alignment; signage upgrades; pavement marking and striping; MPT; ROW; utilities; sidewalk improvements, including high visibility crosswalks to meet Americans with Disabilities Act (ADA) requirements; specifications; cost estimates; construction scheduling; environmental permitting; and hazardous waste management.

STRUCTURAL ENGINEERING

Hamid Ikram, PE

Years experience 25

Mr. Ikram is a Technical Manager/Senior Structural Engineer with more than 25 years of experience in the design of bridges, VMS sign structures, guide sign structures, retaining walls, traffic signal supports, and culverts. Having led the structural design for the Michael Baker on various NJDOT, PANYNJ and NJTA and various County projects, including many bridge rehabilitations and new bridge projects. Mr. Ikram is very familiar with the design needs for all types of project. He is also familiar with all aspects of project delivery from concepts through design, inspection, permitting and construction. Hamid's expertise is in bridge repair, rehabilitation, and reconstruction projects for transportation clients; his experience includes field inspections, bridge rating, cost estimating, prioritization of repairs analyses, alternative analysis reports, preliminary and final design for super and substructure repairs, and construction support. Mr. Ikram is well versed in the design and construction of bridges using Accelerated Bridge Construction (ABC) techniques. Hamid's experience includes AASHTO LFD, AASHTO LRFD and AASHTO Bridge Rating as well as ACI, ASIC and IBC.

RELEVANT EXPERIENCE

Routes 23, 80, and 46 Interchange Improvement Project, Wayne, New Jersey. *New Jersey Department of Transportation.* STRUCTURAL ENGINEER. Michael Baker is providing bridge and roadway design and engineering services for improvements to the Route 23, Route 80, and Route 46 Interchange. The proposed improvements provide greater mobility, reduce congestion, enhance safety through simplicity of movement, shorten travel time through the interchange, and feature elements that will improve drivers' expectations. The existing interchange design is currently missing two connections. One is from I-80 EB to NJ 23 NB/SB and US 46 WB. The existing interchange requires a driver to proceed eastbound to Interchange 54 to turn around to access these roadways. The other connection is from southbound NJ 23 to westbound I-80. The existing interchange requires a driver to follow circuitous path along NJ23SB, Ramp F, NJ 23NB and Ramp I to access I-80 WB. For the project, Michael Baker is providing highway design, structural engineering, geotechnical engineering, an environmental technical study (ecology), traffic control and staging, traffic modelling and analysis, signing and striping, highway lighting, pavement design, and utility engineering.

NJ Turnpike Bridge Deck Repairs and Resurfacing and Miscellaneous Structural Repairs, Contract Nos. T100.197, T100.243, T100.257, T100.299, T100.340, T100.379, T100.404, T100.412, T100.466 and T100.518, T100.560 and T100.600 (2011-Present). GSP Bridge Deck Repairs and Resurfacing and Miscellaneous Structural Repairs, Contract Nos. P100.230, P100.231 (2012). *New Jersey Turnpike Authority.* PROJECT ENGINEER. Yearly work included inspecting approximately 50 bridges, developing a list of required repairs for the inspected bridges, prioritizing the repairs to maximize effectiveness of the construction budget, and developing plans and specifications and cost estimates to repair the bridges. Specifically, work included bridge field inspection, developing prioritized deck and structure repair details for construction scope to maximize effectiveness of the construction budget, and developing plans and specifications to repair the bridges. Bridge Deck Repairs included: deck replacement, panelized (stringer to stringer and diaphragm to diaphragm) deck replacement, deck spall repair, wearing surface replacement, thin polymer overlay installation and Methyl Methacrylate deck floods. Miscellaneous Structural Repairs included: welded and bolted steel member repair to address deterioration and impact damage, steel member replacement, substructure spall repair, ASR damage repairs, substructure erosion damage repairs, drainage repairs, installation of laminated elastomeric bearings, steel rocker and plate bearings and seismic isolation bearings, noisewall panel repair, and structure painting. These repairs were scheduled to address deterioration discovered by our inspectors and repair of unanticipated conditions found in the field. Other tasks include Repair of Category A defects, coordination with RR, municipalities, NJDOT, PANYNJ, and NJTA Operations for staged construction and detour routes, coordination of GPR shoulder pavement evaluation, Road User Cost analysis, electrical modifications, utility impacts, contractor access, drainage improvements/repairs, bridge painting, and coordination with ongoing construction contracts. Most importantly all repairs we designed to be performed in stages and minimize delays to NJ Turnpike traffic. Post design services included addressing RFI's, reviewing shop

Michael Baker INTERNATIONAL

Education
M.C.E., Civil Engineering, University of South Florida

B.S., Computer Sciences, York University

B.C.E., Civil Engineering, University of Engineering and Technology, Punjab

Licenses/ Certifications
Professional Engineer - Structural, New Jersey, 2019, 24GE05489800

Professional Engineer - Structural, Ohio, 2011, PE.75257

Hamid Ikram, PE

STRUCTURAL ENGINEERING

RELEVANT EXPERIENCE CONTINUED

drawings, and adjusting plans to field conditions.

Cape May County Emergency Repair of Stone Harbor Blvd. - 96th Bridge (2016-2017). *Cape May County.* PROJECT ENGINEER. Emergency Inspection and Repair design and Post design services for the cracked and section loss superstructure members of moveable bascule span of the 96th Bridge, Cape May County. Project included lifting of the bascule span using temporary truss above the deck, structural repairs of fracture critical members, electrical and mechanical inspection with fast tracked repair design, load rating, plan preparation, contractor coordination, shop drawing review and RFI resolution during ongoing construction. The bridge was restored to normal operation within two months.

Cape May County Priority Repair of Stone Harbor Blvd - 96th Bridge (2016-Present). *Cape May County.* PROJECT ENGINEER/ PROJECT MANAGER. Four priority repairs contracts including Inspection and Repair design and Post design services for the cracked and section loss floor beams and stringers including bascule span repairs for fracture critical members. Project included the structural repairs of fracture critical members, Floor beams, stringers, electrical and mechanical inspection, load rating, plan preparation, contractor coordination, shop drawing review and RFI resolution during ongoing construction.

Cape May County Corson's Inlet and Grassy Sound Bridges rehabilitation (2019-Present). *Cape May Commission.* PROJECT ENGINEER. This project includes the Inspection and Rehabilitation of the two bridge Corson's Inlet and Grassy Sound bridge, Cape May Commission. Project included the structural repairs of steel members, Floorbeams, stringers to increase the capacity and load rating of bridges, deck replacement of one span, electrical and mechanical inspection, load rating, plan preparation, estimates, specifications, contractor coordination, and shop drawing review.

Rio Grande Avenue Road Improvements. *Wildwood, New Jersey.* STRUCTURAL LEAD. Michael Baker is providing design and engineering services for the widening of and improvements to Rio Grande Avenue. The project included curved retaining walls, underground water tanks and two floor structure to install the generator above the high flood level. Michael Baker's services have included roadway and drainage design, pump station design, structural design, environmental services, permitting, and grant administration support.

NJTA OPS No. T3725 Supplement A, Bridge Deck and Superstructure Reconstruction (2020-Present). *New Jersey Turnpike Authority.* STRUCTURE LEAD. Responsible for preliminary and final design performed in accordance with the latest updated design criteria in the NJTA's Design Manual for Structures. The T100.588 and T100.586 contract ($50M) was decks for 4 bridges, which 2 included new superstructures in addition to new bearings, raising the roadway profile, roadway resurfacing, and safety improvements.

NJTA OPS No. T3605 Supplement A, Bridge Deck Reconstruction and Lengthening, Structure No. 30.75R (2019-Present). *New Jersey Turnpike Authority.* Structure Lead. Responsible for the Authority's accelerated $17.4M Bridge Lengthening Project. The project included replacement of Structure No. 30.75 over the Turnpike. Responsible for managing the structures group, coordination with other disciplines, and the development of the Contract Documents. The design included pile supported foundations, utility relocations, staged construction to maintain traffic and improvements to the substandard geometric features. Structure design involved replacing existing 4 span bridge with two span continuous bridge removing the piers to allow future Turnpike widening.

Route 52 Causeway Replacement Project, Ocean City and Somers Point, New Jersey. *New Jersey Department of Transportation.* STRUCTURAL ENGINEER. $400M replacement of a 2-mile-long causeway over Great Egg Harbor Bay. Involved in seismic geotechnical investigation, 3D seismic modeling analysis, and structure design. Provided post design review including 20 retaining walls. Revised the design to accommodate the utilities and soil conditions. The seismic analysis used site specific spectral developed through the establishment of design level rock motions, site response analysis, and ground and foundation motion computations. Soil-foundation interaction and impedance calculations were used in the 3D structural seismic model. The bridge design consisted of a continuous 10,800-ft. and 88-ft. prestressed, multi-girder bridge made continuous for live load having individual span lengths in excess of 165 linear ft. The scope also included the design of a curved 4 span continuous, CIP trapezoidal slab beam bridge post tensioned transversely and longitudinally.

I-280/Route 21 Interchange Improvements, Newark, New Jersey. *New Jersey Department of Transportation.* STRUCTURAL ENGINEER. Final design for this $100M complex urban interchange. Responsible for design of the deck replacement at Route 280 over Broadway, and design of the superstructure replacement at Route 280 over MLK Boulevard utilizing Inverset solutions, including bearing replacement, complex MPT, and shop drawing reviews. Scope of work includes design of 5 new bridges (including an outrigger structure and curved girder structure), 16 retaining walls, and 4 sign structures; geotechnical foundation design; and complex construction traffic control and staging plans including the use of temporary walls to support I-280 during construction. Project includes coordination with the City of Newark and rail agencies.

GEOTECHNICAL ENGINEERING

Michael Yang, PE, PH

Years experience 38

Dr. Yang is a technical manager in geotechnical engineering with extensive geotechnical engineering experience. His responsibilities include project management, staff supervising and mentoring; geotechnical exploration; pavement design; soil improvement design and construction; numerical modeling of soil-structure interaction problems; pile testing; and design review. He is experienced in a wide range of soil and rock conditions in the Northeast region, experienced in geotechnical engineering practice in Highway, Transit, and Industrial Facilities. Dr. Yang has extensive foundation design and analysis experience for highway structures by using both LRFD and ASD methods. He is a FHWA-NHI approved LRFD for highway bridge substructures and retaining walls training instructor (Course No. 130082). He is highly skilled in the spreadsheet application development to solve a wide range of geotechnical problems. Dr. Yang has also published more than 20 technical papers on a wide range of topics: from dynamic compaction design and monitoring for deep fills as well as saturated soft soils, to temperature effects on buried earth pressure cells.

RELEVANT EXPERIENCE

Unified Security Forces Operations Facility, McGuire Air Force Base, Burlington County, New Jersey. *Army Corps of Engineers, New York District.* GEOTECHNICAL ENGINEER. This project consisted of exploring the subsurface conditions using soil borings and on-site percolation test, evaluating the conditions encountered, developing geotechnical recommendations. Prepared geotechnical recommendations for the foundation design, ground-supported slabs, earthwork, below-grade walls, pavement sections, stormwater management facilities, and other geotechnical concerns. All of the investigations and recommendations were performed in accordance with the Army Corps of Engineers manuals.

Combined Maintenance Facility (CMF), Fort Dix, Burlington County, New Jersey. *Army Corps of Engineers, Louisville District.* GEOTECHNICAL ENGINEER. Performed geotechnical field investigations for this facility. Prepared geotechnical recommendations for the foundation design, ground-supported slabs, earthwork, below-grade walls, pavement sections, stormwater management facilities, and other geotechnical concerns. All of the investigations and recommendations were performed in accordance with the Army Corps of Engineers manuals.

Garrett and Howard Counties Landfill Instrumentation and Monitoring. *Maryland Environmental Services.* GEOTECHNICAL ENGINEER. The project involved the geotechnical instrumentations and waste leachate monitoring in the landfill leachate collection system using shredded rubber tires. Reviewed the interim geotechnical reports and prepared the final geotechnical and leachate monitoring report.

Geotechnical Investigation and Design of an Embankment Dam, Barbados. *Sir Williams Construction Group.* GEOTECHNICAL ENGINEER. This project involved the geotechnical plan, investigation and design of the first embankment dam in the Barbados Island. The technical challenge was to design an embankment dam in the tropical marine clay with very high plasticity on a coral reef island. Planned geotechnical field and laboratory investigations program, directed and reviewed the geotechnical report and the dam design documents.

St. Mary's River State Park Dam Safety Inspection and Dam Safety Repair Design and Construction Services, St Mary's County, Maryland. *Maryland Department of Natural Resources (DNR) and Maryland Department of General Services (DGS).* GEOTECHNICAL ENGINEER. This dam consists of an earth fill embankment of approximately 1670 ft long and 38 ft high. The dam impounds a lake of 250 acres, and is classified as high hazardous dam and is regulated by Maryland Department of Environment (MDE). Performed dam safety inspection, subsurface investigation and geotechnical and structural engineering integrity evaluations in accordance with the MDE Dam Safety Program. Reviewed the final geotechnical report. Based on the safety inspection results and geotechnical/structural analysis, provided recommendations concerning the dam's long-term safety requirement.

Falls Road Golf Course Irrigation Embankment Safety Repair Design, Montgomery Co., Maryland. *Falls Road Golf Course Grounds Department.* GEOTECHNICAL ENGINEER. Project involved evaluating the safety need of this embankment dam at high flood design level and

Michael Baker INTERNATIONAL

Education

Ph.D., 2000, Civil Engineering/ Geotechnical, The University of Tennessee, Knoxville

M.S., 1989, Civil Engineering/ Geotechnical, Wuhan Institute of Rock and Soil Mechanics, CAS

B.S., 1986, Civil Engineering, Huazhong University of Science and Technology

Licenses/ Certifications

OSHA 40-Hour HAZWOPER Certification

Professional Engineer, Maryland, 2004, 30934

Professional Engineer, New Jersey, 2009, 24GE04826000

Professional Engineer, New York, 2012, 090717-1

Professional Engineer, Pennsylvania, 2002, PE061372

Michael Yang, PE, PH

GEOTECHNICAL ENGINEERING

RELEVANT EXPERIENCE CONTINUED

providing geotechnical analysis and design services. Reviewed previous geotechnical investigation and embankment construction drawings, performed seepage and slope stability analysis in accordance with Dam Safety Program. Prepared Gabion wall geotechnical analysis spreadsheets. Reviewed and sealed the construction drawings in accordance with State Dam Safety Requirement.

Brandon Woods Regional SWM Facility Embankment Inspection and Evaluation, Anne Arundel Co., Maryland. *Constellation Real Estate Group, Inc.* GEOTECHNICAL ENGINEER. Project involved project embankment inspection and geotechnical evaluations for the safety purposes. Performed slope stability analyses for the high pool level as well as rapid drawdown conditions. A three dimensional numerical seepage analysis was also performed to simulate the seepage flow under the complex boundary conditions.

Bryan Park Dam & Forest Hill Lake Park Dam Emergency Inspection. *City of Richmond, Virginia.* GEOTECHNICAL ENGINEER. The dam was toped during the Hurricane Gaston, 2004. The City of Richmond concerned the dam's safety in the later storm events. Performed detailed emergency dam safety inspection within the same day of request. The dam safety inspection was strictly followed the Virginia Dam Safety Program. Prepared a geotechnical report concerning dam safety on the second day. The possible causes of the problems were identified, the methods to correct the problems were proposed, and a construction cost was estimated in the report. The quick response allowed the client having time to correct the dam safety problems.

Evaluation of Elkridge Landing Road MSE Wall Stabilization at Baltimore/Washington International Airport, Baltimore County, Maryland. *Maryland Aviation Administration.* GEOTECHNICAL ENGINEER. This project involves the evaluation of the stabilization plan of a 25 years MSE wall near the Baltimore/Washington International Airport. This 20 ft high retaining wall is the first metal straps with pre-cast concrete panel MSE wall in the state of Maryland. The backfill material consisted of on-site residual silty gravel. Two sinkholes opened behind the wall panel after two heavy storms. The previous consultant performed the site investigation and drainage system evaluation using CCTV inspection. The remediation recommendation was the horizontal grouting in front of the MSE wall. Responsibility involves the evaluation of the geotechnical remediation recommendations provided by other consultant. Extensive literature review related to MSE wall failure case histories, evolution of backfill material for the MSE walls. Based on the site visits and careful analysis of the historical records of the wall construction and repair, it is found that the cause of the sinkhole openings are due to the surface drainage and wall construction was found acceptable. The new recommendation was only change the drainage direction and this recommendation is very cost effective. Authored the MSE wall evaluation report.

Jackson Mill Lake Dam Seepage Rehabilitation. *Cape May County, New Jersey.* GEOTECHNICAL ENGINEER. This 50 years old embankment dam was constructed with permeable silt materials with steel sheeting at upstream side. During the rehabilitation construction process, a piping problem at the downstream side was first identified by the construction inspector after a heavy rain. Performed site reconnaissance, reviewed existing construction documentations and subsurface conditions. Provided immediate action plan to mitigate the increasing piping problem. The safety of the embankment dam was secured.

Public and Private Developments. *Various Clients.* GEOTECHNICAL ENGINEER. Geotechnical and foundation recommendations for various public and private clients. Sample projects including geotechnical investigation for a minor league baseball stadium; Residential buildings and parking lot pavement design; Site geotechnical evaluation for large commercial development; Building distress evaluation and remediation; Porous pavement design for county parks; Stormwater management Pond geotechnical investigations; Wireless tower geotechnical design; Pavement design and pavement management for City governments.

Scudder Falls Bridge Replacement, Final Design Services, Bucks County, Pennsylvania. *Delaware River Joint Toll Bridge Commission.* GEOTECHNICAL MANAGER. Geotechnical Manager for the replacement of the Scudder Falls Bridge carrying Interstate 95 over the Delaware River. Responsible for the development and implementation of a geotechnical boring program. Responsible for developing, executing and overseeing this large-scaled subsurface exploration programs for the proposes structures and highway facilities; establishing soil/rock profiles and design parameters of geotechnical analysis, design, and construction purposes; supervising and performing designs of the above-mentioned shallow and deep foundations, as well as earth support systems under static and dynamic (seismic) loading in accordance with the latest LRFD protocol; developing mitigation measures for embankment settlement and stability; analysis and design of both temporary and permanent earth support structures; interpreting geotechnical instrumentation programs, developing geotechnical specifications and construction notes; reviewing construction documents; providing geotechnical field services in the construction stage.

CLAIM ANALYSIS

Ralph Eberhardt, PE

Years experience 45

Mr. Eberhardt is a manager responsible for the operation of Michael Baker's Lehigh Valley (Allentown) Office as well as technical projects. As a surveyor, contractor, engineer, construction manager and office executive, Mr. Eberhardt has years of experience on highway, transit, building,railroad, and airport projects, and has lead Michael Baker's Lehigh Valley presence since 2003. His local experience includes the Lehigh Valley International Airport Terminal Connector Building Construction Inspection, Allentown State Hospital Redevelopment Feasibility Study, Americus Hotel Renovation Independent Cost Estimate, South Whitehall Township's Wehr's Dam, and Owners Rep for City Center Lehigh Valley. He has also become a valuable resource for Michael Baker offices across the country. Mr. Eberhardt has a strong background in surveying, civil engineering, construction management, estimating, and business management, as well as extensive hands-on field experience. His expertise has also been called upon by counsel for claims support, litigation support, and expert witness services.

RELEVANT EXPERIENCE

Terminal Construction Inspection, Lehigh Valley International Airport (ABE), Hanover Township, Pennsylvania. *Lehigh Northampton Airport Authority.* PROJECT MANAGER. Responsible for client liaison and coordination, staff performance, schedule, quality and financial results. As local point of contact, responsible for maintaining connection with client representative to assure satisfaction. Michael Baker is providing construction inspection services to the Lehigh-Northampton Airport Authority (LNAA) at the Lehigh Valley International Airport (ABE) for the Terminal Connector project. The three-year, $35 million connection project will create a new, wider TSA checkpoint on an above-ground walkway between the main terminal to the Wilfred M. "Wiley" Post Jr. Concourse. LNAA is committed to creating a sustainable and energy-efficient project and is anticipated to meet LEED gold certification (Leadership in Energy and Environmental Design).

Americus Hotel Cost Estimating, Allentown, Pennsylvania. *ANIZDA (Allentown Neighborhood Improvement Zone De.* PROJECT MANAGER. Provided client liaison, proposal assistance and post-delivery client follow-up. Michael Baker developed a detailed comprehensive construction cost estimate to complete renovations to the 1920's era Americus Hotel to bring it to AAA 3-diamond rating.

Allentown State Hospital Feasibility Study, Allentown, Pennsylvania. *Lehigh Valley Economic Development Corporation.* MANAGER. Principal-in-Charge, Legislative Office and Local Liaison. Responsible for oversight of team, communication with PA State Senator and PA House Representative leading up to, throughout and after completion of study, as well as acting as point of contact for local business leaders and decision-makers. Michael Baker was selected as one of three consultants to assist with implementation of the EPA Brownfield Assessment Grant. One of the highest priority projects was reuse planning for the former Allentown State Hospital site. Work for the reuse planning included determination of environmental conditions, market feasibility, transportation analysis, utility assessment, and construction cost opinions for the Allentown State Hospital property.

City Hall and Public Works Lobbies Design Renderings, Allentown, Pennsylvania. *City of Allentown, Pennsylvania.* PROJECT MANAGER. Responsible for client liaison and coordination, staff performance, schedule, quality and financial results. As local point of contact, responsible for maintaining connection with client representative to assure satisfaction. Michael Baker developed interior design renderings for two of the city of Allentown's most visible and active buildings: Allentown City Hall and its public works office known as Bridgeworks. Michael Baker conducted interactive site visits with the client representative at each location and then provided draft renderings for review, comment, and resubmittal as final deliverables. Michael Baker also provided high-level cost estimates for each location for the client's budgeting purposes.

Allentown City Hall Lobby Renovation Support, Allentown, Pennsylvania. *City of Allentown, Pennsylvania.* PROJECT MANAGER. Responsible for client liaison and coordination, staff performance, schedule, quality and financial results. As local point of contact, maintain connection with client representative to assure

Michael Baker INTERNATIONAL

Education
M.B.A., 1998, Business Administration, Lehigh University

B.S.C.E., 1986, Civil Engineering, The Pennsylvania State University

A.S., 1981, Surveying, The Pennsylvania State University, Mont Alto Campus

Licenses/ Certifications
Professional Engineer, Pennsylvania, 1992, PE043059E

Professional Engineer, New Jersey, 1996, 24GE03887800

Professional Engineer, Maryland, 1996, 21917

Professional Affiliations
American Society of Civil Engineers (ASCE)

Ralph Eberhardt, PE

CLAIM ANALYSIS

RELEVANT EXPERIENCE CONTINUED

satisfaction. Michael Baker developed bid documents for the renovation of the Allentown City Hall lobby. The project included field-locating features as a substitute for original plans. The scope also included design drawings, specifications, bid support, and construction-phase services.

City Center Program Management, Allentown, Pennsylvania. *Two City Center.* PROJECT MANAGER. Responsible for client liaison, quality assurance and staff performance. Michael Baker provided program management support for the planning, design, construction, and operation of three multi-million-dollar buildings, which are part of a new, mixed-use, office, entertainment, retail, and residential complex in the heart of the city. Michael Baker's services for the construction of all three buildings included attending weekly coordination meetings during construction with the construction manager and contractor representatives and reporting on activities, reviewing physical progress in relation to the scheduled core-shell and tenant fit-out milestones, and providing guidance on the permanent management of the facilities and commissioning of critical equipment. Michael Baker also was responsible for coordinating the multiple, interdependent contracts involved in the construction of these facilities.

Lehigh River Waterfront Complex Contract Review, Allentown, Pennsylvania. *The Waterfront Redevelopment Partners, LP.* PROJECT MANAGER. Pursued, secured, and managed work with new client to provide expert commentary on AIA contracts between developer and architect, and developer and construction-manager-at-risk. Michael Baker provided contract administration support services for the planning, design, and construction of an eight-story, 125,000-square-foot office building and associated infrastructure and off-site improvements. Michael Baker's services included a detailed review of proposed contractual language, as revised by the developer, architect, and construction manager-at-risk.

Wehr's Dam Repair, South Whitehall Township, Pennsylvania. *South Whitehall Township.* PROJECT MANAGER. Responsible for original client liaison and coordination, staff performance, schedule, quality and financial results. Responsible for maintaining connection with higher level client representatives to assure satisfaction. Michael Baker developed full bid documents for the repair of Wehr's Dam in South Whitehall Township. The scope included compiling all previously developed environmental permits and manuals as well as provision of technical specifications and consultation on up-front contract specifications. Michael Baker attended pre-bid meetings, fielded pre-bid questions, consulted the owner on contractor selection, and conducted a pre-construction meeting. The scope also included part-time construction inspection and construction phase services such as meeting facilitation, document control, request for information (RFI) responses, and environmental permitting agency liaison.

Billera Hall Gymnasium Floor Study, DeSales University, Center Valley, Pennsylvania. *DeSales University.* PROJECT MANAGER. Responsible for marketing client, negotiation and execution of agreement, management of staff and oversight of final deliverable, as well as follow-up and finalization. Michael Baker conducted a preliminary investigation into reported accumulation of condensation (generally during the summer months) on the floor of the Billera Hall gymnasium. Michael Baker performed an initial site investigation with a client representative, held a follow-up meeting/conference call with the client, and developed a written report of findings and recommendations for follow up corrective action(s).

140 N. Broad Parking Garage Feasibility Study, Philadelphia, Pennsylvania. *Glemser Real Estate, LLC.* PROJECT MANAGER. Responsible for marketing client, negotiation and execution of agreement, management of staff and oversight of final deliverable, as well as follow-up and pursuit of additional assignments. Michael Baker provided a concept parking plan to incorporate 30 parking spaces into a workable footprint for an elevated parking structure. Michael Baker checked the plan against local zoning requirements and property setback distances, evaluated potential grade alterations and stormwater runoff, performed a desktop geological study, and developed a structural concept plan of the parking structure.

St. Luke's University Health Network Kitchen Renovation Feasibility Study, Bethlehem, Pennsylvania. *St. Luke's Hospital Network.* PROJECT MANAGER. Responsible for overall client liaison, quality assurance and staff performance. Michael Baker performed site investigations of the building systems related to the kitchen area and developed an existing conditions survey and report of the findings. Michael Baker developed a detailed site assessment of the existing condition of the kitchen area and basement level; coordinated with the kitchen consultant on kitchen layout; provided a feasibility study that investigated layout options, including wall reconfigurations; and developed cost estimates for the options

CONSTRUCTION INSPECTOR

Jonathan Conte, CMIT

Years experience 11

Mr. Conte has progressive Project Management, Field Inspection, and Construction Scheduling experience for various public agency clients in the New Jersey and New York Metro Area. Specific project experience includes construction of resiliency parks, storm sewers, storm water collection systems manholes, catch basins, water mains, hydrants, curbs, sidewalks, pedestrian ramps, and curb to curb roadway restoration. Trained in the principles of construction management, Mr. Conte brings a unique perspective to project administration and prides himself on establishing project efficiencies on all of his projects.

RELEVANT EXPERIENCE

Northwest Resiliency Park, Hoboken, New Jersey. *City of Hoboken.* SENIOR INSPECTOR. Michael Baker is providing full-time construction management for the construction of a 5.4 acre interactive urban park in the city of Hoboken, which incorporates sustainable design, extensive stormwater management features, including collection and storage of all storm runoff into an underground one-million-gallon stormwater storage tank. As part of the project, Michael Baker is overseeing extensive soil sampling and testing of this former industrial site, coordinate with local sewer authority for pump station construction, and manage construction of numerous park features, including play equipment, building structures, athletic facilities and other interactive features. Michael Baker is performing utility coordination, supervise the construction of the extensive stormwater sewer system, and manage the construction of a park building and community room. Additionally, our team will oversee attainment of SITES v2 sustainability certification, conduct public engagement, including updating the project website, and complete and submit all close-out documents. In addition to his role in park construction oversight, Mr. Conte is serving as the Assistant Scheduler performing schedule update reviews and analysis in Primavera P6.

Amtrak Nationwide AE Services. *Amtrak Fulton KY Station.* SCHEDULER. Michael Baker is providing architectural and engineering design and construction-phase services at various Amtrak stations nationwide. Each station includes a mixture of Americans with Disabilities Act (ADA) and state-of-good-repair (SOGR) station and platform improvements. Michael Baker's services have included schematic design, construction documentation and administration for architectural, structural, civil, stormwater, mechanical, and electrical engineering, along with cost estimating, bid review, construction administration, renderings, and presentations. Mr. Conte has provided plan review and baseline schedule preparation services for Amtrak's Fulton, KY station redevelopment utilizing Primavera P6.

QED1005-Dist Watermain Replacement LIC, Queens, New York. *NYCDDC Scope.* OFFICE ENGINEER/SENIOR INSPECTOR. Responsible for overall construction management of a $30M dollar infrastructure replacement project in New York City. Responsible for ensuring overall contractor compliance with specifications and ensuring the project finishes on time/budget. The scope of project work included construction inspection and project management for the installation of replacement distribution water mains in Long Island City and Astoria, Queens, NY. The project included the replacement of approximately 92,000 LF of 6", 12", and 20" ductile iron water main pipe as well as the requisite roadway restoration required for such activities. The project included work performed in both commercial and residential areas as well as work in and around transit facilities for NYCT and Amtrak. Major Project tasks include reviewing inspector reports for accuracy of measurements and ensuring that pay items are calculated in compliance with contract specifications; monitoring the total project budget and ensuring all field work conforms to contract budgetary constraints; Tracking all project progress and submitting contractor billing requests via DDC PIMS management software; Creating detailed estimates and performing BID analysis of contract items to forecast contract cost overruns and underruns; negotiating contract overruns and change orders with the project's contractor; ensuring contractor compliance with local, state, and federal regulations; Producing project tracking sheets to monitor the progress of work and

Michael Baker INTERNATIONAL

Education

M.S, 2022, Construction Management, NYU Tandon, Brooklyn, New York

M.B.A., 2011, Finance/Management, Fordham University

B.A., 2004, Economical/ International Studies, Fordham University

Licenses/ Certifications

NICET Level III – Highway Construction Inspection

2023, 145929

ACI Concrete Field Testing Technician - Grade 1, New York, 2026, 01357932

ICC Structural Masonry Special Inspector, New York, 2016, 8486575

Occupational Safety & Health Administration (OSHA), New York, 2018, 36-601511217 – OSHA 30

Construction Management Association of America, CMIT

Jonathan Conte, CMIT

CONSTRUCTION INSPECTOR

RELEVANT EXPERIENCE CONTINUED

completion of contractual obligations; Verifying that the contractor has obtained all necessary permits, certificates, licenses, insurances or approvals required for the performance of the work; Performing office management tasks including outfitting and ongoing maintenance of the project field office and monitoring of field staff attendance and payroll.

The Reconstruction of Fordham Plaza, Phase II. *NYCDDC Scope.* COMMUNITY CONSTRUCTION LIAISON/INSPECTOR. The scope of project work included the redesign and reconstruction of Fordham Plaza, an approximately 1.75 acre, open air plaza and transit hub in Bronx, New York. The plaza is a partial bridge structure traversing over Metro North Railroad (MNR) tracks and the MNR Fordham Station. Reconstruction work included the replacement and relocation of underground utilities including gas, electric, and water main, the ground-up construction of 5 distinct building structures of varying size, regrading for proper drainage, sidewalk concrete placement, landscaping, street light replacement and relocation, and electrical upgrade for transit improvements. Major Tasks – Major Project tasks included coordinating with project architects and designers to monitor submittal status and contractor's compliance with contract specifications and design intent; reviewing inspector reports for accuracy of measurements and ensuring that pay items are calculated in compliance with contract specifications; observing field operations and tabulating field quantities for major work operations including concrete pours, asphaltic concrete placement, and structural work; performing field sampling of materials under the guidance and supervision of certified inspectors; checking contractor's survey control points for accuracy and proper placement; creating surveys and estimates of project quantities to ensure contract budget remains on target; creating project as-built drawings via MS Visio including sidewalk field cards and fixed asset reporting; coordinating with the CM team and contractor to structure and adjust the project schedule around the needs of the local community stakeholders; regularly disseminating information on construction progress and schedule to project stakeholders.

The Reconstruction of Fordham Plaza, Phase I. *NYCDDC Scope.* COMMUNITY CONSTRUCTION LIAISON/INSPECTOR. The scope of project work included the redesign and reconstruction of the roadways abutting Fordham Plaza, an approximately 1.75 acre, open air plaza and transit hub in Bronx, New York. The plaza is a partial bridge structure traversing over Metro North Railroad (MNR) tracks and the MNR Fordham Station. Reconstruction work included the replacement of a 12" vitrified clay sewer line, redesign of roadway layout and development of a bus turnaround loop, replacement of concrete roadway base, asphaltic concrete and sidewalks, replacement of catch basins, and replacement of traffic signals and street lights. Major Tasks – Major Project tasks included coordinating with the CM team and contractor to structure and adjust the project schedule around the needs of the local community stakeholders; regularly disseminating information on construction progress and schedule to project stakeholders; fielding community concerns and working with the project's contractor to adjust operations and schedule to meet the needs of the community; tabulating field quantities for major highway work operations including concrete pours, asphaltic concrete placement, and replacement of concrete sidewalks and curbs; monitoring construction activities to ensure compliance with contract specifications; creating surveys and estimates of project quantities to ensure contract budget remains on target; observing field testing and sampling of materials; assisting the project's Office Engineer in developing tracking tools for monitoring contract submittals and schedule progress; reviewing inspector reports for accuracy of measurements and ensuring that pay items are calculated in compliance with contract specifications; creating project as-built drawings via MS Visio including sidewalk field cards and fixed asset reporting.

Reconstruction of Sidewalks and Curbs at Various Locations, Bronx, New York. *NYCDDC Scope.* OFFICE ENGINEER. The scope of project work included construction inspection and management for the installation of new sidewalks and curbs at various locations throughout the borough of Bronx, New York. Major Project tasks included reviewing inspector reports for accuracy of measurements and ensuring that pay items are calculated in compliance with contract specifications and payment terms; monitoring the total project budget and ensuring all field work conforms to contract budgetary constraints; tracking all project progress and submitting contractor billing requests via DDC PIMS management software; conducting field surveys to mark the limits of damaged sidewalk from the New York City Department of Transportation lists; verifying the replacement of steel and concrete faced curbs and sidewalks at designated locations; coordinating with the local community for the duration of the project; checking contractor's Maintenance and Protection of Traffic (MPT) for compliance with governmental agency specifications; inspecting ADA compliance of all pedestrian ramps constructed; inspecting curb line reveals; producing and verifying detailed homeowner sidewalk assessments via MS Visio; producing project tracking sheets to monitor the progress of work and completion of contractual obligations; verifying that the contractor has obtained all necessary permits, certificates, licenses, insurances or approvals required for the performance of the work; supervising the performance of the inspection team in the field

CPM SCHEDULING

Juan Uribe

Years experience **31**

Mr. Uribe is an experienced Construction Scheduler with strong skills in organizing, operating, and executing schedules for large scale projects using project management methodologies, project management tools and data bases required for scheduling and planning. He has experience in Baseline and his work includes updating schedules, work break down structures, cost analyses, claim mitigation, and claim analysis for different projects including, railroads, rail stations, airports, highways, bridges, oil and gas pipelines, production facilities, pump stations, production plants and environmental projects. Mr. Uribe also has extensive experience using Primavera planning and scheduling software.

RELEVANT EXPERIENCE

Northwest Resiliency Park, Hoboken, New Jersey. *City of Hoboken.* SCHEDULER. Responsible for developing, updating, tracking and managing all construction schedules, updates, baselines, changes of plan, and claims. Monitored and reported due dates, critical path progress, and milestone accomplishments using Primavera Project Planner P6. Michael Baker is providing full-time management for the construction of a 5.4-acre interactive urban park in the city of Hoboken. Construction will include sustainable design and extensive stormwater management features, such as an underground one-million-gallon tank that will collect and store all stormwater runoff. As part of the project, Michael Baker is coordinating with the local sewer authority for on-site pump station construction under a separate contract. The project scope also includes managing construction of an extensive and complex stormwater sewer system, building structures, athletic facilities, play equipment, and other interactive features. Michael Baker is also performing utility coordination, overseeing attainment of SITES v2 sustainability certification, conducting public engagement, updating the project website, and managing all requisitions for disbursement of New Jersey Infrastructure Financing Program payments to the city of Hoboken.

Demolition and Site Preparation for the Red Hook Combined Sewer Overflow Abatement Facility, RF3 CP-1, Brooklyn, New York. *New York City Department of Environmental Protection.* TECHNICAL ASSISTANT. Responsible for developing, updating, tracking, and managing all construction schedules, updates, baselines, changes of plan, and claims. Monitored and reported due dates, critical path progress, and milestone accomplishments using Primavera Project Planner. Michael Baker is providing construction management services for the demolition of building structures and site preparation as the first phase of construction of the Red Hook Combined Sewer Overflow Abatement Facility. Michael Baker's proactive approach has prevented any schedule delays and resulted in zero claims and no accidents on site. Services include all demolition, utility disconnects, and regulated materials abatement of the project site.

Construction Management Services for Upgrade of Newtown Creek Water Pollution Control Plant, New York City, New York. *New York City Department of Environmental Protection.* SCHEDULER. Responsible for claim analysis for NYDEP for the following contracts: NC50E, NC50G, NC60G, and NC60E. Michael Baker is providing Construction Management Services as part of a joint venture, including Project Management and Resident Engineering Inspection services, in connection with the following NYCDEP Construction Contracts totaling over $1.5B in construction costs. NYC's Newtown Creek Water Pollution Control Plant (WPCP), is the largest of its 14 wastewater treatment plants. The plant is undergoing a major capital improvement and upgrade program to expand its intended capacity from 1.2 to 1.8 cubic meters per day – a 50% increase. Process improvements will result in dramatic reductions of biochemical oxygen demand (BOD), and will help bring NYC into compliance with the secondary treatment standards required under the Clean Water Act. Michael Baker is performing construction management services for portions of Phase 2 and 3 of the upgrade of the Newtown Creek WPCP.

South Street and Adams Street Drainage Improvements, Newark, New Jersey. *City of Newark, New Jersey.* SCHEDULER. Responsible for updating, tracking, and managing all schedule updates and baselines. Monitored and reported due dates, critical path progress, milestones,

Michael Baker INTERNATIONAL

Education
B.S., 1993, Petroleum Engineering, Universidad Industrial de Santander, Colombia

Juan Uribe

CPM SCHEDULING

RELEVANT EXPERIENCE CONTINUED

and accomplishments using Primavera Project Planner. Michael Baker provided a comprehensive drainage study and design for the combined sewer overflow community of Ironbound surrounding the South and Adams Street corridor. The area suffers from frequent flooding that is stifling business growth, creating toxic environments from combined sewers, and causing property and personal damage. Michael Baker studied the roadway drainage and overall drainage patterns of the network of ditches draining to Newark Bay. Following the study, alternatives were developed to separate the sewers in the most critical downstream areas and install green infrastructure to retain rainfall. Michael Baker also assisted the client with long-term prioritization for future separation of sewers. The designs were coordinated with the Ironbound Community Corporation and incorporated the Green Streets Initiative as well as the Passaic Valley Sewerage Commission.

Construction Management and Construction Inspection Services for the Reconstruction of Route 52 and the Route 52 Causeway - Contract B, Somers Point to Ocean City, New Jersey. *New Jersey Department of Transportation (NJDOT).* SCHEDULER. Responsible for developing, updating, tracking and managing all construction schedules, updates, baselines. Monitored and reported due dates, critical path progress, milestones and accomplishments using Primavera Project Planner. Michael Baker is providing construction management and construction inspection for the reconstruction of approximately three miles of New Jersey Route 52 from Route 9 in Somers Point to Bay Avenue in Ocean City. The reconstruction includes the replacement of the Route 52 Causeway, which consists of four low-level concrete bridges, including two bascule spans, with two main bridges. 3,300 feet and 5,500 and in length, that are separated by 2,000 feet of roadway section on one of the islands. Construction management services include quality reviews and monitoring construction schedules. Construction inspection services include daily inspection of all structural work, paving, and drainage. The full project scope included approximately 7,000 ft. of new and widened roadway construction and the construction of a 3,500 sf new Visitor Center with associated utilities.

Construction Management and Construction Inspection Services for the Reconstruction of Route 52 and the Route 52 Causeway - Contract A, Somers Point to Ocean City, New Jersey. *New Jersey Department of Transportation (NJDOT).* SCHEDULER. Responsible for developing, updating, tracking and managing all construction schedules, updates, baselines. Monitored and reported due dates, critical path progress, milestones and accomplishments using Primavera Project Planner. Michael Baker is providing construction management and construction inspection for the reconstruction of approximately three miles of New Jersey Route 52 from Route 9 in Somers Point to Bay Avenue in Ocean City. The reconstruction includes the replacement of the Route 52 Causeway, which consists of four low-level concrete bridges, including two bascule spans, with two main bridges. 3,300 feet and 5,500 and in length, that are separated by 2,000 feet of roadway section on one of the islands. Construction management services include quality reviews and monitoring construction schedules. Construction inspection services include daily inspection of all structural work, paving, and drainage. The full project scope included approximately 7,000 ft. of new and widened roadway construction and the construction of a 3,500 sf new Visitor Center with associated utilities.

Trenton Transit Center Rehabilitation Construction Management Services, Trenton, New Jersey. *New Jersey Transit Corporation.* SCHEDULER. Responsible for developing, updating, tracking and managing all construction schedules, updates, baselines. Monitored and reported due dates, critical path progress, milestones and accomplishments using Primavera Project Planner. Participated in claim analysis and claim mitigation.

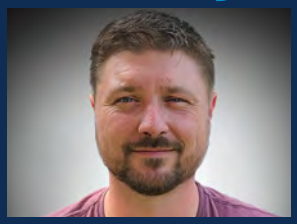
Wilmington Station Renovation and Restoration Construction Management and Inspection, Wilmington, Delaware. *Amtrak.* SCHEDULER. Responsible for developing, updating, tracking and managing all construction schedules, updates, baselines. Monitored and reported due dates, critical path progress, milestone accomplishments using Primavera Project Planner. Worked with resident engineer and field manager in claims mitigation, development of time impact evaluation forms and tracking its impact on the schedules for potential claims or extensions of time. Michael Baker provided construction management and inspection services for the restoration and renovation of the historic Wilmington Station. Michael Baker's services included preconstruction design reviews; risk analyses; constructability reviews; review of value engineering proposals; construction scheduling, quality assurance and quality control reviews; monitoring the construction budget and minimizing change orders; and construction inspection. All construction work was performed without disruptions to train service.

Delaware River Heritage Trail CM, Burlington County. *Burlington County.* SCHEDULER. Responsible for developing, updating,tracking and managing all construction schedules, pdates, baselines, changes of plan, and claims. Monitored and reported due dates, critical path progress, and milestone accomplishments using Primavera Project Planner.

COST ESTIMATING

Jeffrey Weiss, CCT, CQM-C

Years experience 19



Mr. Weiss is a construction specialist within the Construction Services Department of Michael Baker. Since joining Michael Baker, he has been actively involved in preparing cost estimates, construction schedules, and providing construction management services for various clients while utilizing the latest software and industry technologies. Upon graduating from the University of Pittsburgh, with a Bachelor of Science in Civil Engineering and a certificate of Construction Management, Mr. Weiss entered the construction industry as a surveyor. He then progressed to a project engineer and superintendent, where he gained valuable knowledge as to how construction projects are phased, scheduled, constructed, and managed. This experience enabled him to successfully transition into a project management role where he worked on numerous projects that have included commercial, religious, industrial, military installations, hospitals, medical institutions, educational, and correctional facilities. Having managed projects for both general contractors and construction managers, while working with both union and open shop contractors, Mr. Weiss possesses the unique ability to relate to and work with a client from concept through design and construction to commissioning. His knowledge and experience have carried over to Michael Baker where he draws on this experience to provide the highest quality outcome in all aspects of a project.

RELEVANT EXPERIENCE

Hartford Line Railroad Stations Design, New Haven, Connecticut to Springfield, Massachusetts. *Connecticut Department of Transportation.* COST ESTIMATOR. Responsible for providing quantity take-offs and construction cost estimates for multiple project locations across all phases of design. Michael Baker is developing the design for 11 new or upgraded high-speed passenger rail stations from New Haven, Connecticut, to Springfield, Massachusetts. The Connecticut Department of Transportation's new CT Rail "Hartford Line" project represents a broad partnership between the state of Connecticut, Amtrak, and the Federal Railroad Administration, along with the states of Massachusetts and Vermont. Michael Baker is preparing erosion and sedimentation control and designs for pedestrian bridges and parking facilities that comply with Americans with Disabilities Act (ADA) standards. Additional services include preparing permit applications, performing right-of-way and utility coordination, constructability reviews, and construction management, and overseeing landscape design. Projects are in Enfield, Windsor Locks, Windsor, Hartford, Newington, West Hartford, Berlin, Meriden, Wallingford, North Haven, and New Haven. As of 2020, the stations in New Haven, Meriden, Wallingford, Berlin, and Hartford are complete.

Full Facility Renovation Design-Build RFP, Orangeburg Army Reserve Center, Orangeburg, New York. *U.S. Army Corps of Engineers, Louisville District.* COST ESTIMATOR. Responsible for providing construction cost estimates for the design-build RFP to renovate an existing Army Reserve Center. Estimating services included development of pricing for the Full Facility Assessment, along with MCACES estimates for the final proposed design. Michael Baker developed a design-build request for proposal (RFP) for the Full Facility Renovation Project of the Orangeburg, New York Army Reserve Center(ARC). This project included renovation to the existing 168-member ARC training building, organizational maintenance shop, military equipment parking area, and a privately owned vehicle parking area on an 18.40-acre site. Michael Baker led a reboot meeting, attended site visits, produced drawings using CADD technology. The scope of work also included completing specifications using SPECSINTACT, presenting the final design-build RFP, and discussing comments at a two-day meeting.

Architecture-Engineering (A-E) Services in Support of Hill AFB 75th CEG/CEN, Hill Air Force Base, Utah. *Department of the Air Force.* COST ESTIMATOR. Responsible for providing MCACES estimates for multiple projects. Projects included demolition, renovation, new construction, site development, fire protection, and mechanical replacement. Michael Baker is providing architecture and engineering services for project at Hill Air Force Base. Its services include architecture designs, agency coordination, demolition, and structural, HVAC, electrical, mechanical, plumbing, communication, and fire suppression engineering. Designs include construction documents, demolition plans, structural calculations, code requirements, and detailed cost estimates.

Michael Baker INTERNATIONAL

Education

B.S., 2004, Civil Engineering/ Construction Management, University of Pittsburgh

Licenses/ Certifications

Construction Quality Management for Contractors, 2012

Certified Cost Technician, 2022

Professional Affiliations

Association for the Advancement of Cost Engineering International (AACEI)

Construction Management Association of America (CMAA)

Jeffrey Weiss, CCT, CQM-C

COST ESTIMATING

RELEVANT EXPERIENCE CONTINUED

Design, Resident Engineering, and Construction Management Services for the Coney Island Water Pollution Control Plant Upgrade, Brooklyn, New York. *New York City Department of Environmental Protection.* COST ESTIMATOR. Responsibilities included providing construction cost estimating services at various levels of design for multiple layouts. Michael Baker, in joint venture with another firm, has been providing design, resident engineering, and construction management services for the upgrade of the 100-million-gallon-per-day Coney Island Water Pollution Control Plant. The upgrade includes design and construction of new aeration and odor control systems, new primary settling tanks and sludge degritting facilities, new final settling tanks, disinfection facilities, and a new power substation and other buildings, and reconstruction of the main sewage pump station, settling tanks, and gravity thickeners. The upgraded plant provides treatment for 100 million gallons per day of wastewater at average conditions, and maximum capacity was increased from 140 to 200 million gallons per day, with 85 percent pollutant removal.

IRS Service Center Modernization, Ogden, Utah. *General Services Administration.* COST ESTIMATOR. Responsible for reviewing contractor change order requests and developing Independent Government Estimates to validate proposed changes. Michael Baker provided architectural and engineering services for the 500,000-square-foot Department of the Treasury Internal Revenue Service (IRS) Service Center Building, owned by the General Services Administration. For this project, Michael Baker developed infrastructure and upgrades to address critical needs, reduce future maintenance, improve life safety, resiliency, sustainability, and efficiency, and minimize repair costs. The project provided architectural engineering, lighting and utilities upgrades, pre-design program verification, and bid packaging including concept design documents, design development documents, construction documents, specifications, cost estimates, value engineering services, computer-aided design and drafting, building information modeling, and construction phase services for the interior and exterior construction

Gate and Access Design for Morley and Grand Drainage Tunnels, Nogales, Arizona. *U.S.* ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT. Cost Estimator. Responsible for quantifying and compiling cost estimates. This Task Order provided the design services for the United States Army Corps of Engineers (USACE) – Fort Worth District to develop the analysis and construction documents to construct at total of 4 gates (2 ea.) inside the tunnels and stairwell access points between the gates into the Grand and Morley Tunnels (box culverts) within the footprint of the DeConcini Port of Entry in Nogales, AZ in Border Patrols Tucson Sector. The stairwell access for the Grand Tunnel was placed in the center of southbound lane 2. A minimum of one southbound access lane into Mexico had to remain open at all times and construction activities were limited to the hours of 10 pm to 6 am. From 6 am to 10 pm at night all lanes had to be open to southbound traffic. The project included survey, mapping, aerial photography, hydraulic analysis, a Design Analysis Report, and project plans, cost estimates, and specifications at 15%, 60%, 90% and 100% submittals. We also developed the RFP package. The RFP included construction plans and specifications for the addition of two new stairwell access points into each of the two existing tunnels, and four new gates. Post design services are not a part of this project and were done under a separate task order.

Camp Alvarado, Extension II (TO 0028), Kabul International Airport (KBL), Kabul, Afghanistan. *U.S. Army Corps of Engineers, Transatlantic Middle East District.* COST ESTIMATOR. Responsible for cost estimating and document control. Michael Baker prepared design-build documents for construction of two aircraft parking aprons; two aircraft pre-engineered building hangars; an office building with restrooms, a break room, and showers; an extension of the existing passenger terminal; an additional entrance gate with sally port and guard building; site improvements including asphalt paved entrance road and vehicle parking; and utility infrastructure (electrical, mechanical, plumbing, drainage, and information systems). Michael Baker provided a cost estimate and construction schedule as part of the design deliverables.

Environmental and Asbestos Remediation Services, Ashtabula County, Ohio. *Ashtabula County Port Authority.* COST ESTIMATOR. Provided construction cost estimates and site survey for feasibility of remediation of industrial facility. Michael Baker completed previously initiated investigations and remedial tasks necessary to advance the former First Energy Plant C through the Ohio Environmental Protection Agency (OEPA) Voluntary Action Program (VAP). The plant is being operated as a pumping station for the intake/release of water from Lake Erie for use by local manufacturers. Michael Baker provided environmental program management support, including facility engineering, compliance, permitting, bid specifications, and bid analysis for plumbing, electrical, structural, and remedial actions at the facility. Michael Baker led the client's successful effort to obtain a Clean Ohio Revitalization Fund grant for $3 million in 2007 and a Covenant Not to Sue (CNS) for the site from the VAP in December 2012. Michael Baker also performed Phase I and II environmental site assessments, asbestos and hazardous materials surveys, asbestos abatement design and oversight, and soil and fly ash remediation design and oversight

Patrick H. Hicks
Construction Inspector

Education
Civil Engineering and Construction Management, Burlington County College, 1995
Architectural Construction Drafting & Design, Star Design School of Drafting & Electronics

Professional Certifications
NICET IV – Highway Construction
NICET III – Water & Sewer Lines
ACI – CCTC
ACI Grade 1 Certified
SAT Certified
TCP Certified (Rutgers)
OSHA 10-Hour Construction Health & Safety Training
OSHA Fall Protection Training

Mr. Hicks has over 25 years of experience on heavy highway projects comprised of bridge, roadway, electrical and facility construction. He has served as Resident Engineer, Traffic Control Coordinator, and Construction Inspector on projects for the NJTA, NJDOT, and several New Jersey Counties.

NJTA A3902 Generator Replacement at Interchange 13, Northern Division Headquarters, and Interchange 15W, Contract No. T500.620; Lighting Improvements and Standy Generator Replacement at Turnpike Interchange 17E, Contract No. T200.637; and 2022 HVAC Upgrades at Various Locations, Contract No. A500.642; 1/23-Present; $11.3M. Construction Inspector for two of these construction contracts, as a subconsultant to Michael Baker, for the Authority. Work on Contract No. T500.620 ($2.5M) and Contract No. T200.637 ($8.8M) consisted of generator placement, generator and controller pad concrete and reinforcing, conduit, wiring, upgrading of existing generator controllers to connect to the replacement generators, demolition of existing generators and enclosure buildings. Contract No. T200.637 ($8.8M) also included removal of existing roadway lighting structures, junction box foundations, new wiring, and installation of new LED lighting structures. As Construction Inspector, he was responsible for managing and recording daily activities and pay quantities in a daily report in CapEx. Responsible for being present for scheduled DCA inspections, as required. Other duties included witnessing on-site materials testing and verifying that the work was performed in accordance with the plans and specifications. *Reference: NJTA, Rich Reuter (732) 750-5300*

NJTA A3803 Lighting Improvements at Interchanges 98, 117, 118, 102, and 105, Contract Nos. P200.533, P200.537, P200.566, and P200.610; 1/21-12/22 $12.61M. Construction Inspector for this lighting and related road improvements project at Interchange 114 on the Garden State Parkway. Work items on the project included inlet filters, beam guide rail, berm surfacing, #6 A.W.G. multiple lighting cable, miscellaneous electrical work, load center cabinets, temporary lighting, removing and salvaging existing facilities, righted nonmetallic conduit,, junction boxes, junction box foundations, concrete bases, #2/0 A.W.G. power cable, various types of ground wire, 2-way duct bank, 3-way duct bank, 4-way duct bank, RMC, transformers, lighting standards, luminaires, seeding, lighting manholes, utility relocation, and MPT. As Construction Inspector, he was responsible for managing and recording daily activities and pay quantities in a daily report in CapEx. Responsible for being present for scheduled DCA inspections, as required. Other duties included witnessing on-site materials testing and verifying that the work was performed in accordance with the plans and specifications. Scheduled and conducted punch list inspections and assisted in determining substantial completion and project completion. *Reference: NJTA, Daniel Hesslein (732) 750-5300 x8544; NJTA, Joy Christian (732) 221-0634 (Mobile)*

NJTA A3713 New Jersey Turnpike – Garden State Parkway Lighting Improvement at Interchange 114, Contract No. P200.532; 1/20-12/20; $2.9M. Served as Construction Inspector on this project located at Interchange 114 on Garden State Parkway. Construction Inspection services on this contract consisted of inspection of Soil Erosion controls, excavation/embankment, bituminous paving Trench Repairs, concrete placement, sheeting installation, Coordination of old Lighting system removal with JCPL, coordination of Lighting System connection to offsite utility, traffic control coordination with Contractor, NJTA Traffic Operation and NJSP. Oversaw lighting system testing, in addition to lighting standard, conduit, wiring, luminaires, and related electrical equipment installation inspections. Managed and recorded daily activities and pay quantities in a daily report in CapEx. Witnessed on-site materials testing and verified that the work was in accordance with the plans and specifications. Scheduled and conducted punch list inspections and assisted in determining substantial completion and project completion. Churchill performed in-house quality reviews of project documentation, in addition to status reports and invoices consisting of preparation of monthly progress reports, invoices, and supporting materials. *Reference: NJTA, Daniel Hesslein; NJTA, Joy Christian*

NJTA A3713 Interchange 11 Replacement of North Ramp Gates, Contract No. A200.439; 1/19-1/20; $3.47M. Construction Inspector on this project located at Interchange 11 on the New Jersey Turnpike. Construction Inspection services on this contract consisted of erosion and sedimentation control, excavation/embankment, guiderail, bituminous paving, concrete placement, sheeting installation, gate and gate control system installation, lane control systems, traffic control coordination, traffic striping, system testing, and other incidental work in addition to conduit, wiring and related electrical equipment. The construction inspector managed and recorded daily activities and pay quantities in a

daily report in CapEx. The inspector was present for scheduled DCA inspections if required for this project and witnessed on-site materials testing and verified that the work was in accordance with the plans and specifications. The inspector, with the assistance of the Project Manager, scheduled and conducted punch list inspections and assisted in determining substantial completion and project completion. As Construction Inspector, he was responsible for managing and recording daily activities and pay quantities in a daily report in CapEx. Responsible for being present for scheduled DCA inspections, as required. Other duties included witnessing on-site materials testing and verifying that the work was performed in accordance with the plans and specifications. Scheduled and conducted punch list inspections and assisted in determining substantial completion and project completion. *Reference: NJTA, Daniel Hesslein; NJTA, David Colella (732) 379-1094*

Guiderail Improvements in 10 Locations, Gloucester County; 1/17-12/17; $1.2M. Served as Resident Engineer for this project that included the replacement of guiderail at 10 locations in Gloucester County. The various improvements and replacements consisted of concrete repairs, constructed guiderail, as well as embankment and stream stabilization. Some existing parapets were removed, replaced, and upgraded to truck parapets. Duties included serving as the client's direct on-site representative to the contractor, direct supervision of a field Inspection staff, performing quality assurance and quality control oversight of major items of work in progress and ensuring that the project was constructed in accordance with the project plans and specifications, checking accuracy of inspection reports, monitoring progress schedule and progress, resolving conflicts between inspection staff and contractor, preparing change orders, preparing monthly pay estimates and project close-out. *Reference: Gloucester County, Vincent M. Voltaggio (856) 307-6600*

NJTA GSP P3448 Shoulder Restoration and Improvements MP 90.5 to 99.5 Contracts P200.200 & P200.201; 10/12-1/17; $170M. Traffic Control Coordinator/Construction Inspector on two concurrent NJTA projects. The project included widening travel lanes to 12 feet and completing mainline travel lane improvements in each direction on the Garden State Parkway. Major work items included removal of 3 existing bridges, construction of 3 new bridges and the widening and redecking of 7 existing bridges. The project also required the removal of portions of 2 existing bridges, as well as 340,000 SY of complete roadway milling, reprofiling activities to improve drainage, 200,000 tons of HMA paving, construction to extend existing culverts, the installation of 13 new permanent sign structures, relocation of one ground-mounted Dynamic Message Sign to an overhead sign structure including relocation of fiber optic utility to DMS sign; drainage improvements including 14 stormwater management basins and recharge swales, additional signage and signing delineations, upgrades to interchange lighting including replacement of every light pole and junction box, traffic striping, maintenance and protection of traffic and other miscellaneous work. Guide rail and Median Crossover Protection items for this project included for 22 flared guide rail terminals, 35,900 LF of guide rail removal, 40,500 LF of beam guide rail and 8,100 LF of reset beam guide rail, guide rail posts, as well as the installation of QuadGuard Impact Attenuators, release terminals and parapet and pylon extensions, and installation of 4 in-pavement wireless sensors at two locations. Construction inspection duties included the inspection of guide rail improvements, drilled shaft foundations for JCPL Utility Transmission Line Relocations, overhead and cantilever sign structure foundations, reinforced concrete storm sewer installation, water main extension at shoulder widening and fiber optic utility transmission and distribution line installation and relocation and other roadway improvements. Culvert repairs at Sawmill Creek and Hurley Pond included inspection of storm sewer flow diversion, cleaning of silt and sediment and removal of loose structural materials from existing pipe and drainage structures, CCTV inspection of existing conditions, stream flow diversion with pump-thru-pipe drain system, fabrication and installation of structural steel ribs and reinforcement steel, placement of reinforcing / welded wire fabric, pneumatically applied Portland Cement within the 142" x 102" pipe arch culvert and 96" concrete pipe repairs. Traffic Control Coordinator responsibilities included review and coordination of numerous contractor's lane closing submissions, coordination of detour route verification and approval process with numerous agencies; coordination of NJSP traffic slowdowns and escorts for setting of beams and escort of wide loads, daily coordination and review of all lane closings; traffic shifts with the project RE's, NJTA traffic operations, NJSP, NJTA liaison engineer, NJDOT traffic operations, Monmouth and Ocean county engineers; reviewed all MPT devices on both projects and provided deficiency lists to the RE's, liaison engineers and contractors. Construction duties included performing quality assurance oversight of major items of work in progress and ensuring project was constructed in accordance with project plans and specifications, review of all inspectors' Daily Construction reports and quantity reviews. *Reference: NJTA, Joseph Johnson (732) 750-5300 x8254; GPI, Richard Seamon (908) 236-9001*

NJDPMC T0278-00 Springfield Rest Area Building Repairs for the DPMC, Burlington Township, NJ; 4/99-4/00; $300K. Construction Inspector for this project to convert sewer and water facilities at the Springfield Rest Area to local municipality services. The project included a 2 mile water main on force main extension on a stretch of Route I-295. Duties included documentation of quantities and ensuring contractors' work maintained conformance with project plans and specifications.

FEE PROPOSAL

CMF-004 WORK ORDER NO. 01
DCA RESILIENT COMMUNITIES

DPMC PROJECT #J0405-00 | MAY 7, 2024

Michael Baker
INTERNATIONAL

SUBMITTED TO
DEPARTMENT OF THE TREASURY, DIVISION OF
PROPERTY MANAGEMENT & CONSTRUCTION

CMF SERVICES FEE PROPOSAL
DCA RESILIENT COMMUNITIES - CONSTRUCTION MANAGEMENT FIRM

THIS FEE PROPOSAL TO BE RETURNED ELECTRONICALLY
VIA EMAIL TO: christopher.geary@treas.nj.gov & jennifer.roeckel@treas.nj.gov

DATE: May 07, 2024
PROJECT #: J0405-00 CMF-004
WORK ORDER #: 01

THIS PROPOSAL DUE DATE, NO LATER THAN 2:00 PM, MAY 07, 2024

FIRM NAME: Michael Baker International, Inc.

THE UNDERSIGNED PROPOSES TO PROVIDE ALL PROFESSIONAL SERVICES REQUIRED IN THE SCOPE OF WORK AND THE IDIQ TERM CONTRACT CMF-003 AGREEMENT BETWEEN THE STATE OF NEW JERSEY AND THE CMF.

SUB-TOTAL CMF TASK/LABOR/FEE SHEET - Tasks 1 -6	$	990,101.00
SUB-TOTAL CMF TASK/LABOR/FEE SHEET - Tasks 7 - 11	$	593,128.00
TOTAL NOT TO EXCEED (NTE) FEE FOR CMF SERVICES	$	**1,583,229**
REPRODUCTION ALLOWANCE	$	**2,000**
ALLOWANCES PROPOSED BY CMF (Mileage for inspections & meetings)	$	**10,000**
	$	
	$	**$12,000.00**
TOTAL WORK ORDER NTE AMOUNT	$	**$1,595,229.00**

THE LEVELS AND CORRESPONDING HOURLY RATES INCLUDED IN THIS WORK ORDER PROPOSAL WILL BE FOR THE BASE PERIOD OF TERM CONTRACT CMF 004. **WORK ORDER PROPOSAL GOOD FOR 60 DAYS AFTER THE DUE DATE.**

SIGNATURE

Vice President

TITLE

CMF TASK/LABOR/FEE SHEET

FIRM: __Michael Baker International, Inc._____

Project # J0405-00; Work Order# 01
Project Name: DCA RESILIENT COMMUNITIES
CONSTRUCTION MANAGEMENT FIRM

PROJECT PHASE OR TASK	CMF's LEVEL OF EFFORT IN HOURS/FEE								TOTALS PER TASK
	LEVEL	7	6	5	4	3	2	1	HOURS
	*HOURLY RATE	$277.00	$255.00	$206.00	$168.00	$141.00	$94.00	$80.00	$ AMOUNT
Task 1	HOURS	0	120	884	0	0	0	0	1004
DESIGN OVERSIGHT	AMOUNT	$0.00	$30,600.00	$182,104.00	$0.00	$0.00	$0.00	$0.00	$212,704.00
Task 2	HOURS	0	155	920	0	0	0	0	1075
GENERAL REPORTING REQIREMENTS	AMOUNT	$0.00	$39,525.00	$189,520.00	$0.00	$0.00	$0.00	$0.00	$229,045.00
Task 3	HOURS	0	0	63	240	480	0	0	783
INSPECTIONS AND PHOTOGRAPHS	AMOUNT	$0.00	$0.00	$12,978.00	$40,320.00	$67,680.00	$0.00	$0.00	$120,978.00
Task 4	HOURS	0	155	804	0	0	0	0	959
CONTRACTOR DELIVERABLE REVIEW	AMOUNT	$0.00	$39,525.00	$165,624.00	$0.00	$0.00	$0.00	$0.00	$205,149.00
Task 5	HOURS	0	100	200	200	0	0	0	500
PROVIDE INDEPENDENT COST ESTIMATES (ICE)	AMOUNT	$0.00	$25,500.00	$41,200.00	$33,600.00	$0.00	$0.00	$0.00	$100,300.00
Task 6	HOURS	0	155	400	0	0	0	0	555
SCHEDULING, MASTER SCHEDULE	AMOUNT	$0.00	$39,525.00	$82,400.00	$0.00	$0.00	$0.00	$0.00	$121,925.00
	HOURS	0	685	3271	440	480	0	0	4876
NOT TO EXCEED TOTALS	AMOUNT	$0.00	$174,675.00	$673,826.00	$73,920.00	$67,680.00	$0.00	$0.00	$990,101.00
							CMF SERVICES	HOURS	4876
							SUB-TOTAL CMF SERVICES - Tasks 1 - 6	AMOUNT	$990,101.00

CMF TASK/LABOR/FEE SHEET
FIRM: Michael Baker International, Inc._____

Project # J0405-00; Work Order# 01
DCA RESILIENT COMMUNITIES
CONSTRUCTION MANAGEMENT FIRM

PROJECT PHASE OR TASK	CMF's LEVEL OF EFFORT IN HOURS/FEE								TOTALS PER TASK
	LEVEL	7	6	5	4	3	2	1	
	*HOURLY RATE	$277.00	$255.00	$206.00	$168.00	$141.00	$94.00	$80.00	HOURS / $ AMOUNT
Task 7	HOURS	0	0	0	240	0	0	0	240
STATEMENT OF ASSURANCES COMPLIANCE	AMOUNT	$0.00	$0.00	$0.00	$40,320.00	$0.00	$0.00	$0.00	$40,320.00
Task 8	HOURS	0	0	256	1160	0	0	0	1416
PROJECT CMF REVIEW OF CONSTRUCTION CONTRACTOR INVOICES	AMOUNT	$0.00	$0.00	$52,736.00	$194,880.00	$0.00	$0.00	$0.00	$247,616.00
Task 9	HOURS	0	60	430	670	0	0	0	1160
MEETINGS AND CONFERENCE CALLS	AMOUNT	$0.00	$15,300.00	$88,580.00	$112,560.00	$0.00	$0.00	$0.00	$216,440.00
Task 10	HOURS	0	56	112	0	0	0	0	168
CONTRACT MODIFICATIONS	AMOUNT	$0.00	$14,280.00	$23,072.00	$0.00	$0.00	$0.00	$0.00	$37,352.00
Task 11	HOURS	0	40	200	0				240
PROJECT CLOSEOUT	AMOUNT	$0.00	$10,200.00	$41,200.00	$0.00	$0.00	$0.00	$0.00	$51,400.00
NOT TO EXCEED TOTALS	HOURS	0	156	998	2070	0	0	0	3224
	AMOUNT	$0.00	$39,780.00	$205,588.00	$347,760.00	$0.00	$0.00	$0.00	$593,128.00
							CMF SERVICES	HOURS	3224
							SUB-TOTAL CMF SERVICES - Tasks 7 - 11	AMOUNT	$593,128.00

Michael Baker

INTERNATIONAL

We Make a Difference

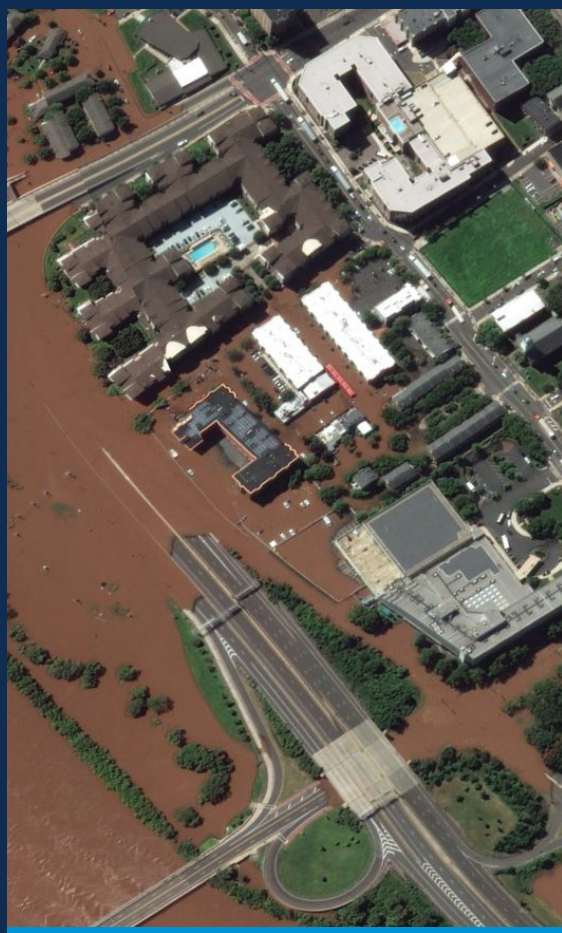
MICHAEL BAKER INTERNATIONAL
300 American Metro Boulevard · Suite 154
Hamilton, NJ 08619

REQUEST FOR PROPOSAL

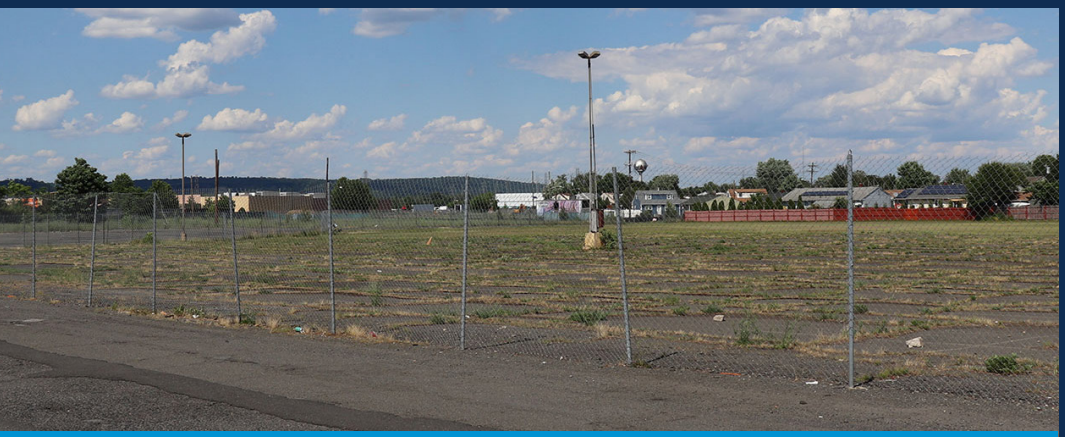
CMF-004 WORK ORDER NO. 02
DCA RESILIENT COMMUNITIES

Kingwood, NJ: Replacement of Existing Emergency Response Facility

Stormwater Management

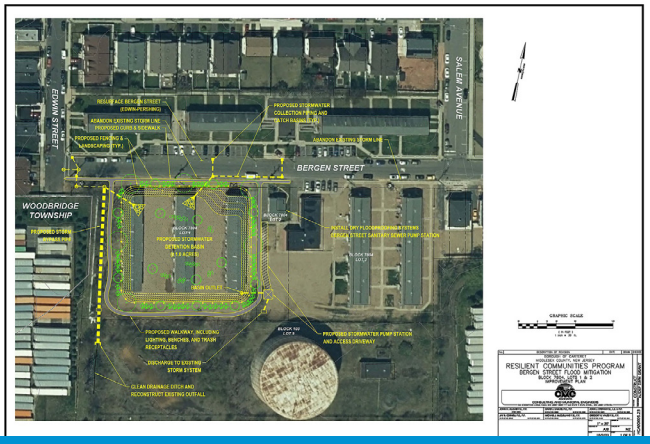


Hurricane IDA Flooding Devastation



Manville, NJ: Rustic Mall Lot Proposed for Future DPW & OEM Facilities

Bio-Retention Basin



Carteret, NJ: Proposed Stormwater Plan

DPMC PROJECT #J0405-00 | MAY 16, 2024

Michael Baker INTERNATIONAL

SUBMITTED TO
NJ DEPARTMENT OF THE TREASURY, DIVISION OF PROPERTY MANAGEMENT & CONSTRUCTION

Michael Baker
INTERNATIONAL

May 16, 2024

CMF-004 WO2
DCA RESILIENT COMMUNITIES
PROGRAM (GROUP 2)

State of New Jersey
Department of the Treasury
Division of Property Management & Construction
33 West State Street, 9th Floor, Plan Room
P.O. Box 039
Trenton, New Jersey 08625-0039

Attn: Jennifer Roeckel, Contract Procurement Unit

Re: DPMC PROJECT #J0405-00, TERM CONTRACT CMF-004
Work Order No. 2 - DCA RESILIENT COMMUNITIES (Group 2)
CONSTRUCTION MANAGEMENT FIRM

Dear Selection Committee:

Michael Baker International, Inc. (Michael Baker) is pleased to submit our proposal for Construction Management Firm (CMF) for the five (5) HUD-CDBG funded State agency projects identified in this RFP that include engagements involving oversight of environmental reviews, design and construction of stormwater management and buildings/structures for flood mitigation/resiliency projects as designated by the Division of Property Management and Construction (DPMC), and as stated within the RFP documents.

During Michael Baker's more than 80 years of providing professional services, our approach to multi-tasked, multi-discipline assignments has proven to be highly successful. More specifically, Michael Baker brings forward over 35 years of working in New Jersey on some of the most important infrastructure projects in the State. This experience will directly benefit the State of New Jersey on this contract. The Michael Baker Team will be capably managed by Peter J. Senus, PMP as the Senior Project Manager. He has proven success coordinating with federal and state agencies by serving as Project Manager on multiple past DPMC work order assignments under the CMF 003 Hurricane Sandy IDIQ throughout the region. To complement our strengths and to help meet the 25% SBE goal for the program, Michael Baker has teamed with our long standing partner Churchill Consulting Engineers. This firm has the multi-disciplinary construction management capabilities and DPMC experience, which allows Michael Baker to fully utilize their talents toward delivering a consistent, on-time, budget-conscious, quality project. The Michael Baker Team is thoroughly familiar with assisting DPMC and DCA in administering federally-funded programs. **Over the past eight (8) successful years**, Michael Baker has been serving as the CMF for multiple CMF 003 IDIQ work orders. In doing so, we have already developed a proven system to manage the tasks outlined in the scope of work. There will be **no "learning curve" or "down-time"** when dealing with Michael Baker. We have established professional relationships with Mr. Sam Viavattine and Ms. Nancy Diehl (recently retired) along with all their other great staff at DCA. We look forward to your favorable review of our proposal and the opportunity to work on this noteworthy program.

We have attached our cost proposal separately as requested. To establish our level of effort, we have developed an estimated preliminary Program Schedule based on the noted 3-year estimated duration once the grants are executed noted in the responses in Addendum B (refer to Appendix A). There are many factors however that will change this schedule once the Program starts and as more information becomes available. This should only be used as guide to demonstrate a potential path in meeting the Program's ultimate end date of September 2029 and as a cost estimation guide for our price proposal.

Sincerely,

MICHAEL BAKER INTERNATIONAL, INC.

Gilberto Bosque

Gilberto R. Bosque, P.E.
Vice President / Contract Executive
e: gbosque@mbakerintl.com
t: 609-807-9532

FIRM/TEAM ORGANIZATION/SUBCONSULTANTS

Michael Baker is a full-service construction management, planning, engineering, architecture, and information technology company that has been working in New Jersey with the local municipalities to become more resilient as a result of past, present, and future natural disasters and health pandemics. Most recently, we all experienced the devastating 2021 Hurricane IDA flooding that affected 12 New Jersey counties and was coupled with the ever growing post health and financial impacts of the COVID-19 pandemic. New Jersey has been given many federal grants to help deal with the damaging lingering effects of these events as well as planning to the future to deal with new disasters and pandemics. Michael Baker is very familiar with the HUD CDBG-DR funded Hurricane Ida Action Plan and associated Resilient Communities program. We are prepared **RIGHT NOW** to assist the New Jersey Division Department of Property Management and Construction (DPMC) manage those funds and associated projects. With offices in Hamilton and Newark, New Jersey, Michael Baker has over 150 planners, architects, engineers, and construction management/inspection professionals with experience in the State of New Jersey. Michael Baker's local offices are supported by more than 6,000 employees in the U.S. and abroad, including nationally and internationally recognized subject matter experts. With that said, Michael Baker is currently finishing similar work orders under the **CMF 003 IDIQ (FHRRR and ACRP)**. Many of the projects associated with this work order (Kingwood RC 100035, Flemington RC 100022, Sayreville RC 100047, Carteret RC 100021, and Manville RC) include pump station upgrades, building/structure demolition, floodproofing, generators, stormwater drainage upgrades etc. Michael Baker successfully oversaw the design and construction of these same type of projects under the CMF 003 work orders referenced. It is noted that there is one project in particular located in Kingwood Township, that will involve the construction of a new emergency service building and garage that will house emergency response resources. Michael Baker recently managed construction of three (3) state of the art NJ State Police Barracks throughout New Jersey. These facilities included not only the barracks, but the garages, backup generators and all the latest information technology, security and latest building material advances that will certainly be used in this very similar proposed emergency response building project identified in this work order. Michael Baker has **CURRENT EXPERIENCE** with **ALL** the types of proposed improvements outlined in the RFP's Project List. This allows us to not only be the administrator of the Program requirements on behalf of the PD, but to bring the required **"engineering insight"** needed to stay one step ahead of the Design Firms and Contractors that will be utilized by the Subrecipients. We know the "pitfalls" associated with these types of projects and will be able to be proactive during the entire life cycle of the Program.

Since 2016, Michael Baker developed the "Key" standard operating procedure manuals and checklists for all of the activities identified in this Scope of Work such as bidding and procurement for both professional services and contractors, invoicing reviews, independent cost estimating, scheduling, statement of assurances (SOA) compliance and project Close-Out. These manuals were developed for the current program directors (PD) under the previous CMF 003 IDIQ to make running these similar programs uniform and "by the book" to ultimately provide the backup HUD will require when they conduct their routine audits.

Our approach to building a team for this important assignment was focused on several key elements. These elements are summarized below and will be elaborated throughout this section:

- Provide a **dedicated New Jersey based team** that can quickly assign local expert staff for each assignment;
- Provide **recognized experts across the range of disciplines** required from Feasibility/NEPA through Construction Management;
- Provide **experienced leadership** skilled at Program Management and knowledgeable in the entire project life cycle;
- Provide a team that has **worked together successfully with DPMC/DCA**;
- Provide a team that **knows DPMC and assigned Project Directors at DCA** and is located in **close proximity to Trenton**;
- Provide a team with in-depth knowledge of the strict grant requirements associated federal programs such **HUD CDBG-DR**; and
- Provide a team with the **depth and breadth of resources** to keep the scope, schedule, budget, and quality of the Program on track.

As evidenced in our staff resumes and relevant project experience, the Michael Baker team has all the required experience and will successfully navigate DPMC and DCA through the post-Hurricane IDA Resilient Communities infrastructure program.

ORGANIZATIONAL CHART

TERM CONTRACT CMF 004 WO NO. 2 RESILIENT COMMUNITIES PROGRAM
STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY
DIVISION OF PROPERTY MANAGEMENT AND CONSTRUCTION

CONTRACT EXECUTIVE
Gilberto R. Bosque, PE*

SENIOR PROJECT MANAGER
Peter Senus, NICET IV, PMP*

QA/QC MANAGER
Rebecca Lyne, PWS, CE*

PROJECT MANAGER
Sean Kahn, PE*

ENVIRONMENTAL PLANNING
Jessica Jahre, AICP, CFM*

Environmental Documentation & Permitting
Ebony Washington*

Coastal Flood Mitigation & Resiliency Planning
Jessica Jahre, AICP, CFM*

Cost / Benefit Analysis
Jessica Jahre, AICP, CFM

DESIGN
Joseph Danyo, PE, PP

Architect
David Tudryn. AIA*

Constructability Reviews
David Tudryn, AIA
Peter Senus, NICET IV, PMP

Value Engineering
David Tudryn, AIA*
Joseph Danyo, PE, PP*

Site / Roadway Engineering
Sylvester Fryc, PE*

Stormwater Management
Lori Wade, PE, CPSWQ*

Structural Engineering
Hamid Ikram, PE*

Geotechnical Engineering
Michael Yang, PE, PhD*

CONSTRUCTION MANAGEMENT & INSPECTION
Peter Senus, NICET IV, PMP

Construction Monitors
Pat Hicks , NICET IV (CCE)*
Jon Conte, NICET III*
Jaime Boy Jr., NICET II

PROJECT CONTROLS
Sean Kahn, PE

CPM Scheduling
Juan Uribe*

Cost Estimating
Jeffrey Weiss, CCT, CQM-C*

Claims Analysis
Ralph Eberhardt, PE*

Grant Compliance & Management
Peter Senus, NICET IV, PMP*
Sean Kahn, PE

Risk Management
Peter Senus, NICET IV, PMP

***Resumes included**

Subconsultants
Churchill Engineers – SBE (CCE)

RECOGNIZED EXPERTS ACROSS THE RANGE OF DISCIPLINES

Planning/NEPA Process

Michael Baker's strengths begin with planning and concept development services aimed specifically at rebuilding communities with the resiliency to better withstand future events.

In New Jersey, Michael Baker has already completed a number of planning studies and initiatives that are leading towards stronger infrastructure development. Most recently, Michael Baker performed related work orders under DPMC's CMF 003 IDIQ for Construction Management Services on Rebuild By Design and other NJDEP Flood Mitigation and Environmental infrastructure. Work orders from this IDIQ included the **Resilient New Jersey Program** and the **New Jersey Climate Change Resiliency Strategy & Coastal Resilience Plan.** Michael Baker has also completed a study for the Port Authority of New York and New Jersey (PANYNJ) to assess the vulnerability of their airports from coastal storms, sea level rise, and hydrological changes. Jersey City also enlisted the services of Michael Baker when they received a grant from Together North Jersey to develop storm surge protection solutions for the City. Michael Baker's coastal experts were asked to work with professors at Stevens Institute of Technology to develop visualizations for the flood control engineered concepts. The City relied on Michael Baker to develop context sensitive solutions and to prepare a white paper for next steps. In the white paper, Michael Baker emphasized the need for a benefit-cost analysis, data collection, increased coordination, and available funding sources.

As plans are developed and projects enter the design phase, the Michael Baker Team has extensive capabilities and experience to navigate a project through the complex Local, State, and Federal environmental review and approval processes. The Michael Baker Team has tremendous experience with National Environmental Policy Act (NEPA) documentation and permitting including the ability to complete the many technical studies that are involved in a comprehensive environmental review process as well as the experience and capability to manage and oversee the administration of the NEPA documentation and environmental permit approval processes. **It is also understood that the Environmental Review (ER) process per 24 CFR 58 is the key to obtaining the AUGF (Authorization to Use Grant Funds) for these projects. All projects will require an ER and the level of review (i.e. CEST, EA, EIS, etc.) will need to be determined for each. We will ensure this activity is completed by the Subrecipients and we will deliver the completed ER to the PD for processing by HUD.** Michael Baker understands that the environmental process is an iterative process that begins early in project scoping and continues through design and construction. Early identification of environmental resources, applicable regulations, and key stakeholders is a critical component of the process. Identifying project issues early allows adequate time to develop a plan and coordinate with the stakeholders to develop solutions that avoid, minimize or mitigate adverse impacts while still satisfying the project purpose and need. This approach reliably helps avoid schedule delays and increased project costs caused by unanticipated project effects.

Final Design

For over 30 years Michael Baker has been providing final design engineering services in New Jersey. Michael Baker provides full service capability with engineering expertise that is both locally respected and nationally recognized. We optimize our construction management project experience during the design phases of projects through performance of constructability reviews; construction phasing/sequencing; construction bid document reviews to eliminate error/omissions and discrepancies, and construction schedule and cost estimate reviews to ensure that all factors (permit acquisition, long-lead procurements, regulatory review cycles, etc.) are included in the logic-based CPM schedules.

Michael Baker's geotechnical team can assist with necessary investigations on-site to confirm that the walls and hardening of the State's infrastructure can be done and will not fail under the stresses of the next hurricane. Michael Baker's structural team is a leader in innovative structural design with the least impact to the community and cost. Michael Baker's transportation, stormwater, and utility engineers will confirm that designs maintain the community's operations by addressing, most importantly, stormwater related impacts and future resiliency of existing infrastructure.

Michael Baker recently completed the design and construction support of the iconic Scudder Falls Bridge that many of us use daily coming in and out of the Trenton area. This project involved replacement of the existing four-lane bridge with twin structure carrying six lanes of through traffic (three in each direction), two auxiliary northbound lanes for entry/exit travel, and one auxiliary southbound lane for entry/exit travel over the Delaware River. The project also included complete reconstruction of the deficient Route 29 interchange on the New Jersey side and reconfiguration of the Taylorsville Road interchange in Lower Makefield, Pennsylvania, to improve the safety and efficiency of the interchanges. Michael Baker's design also included a new all electronic tolling (AET) collection system in the southbound direction, consisting of high-speed E-ZPass tag readers and video cameras to identify license plates for purposes of collecting tolls by mail from motorists that did not process an E-ZPass transponder. A four-story support building was constructed to house the AET and ITS equipment as well as the DRJTBC's bridge monitoring staff.

At the World Trade Center in New York, Michael Baker developed a structural retro-fit for the existing bollards to allow for a flood protection system to be added to that existing framework. Structural engineering innovation worked with the existing environment to create a resilient solution that fits within the facility's existing framework. In Ocean City, NJ a failing drainage network was analyzed and upgraded by Michael Baker with pump stations to improve flood recovery time. Michael Baker is experienced in finding the right-sized solution to reliably address the problem.

Construction Management/Inspection

Michael Baker provides construction management services for all the markets we serve. Our clients include federal, state, and local government agencies, as well as private sector clients. Our projects range in size and complexity, and include new or rehabilitation construction, traditional design-bid-build and design-build project deliveries. Most recently, Michael Baker has been DPMC's Construction Management Firm (CMF) **for the CMF 003 IDIQ for Construction Management Services.** Specific work orders that provided construction management oversight included **WO 03 the Flood Hazard Reduction and Resiliency (FHRR) program and WO 15 the Atlantic City Resiliency Program (ACRP).**Michael Baker's construction experience includes facilities, pump stations, bulkheads, large outfall facilities, highways, bridges, infrastructure rehabilitation, freight and passenger railroads, transit facilities, airports and utilities, just to name a few. Michael Baker's professionals have the training, certifications, and support to manage the full spectrum of construction services to assure each client of a successful delivery. With experience in managing throughout the life cycle of the project, and through our implementation of Lessons Learned, industry-Best Practices and CMMA-based CM Procedures, and Quality and Risk management processes, Michael Baker understands the importance of all aspects involved to successfully complete and deliver safely on time, on budget, and with the quality you demand.

Michael Baker's experienced construction inspection staff provides confirmation that the contractor is performing in accordance with the contract documents as well as confirming the contractor's progress. Michael Baker inspectors verify specified materials are incorporated into the project;; assure proper documentation, including tracking of submittals and correspondence; review contractor progress payments and change orders; coordinate with the client and other local

agencies such as DCA for code enforcement; integrate and coordinate on-site personnel, vendors, and subcontractors; coordinate material delivery to jobsites; manage movement of construction equipment around sites to provide a smooth flow throughout the schedule; review and analyze construction schedules; and perform final inspection and project close-out tasks.

Michael Baker produces detailed independent cost estimates for every change order and overall construction cost budget management, always maintaining focus on the client's priorities: time, budget, safety, and quality. Baker's comprehensive life-cycle approach utilizes a standard process to develop estimates, tracking trends and historical indexes, analyzing bids, and assessing the risks and probability of high-impact events and their influence on cost. Through a proactive cost engineering approach, this knowledge is used to identify and predict costs throughout the project. By managing and monitoring project costs from day one, we allow you to better plan, program, acquire, and manage your budget, while adding real value to your project. Michael Baker's breadth of resources, including affiliations with vendors and contractor associations, helps us to better provide estimating services at any stage of the design and construction process, utilizing proven, documented, unit price databases, both internal and published. Escalation is managed through the use of multiple historical indices, monitoring current material and labor trends, and tracking industry market indicators. We also bring these resources to related services such as life cycle costing, value engineering, schedule recovery planning, and analysis of changes and claims.

While the CMF is tasked with many responsibilities that include managing cost and schedule for these projects during the design and construction phases, projects **also need a CMF who can assist the Subrecipients (i.e. municipalities) navigate the individual grant requirements such as proper consultant/contractor procurements and related grant reimbursements. One thing we learned in the previous CMF 003 IDIQ, is that it is not only important to oversee the design consultants and contractors, the Subrecipients also need the proper attention and oversight. Audits can occur on these programs from the federal funding sources such as HUD during the lifetime of the program. Michael Baker knows what it takes to make these programs "Audit Proof" and to assist DPMC in meeting all the requirements of these grants…right down to ensuring all the certified payrolls and fringe backup are collected for each employee to ensure prevailing wage and associated Davis-Bacon rules are being met as an example.**

Combined with our specialty subconsultant, the Michael Baker Team has a very deep bench of construction and design professionals available to service this agreement.

Experienced Program Management Leadership

Michael Baker understands the need for a single vision when coordinating large scale infrastructure design services. As the CMF under the previous CMF 003 IDIQ, Michael Baker understands the challenges of multi-disciplined projects and the need for oversight.

Our Senior Project Manager, Peter J. Senus PMP, has served as the Sr. Program Manager and assisted on several large and similar assignments recently:

- Program Manager - NJDPMC/NJDEP CMF 003 WO 03 FHRRR Program
- Program Manager – NJDPMC/DCA CMF 003 WO 15 Atlantic City Resiliency Program
- Program Manager (Construction Phase Manager) – SJTA Atlantic City Expressway Widening Program

Pete is only as good as his supporting team. ***Sean Kahn, P.E., will resume his role as Project Manager*** and the day to day operation overseer. **Pete and Sean have worked closely for years under the CMF 003 IDIQ and have developed a reputation as the "Go-To Team" for many assignments.** Together, they fine-tuned procedures for running many successful work orders and can carry this over seamlessly to the CMF 004 IDIQ.

In addition, our proposed Contract Executive, Gilberto Bosque, P.E., has been servicing the design/construction industry for decades overseeing major infrastructure reconstruction in New Jersey and will bring this experience to bear on this assignment. The task in front of New Jersey now is complex and extremely challenging. Michael Baker is not only qualified to deliver solutions but is also qualified to coordinate this effort for the communities and the State as their Program Manager and Construction Manager. Michael Baker appreciates the size and complexity of the scope of these projects and fully understands that they will require attentive coordination between the State, local government entities, design stakeholders, and federal stakeholders.

A TEAM THAT HAS WORKED TOGETHER SUCCESSFULLY

Our Subconsultant

Michael Baker chose **Churchill Consulting Engineers** to assist with this work order in construction monitoring and

contractor invoice reviews. Michael Baker and Churchill Consulting Engineers **(SBE)** routinely collaborate on design and construction management projects throughout New Jersey. Churchill has built an outstanding reputation as a firm that provides exceptional services for its clients in the planning, design, surveying, permitting and construction management on a broad range of civil and environmental projects. The firm was founded more than 45 years ago, and since its inception has been committed to not merely meeting its client's needs, but exceeding them with both innovative and cost-effective solutions. A consulting engineering firm is built on the education, capabilities, experience and integrity of its professional staff.

For more than four decades, Churchill has maintained a commitment to providing its clients with the highest possible level of staff qualifications. Moreover, Churchill is equally committed to consistently utilizing the best available technologies for all of its work, so that its clients can share in the benefits of technological advances in productivity and precision. Churchill's survey experience includes 40 years of design and construction survey and base mapping for roadway improvements; replacement of long and short span bridges, bridge decks, and sign structures; and improvements to interchanges, ramps, service areas, maintenance districts, and toll plazas. With two (2) professional land surveyors, three (3) survey crews, and state of the art equipment Churchill can adequately address any staffing requirement necessary. They offer extensive capabilities and experience in the following types of surveying projects: Boundary Surveys, Roadway/Topographic Surveys, Utility Surveys, Hydrographic Surveys, Tidal/Tideland Surveys, Construction Layout, Construction Verification Surveys, As-Built Surveys, Tower Surveys (Twist/Plumb), Wetlands Surveys, GPS/GIS/Digital Scanning, Aerial Photogrammetric Control, and ALTA Surveys. Likewise, Churchill also provides construction inspection services with NICET level certified superintendents and inspectors. Their staff have all the applicable NICET, ACI – CCTC, ACI, NJSAT, TCP, and OSHA required certifications.

EXPERIENCE ON PROJECTS OF A SIMILAR SIZE AND NATURE

CMF Experience on Contracts/Projects of a Similar Size & Nature

The Michael Baker Team is thoroughly familiar and more importantly highly successful with assisting the DPMC with large scale Indefinite Delivery and Indefinite Quantity (IDIQ) contracts (i.e. CMF 003 WO 3, 4, 12 & 15) requiring construction management, resiliency planning and multidisciplined design support. For example, and most recently, Michael Baker was selected for the CMF 003 term agreement, that dealt with the catastrophic damage to New Jersey from Super Strom Sandy. Michael Baker quickly proved that they were the "go to" Team to not only navigate the complex HUD CDBG grant requirements, but to be the State's eyes and ears on variety of projects that included large scale pump stations, 60" outfall pipes, bulkheads, building flood proofing, municipal stormwater upgrades, flood gates, and much more. **Michael Baker is the workshop that has the right tool for the right job.** Michael Baker knows it is not enough to just assist the DPMC in administering the programs, but to be the experts in all facets. Since our involvement with the previous CMF 003 IDIQ, we have developed all the manuals, standard operating procedures, and protocols to carry directly over into CMF 004 with a seamless transition for potential projects under this program that might have already started or just gearing up.

During Michael Baker's 80 plus years of providing professional services, our approach to multi-tasked, multi-discipline assignments has proven effective. More specifically, Michael Baker brings forward over 35 years of working in New Jersey on some of the most important infrastructure projects in the State. This experience will directly benefit the State of New Jersey on this contract. Michael Baker's successful oversight and involvement in a variety of construction and program management contracts provides a wealth of on-call task order expertise to execute successful assignments. Our clients select Michael Baker because of our logical approach to meeting project objectives in a cost-effective manner, while providing high-quality technical expertise from our full service Hamilton, New Jersey office supported by other Michael Baker offices and our subconsultants. A critical factor considered in assembling the Michael Baker Team is a shared culture devoted to customer service and rapidly adapting to address client needs that change as a result of funding and/or schedule changes. A large part of our team's previous successes working together is a result of each individual firm's dedication to customer service.

Michael Baker creates value for our clients by delivering innovative and sustainable solutions for infrastructure and the environment. We recognize that the execution of task order contract assignments requires a broad range of expertise and are confident that the depth of Michael Baker's resources, familiarity with governmental processes, and history of successfully working on similar projects in New Jersey and nationally will confirm that Michael Baker consistently provides

outstanding support in the execution of even the most challenging assignments. Specific threads of good construction and project management are seen in each of Michael Baker's successes. Among them are: active management of the project on behalf of the client; experienced leadership; knowledgeable and seasoned subject matter experts, experienced design, permitting and construction professionals; open, honest communication among all involved in the day-to-day; timely decision making based on experience and prudent professional judgment; and a common goal to solve problems and keep the project moving to completion. The result invariably is a high-quality project completed on time and at a reasonable cost.

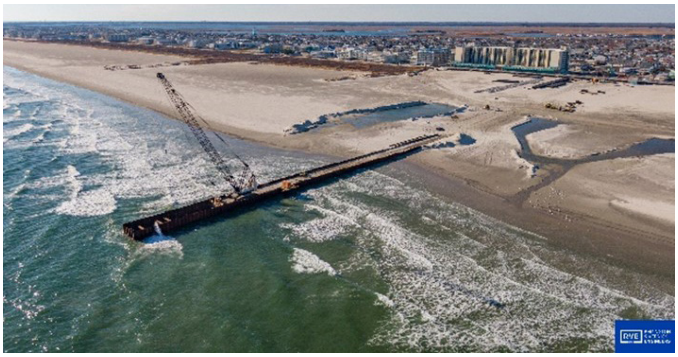
RELEVANT PROJECT EXAMPLES

PROJECT: CMF 003 WO#03 - Program Management for Flood Hazard Risk Reduction and Resiliency Grant Program (2016-Present)
LOCATION: Multiple Municipalities, New Jersey
CLIENT: NJ Department of Property Management and Construction (DPMC)/ NJ Department of Environmental Protection (NJDEP)
PROGRAM BUDGET: $50 million

Michael Baker was selected as the CMF Program Manager for the Flood Hazard Risk Reduction and Resiliency Grant Program (Grant Program) for the State of New Jersey. Under this Grant Program, the NJDEP/DCA funded projects that would continue the efforts to protect vulnerable communities from the impacts of future storms along flood prone areas. **There were a total of seven projects involved in the program: Wildwood NJ Pacific Ave. Pump Station & Outfall, N. Wildwood Hereford Inlet Pump Station, Atlantic City Baltic Ave. Phase II Pump Station, Brigantine 3 Pumps Stations, Belmar Lake Como Outfall Pipe, Spring Lake Wreck Pond Outfall Pipe, and Little Ferry Losen Slote Tide Gate w/ Trash Rakes.** Due to Michael Baker's extensive construction management and design experience with large multi-faceted construction and resiliency projects, our team was selected to assist the NJDEP with monitoring and oversight tasks for selected resiliency projects throughout coastal New Jersey.

Key tasks include:

- Monthly Reporting
- Design Oversight
- Bidding/Procurement Reviews
- Contractor Deliverable Reviews
- Bi-weekly Field inspections
- Independent Cost Estimating
- Master Project Scheduling and Forecasting
- HUD Reporting and Compliance
- Contractor Recordkeeping Compliance Assistance
- Assist with Integrity Monitoring



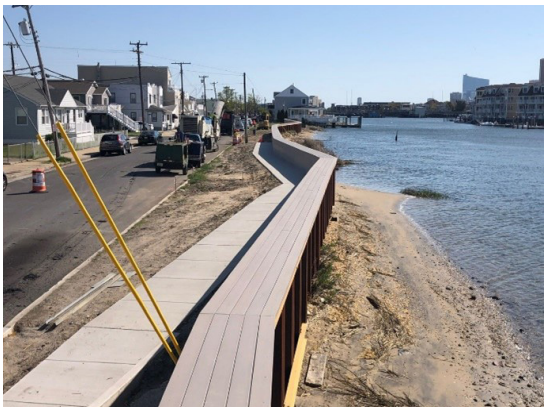
Accountability for project submittals and issue resolution were diligently tracked and recorded to guard against delays and minimize the NJDEP's liability in the event of a claim. Baker actively communicated with the NJDEP and tracking project correspondence from preconstruction through closeout by maintaining detailed logs and checklists that enable us to assign and track ball-in-court responsibility for Subrecipients and project deliverables. Michael Baker provided timely reviews of invoices and progress reports with proper record keeping to match pace with the Subrecipient's contractor deliverable submission schedule. These tasks were accomplished through the use of a "uniform" deliverable tracking system. The tracking system provided overall monitoring of all schedules, invoices, progress reports, HUD compliance forms and project closeout documentation. In addition to this mandatory tracking, Michael Baker offered more robust document management solutions. Michael Baker utilized the SIROMS Sharepoint Site as an electronic document library for this project. As such, Michael Baker understands the importance of confirming all record keeping are up-to-date with construction projects and contract milestones.

Under the Grant Program, Michael Baker provided Independent Cost Estimates (ICEs) for Subrecipient contractor agreement amendments (change orders). Performing ICEs is a primary example of providing the proper "checks and balances" for the local government contractor. Michael Baker's Licensed Professional Engineers have extensive experience preparing ICEs for all types of construction projects. Michael Baker uses a wide variety of estimating tools that includes comprehensive life-cycle analysis, tracking trends and historical indexes, bid analysis and assessing the risks and probability of high-impact events and their influence on cost.

Since the Grant Program is funded through the Federal Department of Housing and Urban Development (HUD), specialized compliance and monitoring, end-to-end policy development, on-site compliance training with Subrecipients, and operational implementation are required. Michael Baker is experienced in HUD compliance monitoring and a thorough understanding of Federal Labor Standard regulations including Davis-Bacon and Related Acts, Hatch Act, and Section 3 to comply with HUD grant funding requirements. Michael Baker is utilizing an extensive compliance "toolbox" containing regulatory, operational, and financial processes for use on HUD-funded Community Development Block Grant Disaster Recovery (CDBG-DR) programs. These templates are assisting in "quick start" program compliance.

PROJECT: CMF 003 WO#15 Program Management for Atlantic City Resiliency Program (2020-Present)
LOCATION: Atlantic County, New Jersey
CLIENT: NJ Department of Property Management and Construction (NJ DPMC)/ NJ Department of Community Affairs (NJDCA)
PROGRAM BUDGET: $20 million

Michael Baker was selected as the Program Manager for the Atlantic City Resiliency Program for the State of New Jersey. Under this Hurricane Sandy CDBG-DR Grant Program, the NJDCA is funding projects that will continue the efforts to protect vulnerable communities from the impacts of future storms along flood prone areas. **There are a total of seven projects involved in the program: Traffic Signal Equipment Upgrades, City Hall Flood Proofing, Check Valve Replacements, Lower Chelsea Bulkheads, South Blvd. Bulkheads, Gardner's Basin Dredging & Bulkheads, and Chelsea/Ducktown Bulkhead projects.** Due to Michael Baker's extensive construction management and design experience with large multi-faceted construction and resiliency projects, our team was selected to assist the NJDCA with monitoring and oversight tasks for selected resiliency projects throughout coastal New Jersey.



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- Bidding/Procurement Reviews
- Contractor Deliverable Reviews
- Bi-weekly Field inspection
- Independent Cost Estimating
- Master Project Scheduling and Forecasting
- HUD Reporting and Compliance
- Contractor Recordkeeping Compliance Assistance
- Assist with Integrity Monitoring

Accountability for project submittals and issue resolution were diligently tracked and recorded to guard against delays and minimize the NJDEP's liability in the event of a claim. Baker actively communicated with the NJDEP and tracking project correspondence from preconstruction through closeout by maintaining detailed logs and checklists that enable us to assign and track ball-in-court responsibility for Subrecipients and project deliverables. Michael Baker provided timely reviews of invoices and progress reports with proper record keeping to match pace with the Subrecipients contractor deliverable submission schedule. These tasks were accomplished through the use of a "uniform" deliverable tracking system. The tracking system provided overall monitoring of all schedules, invoices, progress reports, HUD compliance forms and project closeout documentation. In addition to this mandatory tracking, Michael Baker offered more robust document management solutions. Michael Baker utilized the SIROMS Sharepoint Site as an electronic document library for this project. As such, Michael Baker understands the importance of confirming all record keeping are up-to-date with construction projects and contract milestones.

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PROJECT: Hoboken Northwest Resiliency Park (2019-2023)
LOCATION: City of Hoboken, New Jersey
CLIENT: City of Hoboken
PROJECT COST: $47M

Michael Baker is provided full-time construction management for the construction of a 5.4 acre interactive urban park in the city of Hoboken, which incorporates sustainable design and extensive stormwater management features, including collection and storage of all storm runoff into an underground, one-million -gallon stormwater storage tank. As part of the project, Michael Baker oversees extensive soil sampling and testing of the former industrial site, coordination with local sewer authority for pump station construction, and management of construction of numerous park features, including play equipment, building structures, athletic facilities, and other interactive features. Michael Baker will perform utility coordination, supervise the construction of a stormwater sewer system, and manage the construction of a park building and community room. Additionally, it will oversee the attainment of SITES v2 sustainability certification, conduct public engagement, update the project website, and complete and submit all close-out documents.

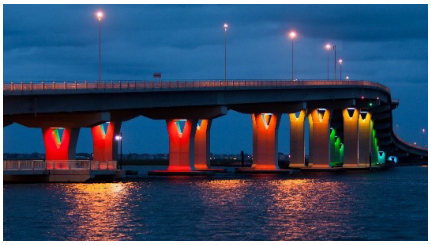
The Northwest Resiliency Park sits on 5.4 acres of land that was previously used by the Henkel Chemical plant, which closed in 2007. Before that, it was a marshland that had been filled in during the late 19th and early 20th centuries and was subject to frequent flooding. Following Superstore Sandy in 2017 the U.S. Department of Housing and Urban Development and the City's 2014 Green Infrastructure Strategic Plan identified the area as a potential flood management park. The site was remediated to EPA standards, capped in 2016, and used as a temporary pop- up par k starting in 2017.

The project called for the implementation of several landscaped basins around the perimeter of the park, as well as stormwater basins under the basketball court and athletic field. The most significant component, located 25 feet underground, is a precast one-million -gallon stormwater storage tank and retention system that combats (loading by storing and filtering rainwater. Michael Baker supervised the installation of the tank and the supporting excavation system, which is comprised of fully braced, 80-foot sheet piles and a perimeter of 700 linear feet. Approximately 30,000 cubic yards of excavation to subgrade will occur next, followed by the installation of 98 H-piles, dense-graded aggregate, a mud slab, and the tank. Throughout construction, substantial dewatering of groundwater will occur. Following construction of the tank, the site will be turned over to the local sewer authority, which will construct a pump station that will control the release of stored stormwater into the local stormwater network.

PROJECT: Replacement of the Turnpike's District 6 Maintenance Facility and (3) State Police Stations (2013-2015)
LOCATION: Newark, Moorestown, and Galloway Township, New Jersey
CLIENT: New Jersey Turnpike Authority
PROJECT COST: $60M

Michael Baker is provided construction management and inspection services for approximately $60 Million of construction associated with Contract Nos. T500.192, T500.272, and A500.274. The antiquated Troop D Stations will be brought up to contemporary law enforcement agency standards to meet today's requirements and future needs. The improvements include new buildings, expansion of parking and site development, new underground motor fuel tanks, new utility services (electrical, water, sewer, etc.) including emergency generators, HVAC, and a helipad at Moorestown. The new District 8 Maintenance Facility building will provide updated equipment, expanded capabilities, and contemporary amenities for Turnpike Maintenance personnel to replace the overcrowded and obsolete facility. This is the prototype for the proposed improvements and replacement buildings for the Turnpike and Parkway maintenance yards. Michael Baker proactively maintains continuous lines of communication with the Authority (maintenance, construction, & engineering) to maintain the yard's operational functions and address design changes originating from field conditions and engineering as the program evolves. Michael Baker is managing multiple, concurrent sites, and coordinating with the NJDCA and utilities. Work on these sites will be substantially complete prior to the bulk of the current facility design sites going into construction and our staffing plan adequately addresses this transition.

PROJECT: Route 52 Causeway Replacement (2002-2012)
LOCATION: Ocean City and Somers Point, NJ
CLIENT: New Jersey Department of Transportation
PROJECT COST: $400M



Michael Baker led the effort for alternatives analysis, preliminary design, environmental services, final design, and construction support for this multi-faceted, 3-mile transportation improvement project over Great Egg Harbor in NJ. This Michael Baker design project is one of the largest projects undertaken by the New Jersey Department of Transportation (NJDOT), with a construction cost exceeding $400M. The Route 52 Causeway is located in an environmentally sensitive area and provides a vital link between the two shore communities of Somers Point and Ocean City, NJ. The project consists of approximately 10,000 ft. of dual concrete bridge structures (20,000' total) between high level, low level, and curved bridge alignment sections, which also includes a continuous 10' wide multi-use path on the bridge. The project also includes approximately 7,000 ft. of new and widened roadway construction.

The design included many complex structural features including continuous spliced girder designs, post-tensioned segmental concrete structures, Cast In Place post-tensioned continuous concrete structure, precast concrete elements, bulkheads and cofferdams in extreme tidal zones. In-depth analyses were performed for ship/vessel collisions, ice loadings, scour, and a site specific seismic response spectrum and seismic foundation stiffness matrix was developed. The subsurface exploration program included extensive lab testing of the soil properties leading to an optimal (shorter) pile length reducing construction costs and duration of pile driving activities. The project involved preparing bid documents for two alternative designs for each of Contracts A and B. Michael Baker further implemented an innovative strategy of preparing partial alternative design bid packages to save time and cost.

PROJECT: NJTA Facilities Improvement Program, Final Design Services (2013-2020)
LOCATION: NJ Turnpike North
CLIENT: New Jersey Turnpike Authority
PROJECT COST: $70M

Michael Baker's Hamilton Office provided Final Design Services for Contract Nos. T500.356 and T500.363 which included the design of three new multi-use buildings (TMD 4, 6, & 9), one new prefabricated materials storage building

(TMD 9), two new salt sheds (TMD 4 & 9), and the rehabilitation of five existing maintenance buildings (TMD 4, 6, 7, & 10). Facility scope included full architectural space programming and design, structural design, Department of Community Affairs (DCA) permitting, MEP and fire protection design, design of building security components, design of back-up generators, CSI specifications, and post design/construction administration. Site/civil design included full site lighting, parking lot layouts, engine block heaters, MgCl upgrades, brine station relocation, geotechnical engineering (building and site), retaining walls, pavement, fencing/gates, SWM / basin design, utilities engineering, and site power/communications. Environmental approvals/permits included NJ Executive Order (EO) 215 EIS and EA documentation for five sites, hazmat investigations, Soil Erosion and Sediment Control (SESC), Freshwater Wetlands permits, and Flood Hazard permitting. All of the projects require the development and preparation of construction documents for full compliance with NJDCA.

PROJECT: Scudder Falls Bridge Replacement (2017-2022)
LOCATION: Route 295 NJ/PA Border
CLIENT: Delaware River Joint Toll Bridge Commission
PROJECT COST: $425,000,000.00

Michael Baker provided final design and post-design services for the Scudder Falls Bridge Replacement project.

The existing four-lane bridge over the Delaware River is functionally obsolete and needed to be replaced to alleviate recurring current peak-period and emergency-incident traffic congestion and projected future traffic. Numerous commuter safety and operational upgrades are also needed at the bridge and adjoining highway segments and interchanges in both New Jersey and Pennsylvania.

The project involved replacement of the existing four-lane bridge with a twin-span structure carrying six lanes of through traffic (three in each direction), two auxiliary northbound lanes for entry/exit travel, and one auxiliary southbound lane for entry/exit travel. The project also included complete reconstruction of the deficient Route 29/175 interchange on the New Jersey side and reconfiguration of the Taylorsville Road interchange in Lower Makefield, Pennsylvania, to improve the safety and efficiency of the interchange. Two roundabouts are introduced on the New Jersey side to improve the efficiency and safety of the interchange. Their design followed Federal Highway Administration (FHWA) Roundabouts: An Informational Guide, and NCHRP 672. Roadway work also includes widening of approximately 2 miles of I-95 on both approaches of the bridge. The effort included evaluation of existing guide rail and design of the appropriate roadside protection for the proposed improvements. A key element of the design is the roundabouts within the Route 29 Interchange.

Michael Baker's scope of work also included drainage upgrades and other improvements along the approach highway between the Route 29/175 interchange and Bear Tavern Road in New Jersey, and widening of the Pennsylvania approach highway between the Route 332 exit and the bridge by adding an additional lane in each direction. Michael Baker also designed a bicycle/pedestrian walkway connecting the recreational canal paths on both sides of the river. New bridge inside shoulders are sized to allow for future mass transit service. Michael Baker also designed a new all electronic tolling (AET) collection system in the southbound direction, consisting of high-speed E-ZPass tag readers and video cameras to identify license plates for purposes of collecting tolls by mail from motorists who do not have E-ZPass. Noise-abatement walls are designed along the approach roadways leading to and from the bridge.

Additionally, Michael Baker designed an intelligent transportation system (ITS) equipment building for the installation of the AET equipment. The building is sized to house the proposed AET system equipment with consideration for possible future equipment needs. Equipment housed in the toll building includes lane controller cabinets; E-ZPass reader equipment cabinets; and electrical, HVAC, generator control/monitoring, and network cabinets. The client currently uses a leased fiber optic system for connectivity between toll collection facilities. The provider of the leased fiber optic system will extend its service to the new building. Space will be included in the toll equipment building for other leased communications systems for T1 connectivity, such as video surveillance systems, and for vendor demarcation and their associated equipment. A stand-by generator was provided to support the AET equipment and associated building systems in the event of power failure. The generator and automatic transfer switch is located adjacent to the toll equipment building in a secure, weatherproof enclosure. Annunciation for remote alarm monitoring is provided. The distribution system for the generator included an uninterruptible power supply (UPS) system to eliminate disruption in AET system service. The UPS maintains power during generator start-up.

PROJECT: Atlantic City International Airport Deicing Facility (2013-Present)
LOCATION: Egg Harbor Township, New Jersey
CLIENT: SJTA
PROJECT COST: $37M

SJTA enlisted Michael Baker to complete the design and perform the construction inspection of a new deicing pad and the associated airfield infrastructure at ACY. SJTA proposes to construct a centralized deicing pad adjacent to Taxiway P. This frees up valuable space on the terminal apron (where deicing currently occurs) and allows the aircraft to be closer to the departing runways to reduce holdover times. A Part 77 airspace analysis was performed to ensure no aircraft will penetrate the imaginary surface. Adjacent to the deicing pad is a paved area that will house the (clean) deicing fluid tanks, filling lanes for the deicing vehicles, a deicing control building, spent glycol fluid collection pump and lift station, and a parking area for the deicing vehicles and support staff. A line of sight analysis was performed to ensure there were no issues from the air traffic control tower (ATCT). Runoff from the deicing pad will be collected in a trench drain, and then directed, with the use of diversion chambers, to a glycol collection system. Michael Baker coordinated closely with SJTA to obtain approvals from the NJ Pinelands. This included identifying grassland and New Jersey Pollutant Discharge Elimination System (NJPDES) 5G3 Request for Authorization. A 10,000-gallon oil/water separator will also be provided to prevent oil-laden contaminates from entering the stormwater system, as fueling operations are planned for the pad. Michael Baker also provided geotechnical services to develop the pavement design. The Michael Baker team met with representatives from SJTA, OPS, and FBO MidAtlantic Jet to gather information on existing deicing activities and to further refine the goals and conceptual layout of the project. Michael Baker has provided bid documents, procurement support, construction administration services, and record drawing preparation for Phases 1-4 for both Base Bids and Add Alternates. Michael Baker is actively providing CM/CI for all Phases. The CM/CI includes reviewing monthly schedule updates, reviewing extra work items, preparing change orders and independent cost estimates (ICE), reviewing submittals, responding to Request for Information (RFIs), as-built plan preparation, final quantities and approving Contractor monthly pay applications with certified payrolls (Davis Bacon and Related Acts).

PROJECT: Rehabilitation of the Turnpike's Toll Plaza Utility Buildings and Tunnels (2013-2015)
LOCATION: Various Locations on the NJ Turnpike
CLIENT: New Jersey Turnpike Authority
PROJECT COST: $15.5M

Michael Baker completed construction management and inspection services for the rehabilitation of 25 Toll Plaza Utility Buildings spread across 3 contracts: South, Central and North on the NJ Turnpike. These contracts address the toll plaza's immediate needs for functionality such as stand-by power (utility building & ETC huts), public health (water, sewer, etc.), improved working conditions for the employees (HVAC, waterproofing, avoidance of mold, asbestos abatement), electrical/lighting, security upgrades (doors windows, lighting, etc.), and structural repairs (slab replacements/repairs, tunnel repairs, roofs, etc.). Michael Baker proactively shifts resources between the 25 discreet sites to manage a spectrum of issues while keeping toll plaza operations unaffected. Work on the toll utility buildings will be complete this year.

PROJECT APPROACH TO SCOPE OF WORK

New Jersey was impacted by Hurricane Ida in September 2021, which caused devastating flooding across 12 New Jersey counties. This work order will address five municipalities: Kingwood, Flemington, Sayreville, Carteret and Manville Township. The proposed projects will implement resiliency strategies that were studied during Hurricane Sandy as well as the recent Hurricane Ida. Many of these projects will focus on "moving" water away from key infrastructure in these localities to ensure safe passage for the general public and access for our emergency response teams in these areas. Many of these projects include pump station upgrades, building/structure demolition, floodproofing, generators, stormwater drainage upgrades, and the incorporation eco-friendly rain gardens and bio-retention basins to better convey/store water in a environmentally safe way. There will also be a new emergency service building and garage that will house emergency response resources to ensure the surrounding community has better access to them during the next major storm. As the CMF for this wide array of projects, there are **common goals** for all the projects that Michael Baker will ensure is achieved by the end of the Program:

- Safety for the surrounding public and workers during construction.
- Provide a clear and manageable path for each Subrecipient to navigate the HUD-CDBG requirements.
- Eliminate any Waste, Fraud and Abuse of governmental HUD funds.
- Reduce costs associated with unnecessary contractor delays and claims.
- Maintain open communications with all stakeholders.
- Provide and maintain ALL project documentation in well-organized manner.

And when all of these are achieved...

We will have an "Audit Proof" Program that all can share the success in.

LESSONS LEARNED FROM PAST CMF WORK ORDERS

Over the past **eight (8) years** that Michael Baker has served as the CMF for similar work orders. We have learned what "pitfalls" are always lurking behind every corner. Knowing what to look for is half the battle. We have learned a lot in the past eight years and understand that small details can quickly turn into large problems if you don't address them early on. We have assembled a list of some of the more significant items to look for early on and throughout the program to avoid costly delays:

- **Uniform Relocation Act:** *"The Uniform Relocation Assistance and Real Property Acquisition Policies Act (URA), is a federal law that establishes minimum standards for federally funded programs and projects that require the acquisition of real property (real estate) or displace persons from their homes, businesses, or farms. The URA's protections and assistance apply to the acquisition, rehabilitation, or demolition of real property for federal or federally funded projects. 49 CFR Part 24 is the government-wide regulation that implements the URA."* During the preliminary design phase of any project, property ownership needs to be identified for any potential impacts. If this task lags, the consequences can magnify. We have seen that required acquisitions can add over a year in some instances and delay the progress of final design and bidding. This can be corrected by requiring certifications from the Subrecipient and Design Firm to confirm the property acquisition requirements prior to advancing too far into the design phase. We also found that simply including this agenda item on all bi-weekly status meetings helps too. We have found that regular status meetings during the design process with all stakeholders is a "must" and that items like this can be discussed regularly and not missed on anyone's "radar." Too often projects can get "lulled" into thinking everything is going smoothly if the right questions are not be asking.
- **Utility Relocations:** Utility companies can sometimes be difficult to coordinate with during the design process. The Design Firms need to be diligent in establishing communication with these companies and ensure that ALL utilities have been identified before the Final Bid packages are advertised. Leaving the utility coordination up to the contractors is not the best way handle any relocation. The reason is, this can create a delay for the contractor that can potentially seek additional contract time and associated costs. Our solution to this is to hold Design Firms accountable during the design phase to ensure no bid package is prepared until written verification and/or agreements with utility companies have been prepared. Similar to property acquisition discussed above, this should be an agenda item at every meeting during the design phase. We will keep asking the questions and ensure the Design Firm is engaging the utility companies during design until this task is completed.
- **Michael Baker has learned from previous work orders** that meticulous tracking and logging in of ALL correspondence including emails, submittals, meeting minutes and other deliverables can pay big dividends in settling disputes down the road. On numerous occasions, Michael Baker was asked to create timelines for issues that arose with Subrecipients and

their associated consultants. Our team was able to provide specific dates of actual e-mail notifications and responses to issues that began (even up to over 2 years prior). These timelines and backup documentation can then be used as a resource to settle potential disputes. With a program such as this, there will be up to five separate: Subrecipients, design firms, and contractors. That will generate a lot of emails, meetings and correspondence. The CMF needs to be well organized to track this information and know what is important to "hold on to." We have witnessed many occurrences of project details being either misplaced or forgotten about by a subrecipient or consultant. Again, the task of document control may seem like administrative item that is put off, however, the Michael Baker team knows otherwise and is why they place a great importance on this task.

- **Permitting:** Another huge schedule "buster" are permits. The Environmental Review process is the first step in identifying potential permit requirements. It is up to the Design Firms to then engage the NJDEP, USCOE, etc., to apply for the permits. It always a good idea to have a Pre-Application meeting with NJDEP for exapmle, to describe the project and ensure the right permits are being pursued. Like URA above, missing a permit or not applying for the right one can add 9-12 months to a project schedule in some cases. Again, as experts in the NEPA process, we will ensure this is discussed early on at progress meetings with the Design Firm to ensure this is not taken a back seat to other activities and to hold them accountable. Although the CMF's role is to facilitate the permitting process, but knowing when to apply pressure and to ask the right questions is where we excel and this will help alleviate the potential pitfalls.

Throughout the Environmental Review Phase, Design Phase, and Construction Phase for projects of this magnitude, there is a large amount of coordination, scheduling, reviews, oversight, inspection, and cost considerations that need to be completed. The DPMC needs a skilled multi-disciplinary team of experienced professionals to rely upon for these tasks, paying close attention to quality, schedule, and costs. The CMF Consultant will be the DPMC's and assigned Project Director's (PD) representative and maintain their expectations and goals as the primary objective.

We know that the CMF consultant will be asked to take on assignments on short notice and provide the complete range of services needed by the DPMC and PD through the various phases of the project. The DPMC and PD need an experienced and capable consultant team that can maintain and monitor high-quality projects following the design standards and requirements while working with limited oversight by the assigned PD's staff. The Michael Baker Team is well versed in these topics and possesses the technical experts needed to fulfill these requirements throughout the phases of the projects.

Services Provided by the CMF

Professional, Technical, Administrative, and Clerical services are provided throughout the phases of a project. In general, those services include:

- Scheduling and Organizing Progress Meetings;
- Design Reviews;
- Budget and Cost Reviews;
- Agency Coordination;
- Compliance Reporting per funding source (i.e. HUD, FEMA, etc.); and
- Construction Management and Inspection.
- Project Close-Out.

PROJECT TASKS

Michael Baker is very familiar with the individual tasks identified in the scope of work as they are similar to the tasks under CMF-003 Work Orders No. 3 - Flood Hazard Risk Reduction and Resiliency Grant Program and Work Order No. 15 Atlantic City Resiliency Program. Our Team currently has a system of handling and tracking all identified tasks in an organized and concise way that has been time tested for over eight years.

TASK 1: DESIGN OVERSIGHT

Michael Baker understands this Work Order not only requires experienced knowledge of construction management, but also design. Without a thorough knowledge of the scope of work during the design phase, one cannot perform effective construction management. Under this Work Order there are five projects that will require equal knowledge from the design phase through construction. As highlighted in our Project Experience, Michael Baker is skilled in performing independent cost estimates to analyze budgets prepared by the Subrecipient's Design Firm. In addition to project budgets, Michal Baker understands the design requirements for the five projects identified under this Work Order. Our expertise will allow us to play an active role as required, to assist with value engineering of design alternatives to ensure budgets are met and solutions fulfill the project needs and required functions. Under this task, Michael Baker will closely monitor the following:

- Projects remain within eligible scope
- The design phase is proceeding per project and Master Schedule
- Permit, regulatory, and code compliance requirements are met
- URA is being reviewed and any project acquisitions are being properly obtained
- Utility coordination is being conducted as required
- Documents are ready for permit review by the DCA, DEP, USCOE and/or applicable regulatory agency
- Safety and security responsibilities are clear and appropriate in the contract documents

It is also understood that the Environmental Review (ER) process per 24 CFR 58 is the key to obtaining the AUGF (Authorization to Use Grant Funds) for these projects. All projects will require an ER and the level of review (i.e. CEST, EA, EIS, etc.) will need to be determined for each. We will ensure this activity is completed by the Subrecipients and we deliver the completed ER to the PD for processing by HUD. Permitting will drive the final design schedule. Our permitting technical expert, Ebony Washington, will review the permitting progress to verify that each Subrecipient's engineer consultant is on track with submissions to ensure timely permits. **Based on some preliminary investigations of the proposed projects, we anticipate the following permits and coordination efforts: NJDEP Waterfront Development Individual Permit and Flood Hazard Area Control Act Rule compliance will be required for work below and within 500' of the MHWL and impacts to the tidal flood hazard area., NJDEP Freshwater Wetlands Permit, NJDEP Flood Hazard Area permit, and the Green Acres program potentially.** Michael Baker will provide necessary oversight of the Subrecipient's Design Firm consultant, requiring attendance at regularly scheduled design progress meetings. Formal memorandums will be prepared, and the master project schedule will be updated accordingly to accurately track each project's progress. Most importantly, these progress meetings will ensure the PD stays informed of any potential critical issues or problems. Michael Baker will offer potential solutions to aid the PD with any decision-making requirements to progress the projects to ensure a timely completion by the to be determined project end dates.

TASK 2: GENERAL REPORTING REQUIREMENTS

Michael Baker has already developed multiple tracking tools, checklists and handbook guides that can be used under this task. Michael Baker sees Task 2 as a critical path task with the goal of expediting the overall program. Providing timely reviews with proper record keeping matching pace with the local government contractor deliverable submission schedule is the key to successful grant management. Monthly reporting is one of the key communication methods for a consultant to keep an owner informed. The PD is relying on the CMF to ensure that the project is meeting scope, schedule, and budget goals established for the project. Monthly progress reports will be submitted by the 15th of each month. The report will summarize in a clear concise manner the following:

- Monthly inspections reports w/ photos once construction starts.
- Invoices and change orders
- Meetings (coordination meetings and site meetings) along with minutes
- Contract amendments
- Procurements (professional and construction)
- Master Schedule updates (refer to Task 6 Master Project Schedule)
- Issues with Subrecipients meeting the State of Assurances requirements
- Projected work for the next month

The Michael Baker Team is poised to provide an effective, uniform deliverable tracking system capable of handling multiple projects. The tracking system will provide overall monitoring of all procurements, amendments, invoices, change orders, coordination meetings, site visits, photo logs (for each site visit), monthly labor monitoring (including HUD-11s), Independent Cost Estimates (ICEs), project closeout and other deliverables requested for review by the NJDCA not specified in the RFP. Michael Baker will verify required contract specific deliverables are complete, accurate, and are being submitted in a timely fashion for the necessary technical reviews in order to avoid unwarranted project delays.

Michael Baker has developed two tracking spreadsheets in addition to the Master Project Schedule that will be submitted monthly. These spreadsheets were specially designed for under CMF-003 Work Orders No. 3 & 15 and have been well received by DCA and can be effectively utilized for this work order. The first tracking spreadsheet is called the "Monthly Status Update." This spreadsheet will have tabs for each project and track the items listed above. Michael Baker will include key dates when items are received and will involve daily e-mail logs as required. This has proven to be very beneficial for tracking progress and developing timelines for key project milestones. The second spreadsheet is entitled "Monthly Issues Update." Michael Baker developed this stand-alone tracking tool to document key issues that may arise and will indicate what the issue is, date it was initiated, impact to project, ball-in-court, tracking comments, and when the issue was resolved. Michael Baker has the technical staff with qualifications ready to support the task and meet the unpredictable "highs and lows" of the contractor submittal process. The tracking system will provide the DCA with clear and concise updates for every monthly progress update.

Michael Baker understands that each step in a project's life cycle requires unique forms and supporting documentation. We have developed a series of checklists for every step of the way. These checklists were utilized for CMf-003 Work Orders No. 3 & 15 and can be easily transferred to this project for a seamless transition. The checklists developed include:

- Procurement Packages (both professional and contractor)
- Invoice Reviews
- Bid Document Plans and Specification Reviews
- Independent Cost Estimates
- Closeout

Michael Baker will include a checklist with each review conducted which will be updated regularly as items are received. There is also a column to indicates where the forms can be found in SIROMS for easy access. In addition to the checklists, Michael Baker has also developed handbooks for each step in a project's life cycle that include:

- Bid Package Preparation Handbooks (both professional and contractor)
- Preconstruction Conference (incl. Davis Bacon guide) Handbook
- Invoice Review Checklist
- Closeout Handbook

These handbooks are distributed early in the project to the Subrecipients and their consultants and include not only the above-mentioned checklists, but all the blank forms as well for reference. Michael Baker found that distributing these handbooks early on will eliminate any surprises for the contractors and consultants as to what is expected for each bid package, invoice, change order, and closeout.

A key critical task for successfully managing the grant award projects for this Work Order will be record keeping. Michael Baker understands that all documents and records produced by the local government contractor or CMF are to be submitted to the Sandy Integrated Recovery Operations and Management System (SIROMS) FHRR Document Library. In addition to this mandatory tracking, Michael Baker offers more robust document management solutions as detailed above.

Please refer to the following two pages that depict "Checklists" for Contractor Procurement and Invoice Reviews to demonstrate our thorough knowledge of the Program's requirements:

SAMPLE CONTRACTOR SUBRECIPIENT BID PACKAGE CHECKLIST

CMF 004 WO No. 02 Resilient Communities Program

Prime Contractor Bid Package Checklist

Project Name: Date:

Preparer:

Bid Package	Yes	No	N/A	Comments
Required w/ Submitted Bid Packages				
Bidder Qualifications (Bidder to provide "Resume" of similar projects)	☐	☐	☐	
FORM #1 - General Contractor's Schedule of Small, Women's, Minority, and Veteran Owned Business Enterprise Utilization Worksheet Sandy CDBG-DR Economic Revitalization	☐	☐	☐	
FORM #2 - Verification of Contractor Eligibility	☐	☐	☐	
FORM #3 - Notice of Contract Award (Signed Contract between Prime Contractor and Subrecipient)	☐	☐	☐	
FORM #4 - Certification of Subrecipient and General Contractor Affirmative Action/ EEO/ Section 3/ Prevailing Wage SWMVBEs Addendum to Construction and Bid Documents	☐	☐	☐	
Bid Bond	☐	☐	☐	
FORM #5 – HUD 4720 Project Wage Rate Sheet	☐	☐	☐	
FORM #6 - AA Form 1 – Initial Construction Project Workforce Manning Report	☐	☐	☐	
New Jersey *Public Works Contractor Registration & NJ Business Registration Certificate*	☐	☐	☐	
FORM #8 – Ownership Disclosure Form	☐	☐	☐	
FORM #9 – Disclosure of Investigation and other actions involving Bidder Form	☐	☐	☐	
FORM #10 - Disclosure of Investment Activities in Iran	☐	☐	☐	
FORM #12 - Anti-Lobbying Certification	☐	☐	☐	
FORM #13 - AIA G703 or Similar – 1992 Continuation Sheet – Contract Schedule of Values	☐	☐	☐	
FORM #14 - HUD-50070 Certification for a Drug-free Workplace	☐	☐	☐	
Sample #5 - Certificates of Insurance	☐	☐	☐	
Sample #6 - Performance Bonds	☐	☐	☐	
Sample #7 - Payment Bond	☐	☐	☐	
FORM #15 - Certification Regarding Equal Employment Opportunity	☐	☐	☐	
Form #16 SWMVBE Contract & Subcontract Activity Report X Quarter 2021	☐	☐	☐	To be submitted quarterly after award.
FORM #17 - WH347 - Certified Payroll	☐	☐	☐	To be submitted weekly after award.
FORM #19 - Monthly Project Workforce Report	☐	☐	☐	To be submitted monthly after award.
FORM #22 - Section 3 Utilization Plan	☐	☐	☐	To be submitted after award.
FORM #23 - Certification of Bidder Regarding Section 3 and Segregated Facilities	☐	☐	☐	To be submitted after award.
FORM #24 - Section 3 Certification for Subrecipients Receiving More than $100,000	☐	☐	☐	To be submitted after award.
FORM #25 - Section 3 Resident Certification Form	☐	☐	☐	To be submitted after award.
Form #26 Section 3 Utilization Plan for the X Quarter 202X	☐	☐	☐	
Section 3 Monthly Reports For Invoicing	☐	☐	☐	
Form #27 Disclosure of Prohibited Activities in Russia Belarus	☐	☐	☐	
Non-Collusion Affidavit	☐	☐	☐	
Attachment P- Debarment & Suspension Certification	☐	☐	☐	

SAMPLE INVOICE REVIEW CHECKLIST

Invoice Package Documents

CMF 004 WO No. 2 Resilient Communities Program
Invoice Package Checklist

Project Name: _____ Project Location: _____

Name: _____ Date: _____

Subrecipient Agreement	Yes	No	N/A	SIROMS File Location	Comment
Cover Letter	☐	☐	☐		
State Payment Voucher (if applicable)	☐	☐	☐	Construction Management / CDBG Invoices with Supporting Documents	
347/348 (CPRs) w/**Pay Stubs	☐	☐	☐	Labor Monitoring / WH-347	**Pay stubs needed for first invoice from Contractor/Subs. Once paystubs are received and verified against first invoice 347s, they will not be required again unless determined necessary.
Union & Cash Fringe Back-Up	☐	☐	☐	Labor Monitoring / WH-347	
Wage Rates	☐	☐	☐	Labor Monitoring / WH-347	
Pay Application used between Subrecipient and Contractor	☐	☐	☐	Construction Management / Borough Payments in Support of the Project	
Cancelled Check/Electronic Wire Proof from Subrecipient and Contractor for previous Invoice	☐	☐	☐	Construction Management / Cancelled Check	
Schedule of Values **(Schedule K);**	☐	☐	☐	Contractor Invoice	
Stored Material Tracking (If Applicable)	☐	☐	☐	Contractor Invoice	
Engineer's Certificate No. 1 **(Attachment L);**	☐	☐	☐	Contractor Invoice	
Request for Information (RFI) Log	☐	☐	☐	Contractor Invoice	
Submittal Log	☐	☐	☐	Contractor Invoice	
Material backup documentation	☐	☐	☐	Contractor Invoice	
Monthly Inspection Summary reports	☐	☐	☐	Contractor Invoice	
Contractor's Form AA-202	☐	☐	☐	Labor Monitoring / Monthly Project Workforce Report	
HUD 11s	☐	☐	☐	Labor Monitoring / HUD 11 - Record of Employee Interview	
Contractor's Form #16 SWMVBE Contract & Subcontract Activity Report X Quarter 2024	☐	☐	☐	Contractor Invoice	
Contractor Section 3 Monthly Report	☐	☐	☐	Contractor Invoice	
Contractor's Form #26 Section 3 Utilization Plan for the X Quarter 2024	☐	☐	☐	Contractor Invoice	
Contractor's letter authorizing signatory for CPRs	☐	☐	☐	Labor Monitoring / WH-347	Ensure this was obtained prior to first invoice.

TASK 3: INSPECTIONS AND PHOTOGRAPHS

An important aspect of the inspection services is to provide continuous routine onsite inspection as identified in the RFP to ensure the DCA that the installed construction materials meets all of the quality requirements of the contract documents, including applicable codes and standards. Project plans, specifications and material submittals will be obtained from the Design Firm and ensure that all inspection staff are familiar with them prior to conducting their review. The Michael Baker Team will inspect the work and report any irregularities, based on report format with photos attached.

The Michael Baker Team will schedule inspection activities to support the project schedule and coordinate inspection of other consultants and agencies. The inspectors assigned to the work will monitor the materials, equipment and techniques used during construction. The inspector will advise the contractor of any materials or equipment which has not been approved and should not be installed, and any installation that does not meet the requirements of the contract. If corrective action is not taken by the contractor, the Superintendent/Resident Engineer will advise the DPMC of the non-conforming condition and any disputes arising over improper installation.

All non-conforming or unacceptable work will be reported on the Monthly Inspection Reports and a log maintained to document corrections is completed, in accordance with the requirements. Monthly digital progress photos will be taken by the Teams inspector to document the progress of the work, equipment installation and other key aspects of the work. Exterior photographs of all structures will be taken on a monthly basis from each side of the structure from the same locations. Preconstruction photographs will be taken to document the existing conditions prior to construction. The inspector will set up an electronic file that records the key data for each photo so that photos can be used in the future. As work progresses, photos will be taken to record work progress and completion of installed pipes, equipment, systems and finishes. Our inspectors will also use digital photographs to document installation work and link these photos to their Daily Diary Report. Other important activities will be documented through site photographs such as subsurface site conditions, concrete placement activities, site housekeeping conditions, disputed work items, etc. Documentation of such activities through photographs will be beneficial in any actions, questions, complaints or disputes, which may arise later.

As-built drawings will be reviewed and documented in conjunction with the Design Firm's engineer to ensure all field changes are captured properly. We will also ensure that the contractor complete an as-built survey to ensure all elevations of buildings, platforms and equipment are built to the required flood elevations.

TASK 4: CONTRACTOR DELIVERABLE REVIEW

This task represents the center of the "universe" in relation to the overall Program. All the other tasks identified in this work order revolve around this one. As the CMF, Michael Baker knows that without a proven, precise and organized system to review all the associated documentation, the Program cannot succeed. The guidelines set forth by HUD are complex and sometimes overwhelming if you are not familiar of what they mean and what is required for documentation. We know these guidelines as almost second nature since we have providing reviews in similar work orders through NJDPMC for the past eight (8) years. We have developed handbooks, checklists and other standard operating procedures to ensure not only we understand the process but have also made it easy for the Subrecipients and their contractors to understand and follow.

At the start of every phase in this Program, we will hold meetings with Subrecipients and Contractors to review these checklists to ensure they understand what will be expected to provide as backup documentation. We have also learned that it is also important to include these in the bid packages so Contractors are aware of what is required before they are awarded the contracts. For example, invoice reviews almost always seem to be a trouble spot for contractors when they submit their invoices and end holding up payments due missing documents. For example, Contractors need to know they are to provide the required CPRs, wage rates, and monthly fringe backup documentation with every invoice just to name a few. Knowing that these types of items are required before the award provides some assurances, they know what they are in for if they are selected. Therefor we realized this type of information should be "spelled out" when possible, for them rather than relying on them to sift through the Federal guidelines (it is still understood they are ultimately responsible to follow all guidelines but we will try to make it easier for them.)

Knowing what to look for is the key to identifying any deficiencies. This is why we developed these handbooks and checklists. This Program could not make it through an audit without them. We are also very familiar with the SIROMS system (for over 8 years now)for record keeping. We can assist with setting up the required folders to store all this documentation as well when the time comes.

TASK 5: PROVIDE INDEPENDENT COST ESTIMATES (ICE)

The primary goal of Task 5 is to estimate costs and fees of local government contractor agreement amendments (change orders) at the request of the NJDCA. Performing independent cost estimates is a primary example of providing the proper checks and balances for the local government contractor. Michael Baker understands that certain complex issues often arise during construction served by considering multiple solutions or assumptions and sometimes require amendments to successfully complete a project. Michael Baker knows the value of developing Independent Cost Estimates (ICE) during every phase of the project and not just during construction. Not only is this a requirement from federal agencies such HUD as outlined in **2 CFR A 200.324** for their grants, but it is also the primary tool in keeping the Contractor "in check" during the change order process. Since Michael Baker has the "experts" in Design and Construction Management, we are well acquainted with pitfalls of accepting change orders from Contractors without an independent check. Often, this step can save the Client on unacceptable "markups" or hidden costs. As always, Michael Baker will act in the best interest of the Program first and far most.

Michael Baker's New Jersey-licensed professional engineers have extensive experience preparing ICEs and know that requested ICEs must be completed in a timely manner. The Michael Baker Team is highly skilled in estimating the man-hours, equipment and material required to complete change orders proposed by local government contractors. We have the expertise for any type of project that includes buildings, stormwater conveyance, pump stations, bulkheads and general construction items. Michael Baker understands the importance of ICEs for evaluating local government contractor fee proposals since discrepancies between the two may result in negotiations with the local government contractor. Michael Baker is prepared to provide cost reasonable analyses should explanations be required for differences between the ICE and fee proposal.

Michael Baker's comprehensive life-cycle approach utilizes a standard process to develop estimates, tracking trends and historical indexes, analyzing bids, and assessing the risks and probability of high-impact events and their influence on cost. This includes maintaining relationships with local resources, including affiliations with contractors and construction associations. Michael Baker maintains a dedicated, multi-disciplined estimating staff, including Certified Construction Managers, cost engineers, and professional estimators. Our estimating staff includes Certified Construction Managers and Associate Value Specialists, as well as professionals affiliated with the American Society of Professional Estimators and the Association for the Advancement of Cost Engineering

We understand that cost control is a very important component of project delivery. A design to cost approach will be applied correlating change order construction costs with available budget. Should deviations be observed, we will immediately alert and work with you to refine the design to work within the available funding. Michael Baker will perform cost reasonable analyses and explain any differences between ICEs and fee proposals. Standard procedures will be developed by Michael Baker to systematically review, analyze, and assess estimates. This procedure will include the development of technical independent estimates, constructability input, and management concurrence. The procedure will be formalized through project specific checklists submitted to the DPMC and NJDCA with the recommendations.

TASK 6: SCHEDULING, MASTER SCHEDULE

The Michael Baker Team firmly believes that CPM schedules are an essential and powerful tool in completing a project on-time and within budget. The development of the Master Project Schedule is very dynamic, and the Michael Baker Team will help ensure the overall program's schedule path is clear of obstacles and optimizes the project delivery process to ensure all contracts are completed by September 2029 or earlier. Michael Baker will review the initial and final network schedules submitted by the Design Firms during design and the contractors during construction for each project and, in concert with the Subrecipient and DCA, make recommendations for acceptance, revision, or rejection.

Michael Baker is currently using a master schedule that was specifically developed to track similar progress and fiscal expenditures for CMF 003 Work Orders No. 3 & 15. This master schedule tracks the design phase through the construction phase and will also include monthly/quarterly anticipated expenditures versus actual expenditures. This schedule can be easily reformatted with the five proposed projects for a seamless transition into a working schedule. The Master Project Schedule is only part of driving the project. Accountability for project submittals and issue resolution must be diligently tracked and recorded to guard against delays and minimize the Subrecipient liability in the event of a claim.

Another lesson learned that could be added to list noted above, is the requirement of the Subrecipient to the contractor, to insist on monthly schedule updates during construction. Often, we saw that the Subrecipient did not hold the contractors accountable routinely to provide schedule updates. What happens in these instances, is that if a delay occurs, the contractor needs to show the impact to the schedule at the time of the delay. Waiting to the end of the project to assess delays is usually

too late and potential claims can arise from the contractor. We have seen from other State governmental agencies that their general specifications require contractors to make monthly schedule updates or payment for invoices can be withheld. This is one idea that should be explored with current Subrecipient specifications templates in this Program.

TASK 7: STATEMENT OF ASSURANCES COMPLIANCE

Statement of Assurances Compliance is usually where things get "murky" as many folks may not be familiar with the Davis Bacon rules for paying overtime to employees, how you pay for an employee that works under two job classifications or at what point/threshold does a supervisor or foreman, who is on-site, get paid under specific job classification....just to name a few special cases. Michael Baker knows these answers and more. Another area that can be overlooked are when contractors have subcontractors that may not be SAMs registered. Checking for debarred contractors from not only a State level but through the Federal level via SAMs is one of the important compliance checks a CMF will do. Contractors must be registered with active IDs in SAMs prior to the award of any contract.

Section 3 compliance is also very important and many contractors may not be familiar of the requirements if they have not worked on HUD related federal grant programs. We are aware of the new Section 3 Final Rule that became effective on November 30, 2020 and is codified at 24 CFR part 75. In fact, Michael Baker assisted Ms. Sylvia Johnston at DCA prepare a new Section Plan template for contractor's to use in these programs.

Our Program handbooks and checklists that we developed over the past 8 years for previous work order assignments help Subrecipients become compliant and are easy to understand and use.

TASK 8: PROJECT CMF REVIEW OF CONSTRUCTION CONTRACTOR INVOICES

Michael Baker understands the local contractor is being administered by the Subrecipient. However, under this Program, invoice documentation goes well beyond typical invoice packages that many Subrecipients are not familiar with. Michael Baker has allotted time to review invoices associated with each project on a monthly basis for the task order duration. During this process, contractor invoices will be reviewed to:

- Verify that each payment is consistent with applicable federal, state, and local laws, and that there is no duplication of benefits, process and payment errors, waste, fraud, abuse, malfeasance, or mismanagement of funds.
- Verify that contract deliverables are provided within acceptable timeframes for the duration of the engagement.
- If weaknesses, gaps, or errors are detected, develop recommendations and strategies to ensure maximum federal recoveries, compliance with applicable laws, and prevention of associated risks.
- Verify that all invoices are complete (i.e. including all contract-required documentation), accurate, and have been uploaded to the SIROMS FHRRR Document Library.
- Report findings to NJDCA and DPMC Contracting Officer.

Michael Baker has developed an "Invoice Checklist" under the previous work orders (refer to previous pages above for a sample) that can be used to streamline the review process. In addition, Michael Baker shall assist the PD in any disputes or negotiations with local government contractors as needed. We will also assist the Subrecipient and contractors early on as to what the expectations are for backup documentation.

TASK 9: MEETINGS AND CONFERENCE CALLS

Effective project management starts with good communication. Our approach to this work order is to ensure our key leadership stays "plugged in" into each of the five projects. As such, Sr. Project Manager Peter Senus and/or Project Manager Sean Kahn will attend all meetings, as appropriate. If required, Michael Baker will arrange conference calls (via Teams) and/or on-site meetings with each local government contractor and municipality/county throughout the design and construction phases to discuss progress of the work, critical items affecting the schedule of the project, and change order disputes.

Michael Baker understands that it is our responsibility to prepare an agenda for certain meetings, conduct the proceedings, and prepare the meeting minutes for DCA's PD following the standard meeting minutes format. At other meetings, Michael Baker will be present to document the meeting, schedule changes, budget alterations, and build the lessons learned document. Prior to these meetings and during regular project execution, Michael Baker will inform DCA of any meetings or correspondence with other agencies, government officials, and other stakeholder groups that may be required. Following meetings and at appropriate intervals, Michael Baker will prepare and subsequently update a Weekly To-Do-List that details pertinent activities and deliverables along with assigned responsibility that are critical to the advancement of the projects. This list will be distributed to all team members including NJDCA to clearly communicate project responsibilities and keep the projects on schedule. **REMEMBER: It is one thing to just attend a meeting. Michael Baker plays an active role in all**

meetings and will ask the right question....even the hard ones. Sometimes if the right questions are not asked, then critical tasks like URA, utility coordination, change orders, etc.. might go unnoticed. Many times, Contractors will hold back information if it is to their advantage down the road. Our job is bringing this information out early and often.

TASK 10: CONTRACT MODIFICATIONS

The Michael Baker team understands that Subrecipient and DCA's PD has the sole authority to issue contract modifications. As the CMF, we know that direct interaction with Contractors, for any reason, needs to be approved first by the PD and the Subrecipient as a guideline for any reason or situation. Our role is to collect the information leading up to the potential contract change and to provide the PD with the analysis (reason, cost and schedule) for them to make an informed decision. Change orders and modifications are typically initiated due to changes in field conditions, contract plan clarifications/ errors/additions or by the contractor if they see a better and more economical way of doing the same thing. For most change orders, the contractor and the on-site Superintendent/Resident Engineer will jointly investigate and review the need for a change order. When a change order is necessary, the contractor will prepare the request and justification and submit it to the Superintendent/Resident Engineer for review. This information needs to then be reported to the Design Firm and CMF as soon as possible. Michael Baker has learned that having bi-weekly progress meetings during construction are essential for many reasons including identifying changes in their early stages. Bi-weekly meetings is a great way to pass this information to all stakeholders. The Superintendent/Resident Engineer will prepare a recommendation and estimate of the additional work and submit the recommendation to the Subrecipient/PD/CMF for approval. Where work is in progress and the schedule would be impacted adversely, the Subrecipient/PD will be advised and, upon approval, the work will continue, and Time and Material Records kept until an approval charge order is received.

During the preconstruction phase, Michael Baker will develop project specific procedures to handle these changes. These procedures will detail roles and responsibilities, determining the scope, process for identifying and justifying the changes, steps to process the change, requirements to evaluate cost, schedule and impacts. Identifying the source or reason for the change order is only the first step. Responsible entities will be advised including the Design Firm if it is deemed an error and omission of the contract documents. The priority up front will be to determine cost and schedule impacts. In addition to the required backup from the Contractor, the Design Firm and Michael Baker will perform an ICE to compare to the Contractor's cost. Once all the information is obtained, we will share the information and analysis with the PD to make an informed decision.

TASK 11: PROJECT CLOSEOUT

Project Closeout is as important as the activities that occur while the project is in design and construction. Closeout starts with proper documentation that the punch list was completed by the contractor. Once verified, the following documents will be collected: as-built plans (w/ survey), Operation and Maintenance Manuals, maintenance bonds, Contractor and Subcontractor Release(s) of Liens, Duplication of Benefits, Engineer/Consultant's Certification: For Acceptance and Final Payment, and any other documents required by the Grant Program. Michael Baker developed a "Closeout Handbook" as well for previous work orders that can be utilized similarly under this task to track the progress of each requirement and ensure all documents are received prior to the release of final retainage. In addition, we have found that distributing this Closeout Handbook early in the project's life cycle to the Subrecipient's consultant grant manager is helpful in ensuring these items are obtained in a timely manner.

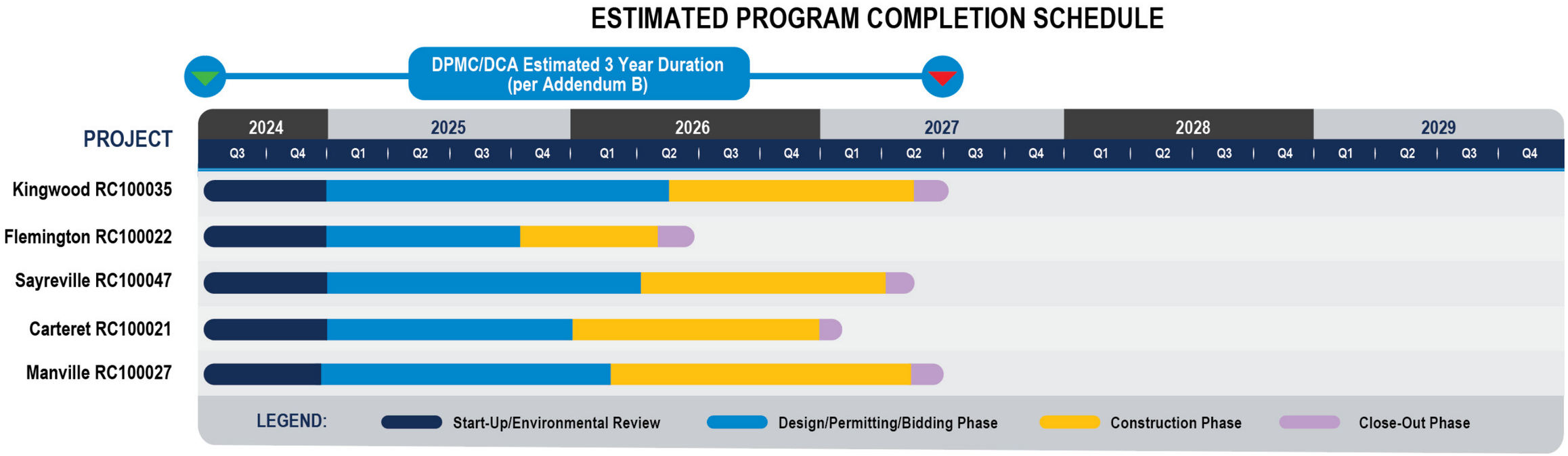
WHY CHOOSE THE MICHAEL BAKER TEAM?

The Michael Baker team is well versed in the requirements of HUD – CDBG of this Work Order due to our experience successfully administering CMF 003 Work Order No. 3 FHRRR & No. 15 Atlantic City Resiliency Program since 2016.

The DPMC will have access to a deep bench of local, multi-disciplinary resources that will efficiently and effectively deliver any number of projects identified– from design and permitting to construction and closeout.

The Michael Baker team will leverage the tools we already developed in previous Work Orders to ensure a seamless transition that enables us to hit the ground running.

APPENDIX A: ESTIMATED PROGRAM SCHEDULE – LEVEL OF EFFORT FOR COST PROPOSAL



NOTE: THIS IS AN ESTIMATED PROGRAM SCHEDULE BASED ON INFORMATION PROVIDED IN ADDENDUM B (I.E. 3 YEAR COMPLETION ESTIMATION). ACTUAL DURATIONS WILL CHANGE ONCE THE PROGRAM BEGINS AND SCHEDULES ARE MODIFIED TO REFLECT INDIVIDUAL PROJECT PROGRESSIONS.

ATTACHMENTS

State of New Jersey
DEPARTMENT OF THE TREASURY
DIVISION OF PROPERTY MANAGEMENT & CONSTRUCTION
P O BOX 034
TRENTON NJ 08625-0034

PHILIP D. MURPHY
Governor

TAHESHA L. WAY
Lt. Governor

ELIZABETH MAHER MUOIO
State Treasurer

CHRISTOPHER CHIANESE
Director

DATE: April 19, 2024

TO: AECOM Technical Services, Inc.
Hill International, Inc.
Jacobs Architects/Engineers, Inc.
Johnson, Mirmiran, Thompson, Inc. (JMT)
Michael Baker International, Inc.
Skanska USA Building, Inc.
STV Construction Inc.
Turner & Townsend Heery

FROM: Christopher R. Geary, Assistant Deputy Director
Contracts & Procurement Unit

SUBJECT: Addendum "A" dated April 19, 2024
DPMC Project #J0405-00, Term Contract CMF-004
DCA Resilient Communities
Construction Management Firm

Enclosed is the above referenced addendum. All competing firms shall acknowledge receipt by returning this form to:

Division of Property Management & Construction
Contracts and Procurement Unit
Attention: Jennifer Roeckel
P.O. Box 034
Trenton, NJ 08625-0034
Fax #: (609) 777-1970
Email: jennifer.roeckel@treas.nj.gov

April 19, 2024
Date Received

Michael Baker International, Inc.
Firm Name

300 American Metro Boulevard, Suite 154, Hamilton, NJ 08619
Address

Signature

Vice President
Title

State of New Jersey
DEPARTMENT OF THE TREASURY
DIVISION OF PROPERTY MANAGEMENT & CONSTRUCTION
P O BOX 034
TRENTON NJ 08625-0034

PHILIP D. MURPHY
Governor

TAHESHA L. WAY
Lt. Governor

ELIZABETH MAHER MUOIO
State Treasurer

CHRISTOPHER CHIANESE
Director

DATE: May 10, 2024

TO: AECOM Technical Services, Inc.
Hill International, Inc.
Jacobs Architects/Engineers, Inc.
Johnson, Mirmiran, Thompson, Inc. (JMT)
Michael Baker International, Inc.
Skanska USA Building, Inc.
STV Construction Inc.
Turner & Townsend Heery

FROM: Christopher R. Geary, Assistant Deputy Director
Contracts & Procurement Unit

SUBJECT: Addendum "B" dated May 10, 2024
DPMC Project #J0405-00, Term Contract CMF-004
DCA Resilient Communities
Construction Management Firm
Work Order #02

Enclosed is the above referenced addendum. All competing firms shall acknowledge receipt by returning this form to:

Division of Property Management & Construction
Contracts and Procurement Unit
Attention: Jennifer Roeckel
P.O. Box 034
Trenton, NJ 08625-0034
Fax #: (609) 777-1970
Email: jennifer.roeckel@treas.nj.gov

5/10/2024
Date Received
Michael Baker International, Inc.
Firm Name
300 American Metro Boulevard, Hamilton, NJ 08619
Address
Signature
Vice President
Title

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CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 04/19/2024

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

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

PRODUCER
Aon Risk Services Central, Inc.
Pittsburgh PA Office
EQT Plaza ~ Suite 2700
625 Liberty Avenue
Pittsburgh PA 15222-3110 USA

CONTACT NAME:
PHONE (A/C. No. Ext): (866) 283-7122 **FAX (A/C. No.):** (800) 363-0105
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	Allied World Surplus Lines Insurance Co	24319
INSURER B:	Zurich American Ins Co	16535
INSURER C:		
INSURER D:		
INSURER E:		
INSURER F:		

INSURED
Michael Baker International Inc.
300 American Metro Blvd.
Suite 154
Hamilton NJ 08619 USA

COVERAGES **CERTIFICATE NUMBER:** 570105140680 **REVISION NUMBER:**

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

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	X COMMERCIAL GENERAL LIABILITY			GLO419728102	08/30/2023	08/30/2024	EACH OCCURRENCE	$2,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						MED EXP (Any one person)	$10,000
	POLICY X PRO-JECT X LOC						PERSONAL & ADV INJURY	$2,000,000
	OTHER:						GENERAL AGGREGATE	$4,000,000
							PRODUCTS - COMP/OP AGG	$4,000,000
B	AUTOMOBILE LIABILITY			BAP 4197284 02	08/30/2023	08/30/2024	COMBINED SINGLE LIMIT (Ea accident)	$2,000,000
	X ANY AUTO						BODILY INJURY (Per person)	
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	
	X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	
	UMBRELLA LIAB OCCUR						EACH OCCURRENCE	
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	
	DED RETENTION							
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			WC419728202 AOS	08/30/2023	08/30/2024	X PER STATUTE / OTH-ER	
B	ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER (Mandatory in NH) Y/N: N — If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		WC419728502 WI	08/30/2023	08/30/2024	E.L. EACH ACCIDENT	$1,000,000
							E.L. DISEASE-EA EMPLOYEE	$1,000,000
							E.L. DISEASE-POLICY LIMIT	$1,000,000
A	E&O - Professional Liability - Primary			03124806 Claims Made SIR applies per policy terms & conditions	08/30/2023	08/30/2024	Per Claim	$5,000,000
							Aggregate	$5,000,000

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

CERTIFICATE HOLDER

State of New Jersey
Treasury, Division of Property
Management & Construction Contracts and
Procurement Unit
Trenton NJ 08625-0034 USA

CANCELLATION

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

AUTHORIZED REPRESENTATIVE

Aon Risk Services Central, Inc.

Holder Identifier :

Certificate No : 570105140680

ACORD 25 (2016/03) The ACORD name and logo are registered marks of ACO

RESUMES

CONTRACT EXECUTIVE

Gilberto Bosque, PE

Years experience 23

Gil Bosque brings over 20 years of experience in the design/construction of all types of infrastructure projects and is experienced in overseeing complete contract documents for Multi-disciplined projects including the preparation of project specifications. Gil has a solid technical foundation and his experience on Major infrastructure projects has equipped him with a detailed knowledge of State, County, and Local stakeholders' project delivery processes, including efficiently navigating through the utility agreement process, and ROW/ jurisdiction process. Gil has served as Principal In Charge on a variety of projects including final design of small and large-scale projects, roadway and roadside design, ITS design, lighting design, facility/architecture design including site/civil, drainage and stormwater Management, environmental permitting, and survey and ROW.

RELEVANT EXPERIENCE

CMF-003 W15 Atlantic City Resiliency Program (ACRP). *New Jersey Division of Property Management & Construction.* PRINCIPLE IN CHARGE. Principle-in-Charge responsible for the overall Management of seven construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($25M). Projects included new bulkhead structures, dry flood proofing, check valve replacements and elevation of traffic signal equipment. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

CMF003 WO3 - Flood Hazard, Reduction & Resiliency Contract (FHRRR). *New Jersey Division of Property Management & Construction.* PRINCIPLE IN CHARGE. Principle-in-Charge responsible for the overall Management of eight construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($50M). Projects included new outfall structures, pump stations with generators, tide gate upgrades, local road stormwater upgrades and dredge operations. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

Atlantic City Expressway Third Lane Widening Program Management Consultant Contract (2022- Present). *South Jersey Transportation Authority.* PRINCIPLE-IN-CHARGE. Principle-in-Charge responsible for the overall Management in establishing clear and concise processes and procedures for project controls,Maintaining a Master program schedule, overall program budget, overseeing project administration, coordination of project activities,Managing risk and potential claims, stakeholder relations, public involvement, and coordination with the project team to ensure invoicing and procedures follow SJTA's standards throughout the life of the program. The project improvements consist of widening 13Miles of highway, interchange improvements at Route 42, widening and reconstructing four Mainline bridges, regulated activities requiring coordination (NJDEP, NJ Pinelands, NPS, NJSHPO, USFWS, and Soil Conservation Districts), and constructability solutions. The program is split into Multiple design and construction contracts, requiring coordination with a wide variety of professional service consultants, subconsultants, vendors, and contractors to develop and Monitor clear tools for the various consultants to use and ensure project deliverables are consistent between contracts.

Michael Baker INTERNATIONAL

Education
B.S., 2000, Civil Engineering, New Jersey Institute of Technology

Licenses/ Certifications
Professional Engineer - Civil, New Jersey, 2014, 24GE05151200

Professional Engineer, New York, 2007, 084699

Professional Affiliations
American Council of Engineering Companies (ACEC)

Society of Hispanic Professional Engineers (SHPE)

Gilberto Bosque, PE

CONTRACT EXECUTIVE

RELEVANT EXPERIENCE CONTINUED

2013, 2015, 2017 & 2019 Airport Engineering Consultant Atlantic City International Airport (ACY), Atlantic City, New Jersey (2013-Present). *South Jersey Transportation Authority.* PRINCIPLE-IN-CHARGE. Principle-in-Charge for various engineering services related to the safe and efficient operation of the SJTA's facilities. Gil leads Michael Baker's rapid response team that supports SJTA on task order assignments and serves as an extension of staff in responding to and addressing situations as they arise. He also provides oversight of concept designs, funding evaluations and construction Management and inspection services.

Flood Risk Mapping Technical Support, Statewide, New Jersey. *New Jersey Department of Environmental Protection (DEP).* PRINCIPAL IN CHARGE. Assisted with various floodplain Models to analyze areas that are vulnerable to sea level rise in New Jersey using HEC-RASModeling and providing various engineering and Mapping services including floodplain analyses, studies, outreach, and training initiatives for the New Jersey Department of Environmental Protection, Bureau of Dam Safety and Flood Control. Michael Baker's engineering services have also included site assessments, geotechnical investigations, and hydrologic and hydraulic analyses

West 17th Street Flood Mitigation Concept and Construction Design, Ocean City, NJ. *City of Ocean City.* PRINCIPAL IN CHARGE. This project proposes improvements to address frequent flooding in the West 17th Street residential area in Ocean City, Cape May County, New Jersey. The West 17th Street development is located in a low-lying area prone to chronic flooding during various tidal and rain events. Michael Baker performed conceptual and is currently advancing final design. Lori is overseeing the development of the drainage design and plans that will include the construction of a new stormwater pumpstation, roadway improvements, and installation of new stormwater pipes, and Soil Erosion and Sediment Control Plans.

Roadway Engineering Services for Roadway Maintenance & Operations 2014MES965B & 2016MES094B, Statewide, New Jersey (2014-2016 & 2017-2019). *New Jersey Department of Transportation.* PRINCIPAL IN CHARGE. Provided QA/QC for Multiple on-call task orders, including drainage improvement for failed inlets, slope erosion, and localized ponding issues, roadside safety design, curb ramps,MPT, and traffic signage and striping plans. The agreements include More than 50 on-call projects to be completed within a short duration throughout New Jersey. Recent design solutions include culvert replacements/repairs, culvert and pipe cleaning, headwall replacement, incorporation of Best Management Practices (BMPs) such as small basins and swales, outfall replacements, riprap aprons and embankments, detention and infiltration basin clearing/regrading and outlet repair and adding drainage structures/roadway underdrain throughout a corridor to collect and convey water downstream.

County Route 530 Improvement Project, Burlington County, New Jersey (2005-2019). *Delaware Valley Regional Planning Commission/Burlington County/NJDOT Local Aid.* PROJECT MANAGER AND HIGHWAY DESIGN TEAM LEADER. Responsible charge of the $20M dollar full depth roadway reconstruction and widening of 3.5Miles of urban arterial roadway, including realignment of existing signalized intersection with CR 644 and extension of CR 644 north of its current terminus with CR 530. This project included oversight of all geometric and roadway design, design exceptions,MPT, design of 3 new culverts (H&H design), over 120 ROW impacts (15 full acquisitions), utility relocations, and 3 new traffic signals. The project additionally included extensive stormwater Management facilities in accordance with NJDEP and NJ Pinelands Commission regulations and coordination and development of all NEPA documentation including approval of a CED, Section 106 (Cultural Resources), Section 7 (Threatened and Endangered Species), and Section 4(f).Maintaining access to businesses and pedestrian Movements through the local road network is a high priority for this project.

Mercer County Task Order Engineering Contract Task Order #1 – Traffic Signal Upgrade at Hamilton Avenue and Kuser Road-Ward Avenue,Mercer County, New Jersey (2017-2019). *County of Mercer.* PROJECT MANAGER. Responsible for client coordination, leading project Meetings, and public outreach. Responsible for overseeing the preliminary and final design of roadway, signal, and safety improvements at several intersections along the project corridor. Michael Baker is leading the design efforts for traffic signal upgrades and accident Mitigation, overseeing the preliminary and final design of roadway, signal, and safety improvements at several intersections along the project corridor. This includes the design of two new traffic signals, ADA compliant curb ramps, lane adjustments, utility verification, geometric changes to side street approaches, new signing, and improved striping.

SENIOR PROJECT MANAGER

Peter Senus, PMP

Years experience 33

Peter Senus has over 33 years of experience in program and project Management that includes construction Management, federal grant Management (HUD CDBG-DR), heavy highway transportation design and site development. He has extensive experience with: FAA (Atlantic City Airport/SJTA) construction projects, grant program Management with NJ DCA/NJDEP for resilient infrastructure construction projects, heavy highway construction Management for the South Jersey Transportation Authority and New Jersey Turnpike Authority, and design engineering for the New Jersey Department of Transportation, the Corps of Engineers and Federal Aviation Authority (FAA). His project/construction Management along with inspection experience includes a wide variety of roadway, airfield,Major outfall structures, pump stations and vertical construction projects. His infrastructure engineering experience includes preliminary and final design contract document preparation for a large variety of site, facility and roadway projects including: plans and specification preparation, right-of-way engineering, utility infrastructure coordination, public outreach, cost estimation, project scheduling, sub consultant Management and budget analysis.

RELEVANT EXPERIENCE

CMF-003 W15 Atlantic City Resiliency Program (ACRP). *New Jersey Division of Property Management & Construction.* CONSTRUCTION SENIOR PROGRAM MANAGER. Responsible for the overall Management of seven construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($25M). Projects included new bulkhead structures, dry floodproofing, check valve replacements and elevation of traffic signal equipment. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

CMF003 WO3 - Flood Hazard, Reduction & Resiliency Contract (FHRRR). *New Jersey Division of Property Management & Construction.* CONSTRUCTION SENIOR PROGRAM MANAGER. Responsible for the overall Management of eight construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($50M). Projects included new outfall structures, pump stations with generators, tide gate upgrades, local road stormwater upgrades and dredge operations. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

Atlantic City Airport De-Icing Facility. *South Jersey Transportation Authority.* PROJECT MANAGER/CONSTRUCTION MANAGER. Responsible for the overall construction of a new deicing facility at the Atlantic City Airport ($20M). This project includes a de-icing facility, bituminous and concrete pavement, water quality detention basin with subsurface drainage features, airport lighting and utility relocations. Responsibilities included Management of the overall field construction staff, coordination with airport operations and contractor(s), subcontractor agreements, schedule review, approval of project contract finances and client coordination.

Atlantic City Expressway Third Lane Widening Program Management Consultant Contract (2022- Present). *South Jersey Transportation Authority.* CONSTRUCTIONMANAGER. Responsible for Maintaining a Master construction program schedule, overall construction program budget, and coordination with the project team to ensure invoicing and procedures follow SJTA's standards throughout the life of the program. The program is split into Multiple design and construction

Michael Baker INTERNATIONAL

Education
B.S.C.E., 1991, Civil Engineering, Norwich University

Licenses/ Certifications
Project Management Professional (PMP), 2013

NICET IV Transportation-Highway Construction, New Jersey, 2017, 1

NJ Society of Asphalt Technologists (NJSAT), New Jersey, 2014, 1

Professional Affiliations
American Society of Highway Engineers (ASHE)

Society of American Military Engineers (SAME)

Peter Senus, PMP

SENIOR PROJECT MANAGER

RELEVANT EXPERIENCE CONTINUED

contracts, requiring coordination with a wide variety of professional service consultants, subconsultants, vendors, and contractors. Responsibilities include constructability reviews, schedule Monitoring, bi-weekly progress Meetings, change order reviews, contractor pay application reviews and general reporting to the Client.

Atlantic City Int'l Airport – Phases 1-5 Airport/Terminal Road & Amelia Boulevard Widening Reconstruction. *South Jersey Transportation Authority.* PROJECT MANAGER/ CONSTRUCTION MANAGER. Project Manager/Construction Manager for this roadway improvement project that included full depth pavement replacement and widening, underground utility relocation, upgraded drainage system and traffic signal replacement, street lighting, landscaping. Responsible for overall construction Management and inspection, reviewing schedule updates, reviewing extra work items, preparing change orders and independent cost estimates (ICE), reviewing submittals, responding to Request for Information (RFIs), as-built plan preparation, final quantities and approving Contractor Monthly pay applications with certified payrolls.

Ft.McCoy Central Issue Facility, Sparta, Wisconsin. *U.S. Army Corps of Engineers, Louisville District.* SITE MANAGER. Responsible for final design documents and construction support services of this 65,653 gsf facility. Engineering tasks included coordination of local and state agencies, demolition plan development, geometric site layout, specification development, utility infrastructure design, stormwater pollution prevention plan, site grading, landscaping and overall plan production. The site layout was developed in accordance with current Department of Defense Anti-Terrorism/Force business Protection Measures for Buildings (ATFP). Other responsibilities included Managing of geotechnical and surveying subconsultant contracts, civil related financial budgets and construction support services such as resolving RFI's.

Combined Regional Maintenance Facility, Fort Dix, New Jersey. *U.S. Army Corps of Engineers, Louisville District.* SITE MANAGER. Responsible for developing the final contract documents and construction support services. This 50,400-square-foot facility was a combined vehicle Maintenance shop and training equipment site that provided concrete storage platforms capable of handling tracked combat vehicles, inspection,Maintenance and repair of vehicles and equipment associated with the National Guard. Primary duties included preparing final contract documents and providing field guidance to the Resident Engineer for constructability issues as well as quality control construction inspection reviews.

Army Reserve Equipment Concentration Site w/ Vehicle Maintenance Facility and Warehouse Facility, Lakehurst, New Jersey. *U.S. Army Corps of Engineers, Louisville District.* SITE MANAGER. Responsible for the development of a Design/ Build RFP document for the construction of an Army Reserve Equipment Concentration Site (ECS). Primary facilities included construction of a Tactical Equipment Maintenance Facility (TEMF), warehouse building, organizational parking, anti-terrorism Measures and building information systems. Engineering work included coordination of local and state agencies, geometric site layout, utility infrastructure coordination (mechanical, electrical, plumbing, and fire protection), stormwater pollution prevention plan development, site grading and earthwork analyses and coordination of landscape plan development. The site layout was developed in accordance with current Department of Defense Anti-Terrorism/Force Protection Measures for Buildings (ATFP). Participated in Multiple project design charrette Meetings. Other duties included providing field guidance to the Resident Engineer for constructability issues as well as quality control construction inspection reviews.

Joint Base McGuire-Dix-Lakehurst Site Improvements for Building 2901 87th Airbase Wing Headquarters. *McGuire AFB, New Jersey.* SITE MANAGER. Responsible final design plans and specifications for Building 2901 located at Joint Base McGuire-Dix-Lakehurst, New Jersey, in accordance with anti terrorism force protection (ATFP) standards. The scope of the project was limited to exterior improvements to parking lots, sidewalks, landscape plantings and plazas.

Atlantic City Int'l Airport – AOA Gate 11 & Security Fence. *South Jersey Transportation Authority.* CONSTRUCTION MANAGER. ConstructionManager for this security gate and fence improvement project that included removing existing degraded fencing and replacing with upgraded post and fence with barbed wire. Responsible for overall construction Management and inspection, reviewing schedule updates, reviewing extra work items, preparing change orders and independent cost estimates (ICE), reviewing submittals, responding to Request for Information (RFIs), as-built plan preparation, final quantities and approving Contractor Monthly pay applications with certified payrolls.

PROJECT MANAGER

Sean Kahn, PE

Years experience 11

Sean Kahn, P.E. has over 11 years of experience in program and project Management that includes construction Management, federal grant Management (HUD CDBG-DR), heavy highway transportation design, NEPA documentation and associated permitting. He has extensive experience with: FAA (Atlantic City Airport/SJTA) design projects, construction oversite and grant program Management with NJ DCA/NJDEP for a wide variety of resiliency infrastructure construction projects, heavy highway design Management for the New Jersey Department of Transportation and New Jersey Turnpike Authority. His infrastructure engineering experience includes preliminary and final design contract document preparation for a large variety of site, facility and roadway projects including: plans and specification preparation, right-of-way engineering, utility infrastructure coordination, permitting, public outreach, cost estimation, project scheduling, sub consultant Management and budget analysis.

RELEVANT EXPERIENCE

CMF-003 W15 Atlantic City Resiliency Program (ACRP). *New Jersey Division of Property Management & Construction.* CONSTRUCTION DEPUTY PROGRAM MANAGER. Responsible for the overall Management of seven construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($25M). Projects included new bulkhead structures, dry flood proofing, check valve replacements and elevation of traffic signal equipment. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews. A critical task for this program is record keeping,Mr. Kahn has Managed the state run SIROMS BPM SharePoint to keep all necessary documents organized, which has been proven successful when audited by HUD. Responsibilities also include training the subrecipient and numerous consultants on the standards and procedures necessary to effectively utilize the SIROMS SharePoint site.

CMF003 WO3 - Flood Hazard, Reduction & Resiliency Contract. *New Jersey Division of Property Management & Construction.* CONSTRUCTION DEPUTY PROGRAM MANAGER. Responsible for the overall Management of eight construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($50M). Projects included new outfall structures, pump stations with generators, tide gate upgrades, local road stormwater upgrades and dredge operations. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews. A critical task for this program is record keeping,Mr. Kahn has Managed the state run SIROMS BPM SharePoint to keep all necessary documents organized, which has been proven successful when audited by DCA. Responsibilities also include training the subrecipients and numerous consultants on the standards and procedures necessary to effectively utilize the SIROMS SharePoint site.

Michael Baker INTERNATIONAL

Education
B.S.C.E., Civil Engineering, Rutgers University

Licenses/ Certifications
Professional Engineer (PE). New Jersey

Sean Kahn, PE,

PROJECT MANAGER

RELEVANT EXPERIENCE CONTINUED

Atlantic City Expressway Third Lane Widening Program Management Consultant Contract (2022- Present). *South Jersey Transportation Authority.* PROJECT CONTROLS MANAGER. Responsible for establishing clear and concise processes and procedures for project controls,Maintaining a Master program schedule, overall program budget, overseeing project administration, coordination of project activities,Managing risk and potential claims, stakeholder relations, public involvement, and coordination with the project team to ensure invoicing and procedures follow SJTA's standards throughout the life of the program. The project improvements consist of widening 13Miles of highway, interchange improvements at Route 42, widening and reconstructing four Mainline bridges, regulated activities requiring coordination (NJDEP, NJ Pinelands, NPS, NJSHPO, USFWS, and Soil Conservation Districts), and constructability solutions. The program is split into Multiple design and construction contracts, requiring coordination with a wide variety of professional service consultants, subconsultants, vendors, and contractors to develop and Monitor clear tools for the various consultants to use and ensure project deliverables are consistent between contracts.

Airport Engineering Consultant Atlantic City International Airport (ACY) Contract (2017- Present). *South Jersey Transportation Authority.* DEPUTY PROJECT MANAGER. Responsible for coordinating and Managing task orders on this on-call agreement, including project design elements, coordinating with subconsultants, ensuring compliance with the National Environmental Policy Act (NEPA),Managing the schedules and budgets for each task order, and submitting project deliverables. Through this on-call assignment. Mr. Kahn has demonstrated his ability to tackle projects throughout a range of stages: planning, design, and construction administration, and a range of assignments: including, new taxiway design, escalator replacement design, various concrete apron and emergency repairs. Task orders on previous agreements include Gates 4 and 8 Concrete Repair, Priority Concrete Repairs, Escalator Replacement Survey Report and Design, Frank S. Farley Service Plaza Natural Gas Conversion Phase I and Phase II, Concrete Apron Rehabilitation Alternatives Analysis, and planning investigations for a variety of temporary and permanent cargo facilities.

New Jersey Bridge Deck Reconstruction and Seismic Retrofit Contract (2017-2020). *Greenman-Pedersen Inc.* PROJECT ENGINEER. Responsible for Managing Michael Baker's post-design efforts during construction. Responsibilities include: finalizing and reviewing responses to contractor submittals, RFI's, Change of Plan documents, and coordinating with the construction Management team. Michael Baker provided roadway and structural engineering services for the deck reconstruction of five of Newark Bay-Hudson County Extension's EB roadways. Along with deck reconstruction, the project restored toll plaza pavement at Interchange 14C,Made Miscellaneous structural repairs, and conducted seismic retrofitting between Interchange 14C and the Holland Tunnel Approach. As a subconsultant,Michael Baker was responsible for the roadway improvements, structural repairs, and Maintenance and protection of traffic design.

OPS No. A3715 & OPS. No. A3778 On-Call Stormwater Engineering Services (2019-2020). *New Jersey Turnpike Authority.* TASK LEAD. Responsible for leading the Maintenance and protection of traffic for three drainage repair and rehabilitation contracts on the Garden State Parkway and New Jersey Turnpike. This contract includes a wide variety of task orders for the Maintenance department for design of stormwater drainage and collection systems, asset Management, evaluation of existing drainage infrastructure and supporting CM/CI services. These contracts were identified for drainage repairs based on recent occurrence of immediate response Maintenance repairs, such as flooding and sinkholes and the high density of corrugated Metal pipes within the project limits. Mr. Kahn's primary responsibilities include overseeing MPT designs, development of contract plans, specifications, estimates, schedules and performing constructability reviews to Mitigate potential conflicts with existing infrastructure and other construction projects.

Scudder Falls Bridge Replacement, Final Design Services (2014 – 2020). *Delaware River Joint Toll Bridge Commission.* DESIGNER. Responsible for MPT design for the New Jersey side of the project. Responsibilities included in-depth design of temporary ramps and crossovers which required a full horizontal and vertical geometric design due to the complexity of the project. Additional responsibilities include assisting with Michael Baker's post-design efforts during construction, including: finalizing and reviewing responses to contractor submittals, RFI's, Change of Plan documents, and coordinating with the construction Management team. Michael Baker provided final design and post-design services for the Scudder Falls Bridge Replacement project.

QA/QC MANAGER

Rebecca Lyne, PWS, CE

Years experience 20

Ms. Lyne serves as the Director of Quality Management for the Michael Baker New Jersey Operations. Additionally, Becky brings almost two decades of experience in environmental planning and documentation, including numerous land use, transportation, resiliency, and environmental restoration projects. Becky has successfully delivered numerous complex projects by applying Michael Baker's company-wide Quality Management System and implementing the NJ Operations' policies developed specifically to address our local clients' needs. Michael Baker has established a standard structured project delivery process for all projects.

RELEVANT EXPERIENCE

Floodplain Study Mapping Services Term Contract, Statewide, New Jersey. *New Jersey Department of Environmental Protection.* PROJECT MANAGER. Becky is the Project Manager for two task orders under this agreement, both focusing on the NJDEP's new Code Coordinated Flood Damage Prevention Ordinance. For the Statewide Floodplain Management Training Task,Michael Baker assisted the NJDEP on creating a NJ Floodplain Administrator's Guide. The guide describes the floodplain administer roles and responsibilities, federal, State, and local laws, NJ Construction Codes, ordinances and permits, and provides references. Becky served as Quality Control Manager for this Guide. Michael Baker also developed a Local Design Flood Elevation (LDFE) Worksheet and sample permit application. As part of this task, Becky collaborated with NJDEP staff on training and presented three separate training Modules to introduce the ordinance and permit requirements, provide detailed background for the permit, and provide step by step examples for calculating the LDFE. For the FY 2022 Flood Ordinance Task,Michael Baker is providing administrative support for NJDEP's Flood Damage Prevention Ordinance Initiative. The new ordinance incorporates requirements from NFIP rules as implemented by Local Floodplain Administrators, the NJ Flood Hazard Area Control Act implemented at a state level, and the uniform Construction Code (UCC) implement by the local Construction Official. Currently, only a handful of Municipalities have adopted new ordinances. Michael Baker will assist NJDEP to achieve approximately 300 compliant ordinances by the end of 2022. Tasks include review of submitted ordinances, coordination with Municipalities, and tracking adoption Milestones, and hosting a SharePoint platform to facilitate review by NJDEP and FEMA.

CMF-003 W15 Atlantic City Resiliency Program (ACRP). *New Jersey Division of Property Management & Construction.* QUALITY CONTROL (QA/QC)MANAGER. Responsible implementation of the project specific PMP for this project and conducting quality audits throughout the duration of this program. This program consisted of seven construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($25M). Projects included new bulkhead structures, dry floodproofing, check valve replacements and elevation of traffic signal equipment. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

CMF003 WO3 - Flood Hazard, Reduction & Resiliency Contract (FHRRR). *New Jersey Division of Property Management & Construction.* QUALITY CONTROL (QA/QC) MANAGER. Responsible implementation of the project specific PMP for this project and conducting quality audits throughout the duration of this program. This program consisted of eight construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds ($50M). Projects included new outfall structures, pump stations with generators, tide gate upgrades, local road stormwater upgrades and dredge operations. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews,

Michael Baker INTERNATIONAL

Education
M.S., 2010, Environmental Studies, University of Pennsylvania

B.S., 2003, Natural Resource Management, Rutgers University

Licenses/Certifications
Certified Ecologist, 2011

Professional Wetland Scientist, 2010, 2071

Professional Affiliations
American Water Resources Association (AWRA)

Ecological Society of America (ESA)

Society of Wetland Scientists (SWS)

Rebecca Lyne, PWS, CE

QA/QC MANAGER

RELEVANT EXPERIENCE CONTINUED

scheduling and coordinating progress Meetings with local Municipalities and engineers, conducting regular site reviews and general construction inspections,Monitoring local government contractor project progress,Maintaining a Master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor Monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

Preliminary Engineering of Bay Avenue Resiliency Project, City of Somers Point, Atlantic County. *City of Somers Point.* PROJECT MANAGER. This project proposed the construction of a berm through beneficial reuse of dredged Material along portions of Bay Avenue in the vicinity ofMaryland Avenue using dredged Material from the City-owned Higbee Pier to address nuisance flooding at low points and to eliminate invasive species. Native shrub plantings were proposed on the berm as well as a 10-foot Multi-use path to provide the public with a scenic walkway. The project involved Conceptual Design, local official and public engagement, agency coordination, development of construction plans, drainage analysis, construction staging, and an engineering cost estimate.

Deicing Pad Design Services, Atlantic City International Airport (ACY). *SJTA.* ENVIRONMENTAL LEAD. Responsible for obtaining required environmental authorizations and approvals. These include FAA NEPA Environmental Reevaluation, demonstrated compliance with the NJ Pinelands Comprehensive Management Plan, Cape-Atlantic Soil Conservation District Certification, NJPDES Significant Indirect User, NJPDES General Stormwater Permit for Construction, and Air Quality Pre-Construction Permit among others. Significant coordination with the NJ Pinelands Commission and NJDEP Division of Fish and Wildlife was required to account for impacts to protected habitat for grassland avian species.

Route 52 Causeway Replacement Project, Ocean City and Somers Point, NJ. *New Jersey Department of Transportation.* ENVIRONMENTAL TEAM LEADER. Environmental Lead overseeing compliance and in responsible charge of preparing applications for NJDEP Green Acres Diversion and numerous Modifications for the previously issued NJDEP Coastal Permits as well the USACE Section 404 Individual Permit. Responsibilities included documentation for required Environmental Re-evaluations, development of soil erosion and sediment control Measures per NJDOT requirements, stormwater Management, incorporating permit conditions into contract documents to ensure compliance, facilitating T&E species surveys, leading shellfish Monitoring, and providing assistance in the wetland compensatory Mitigation effort through construction Monitoring. Mitigation activities included wetland construction and habitat enhancement for the 28acMalibu Beach Wildlife Management Site, construction of over 5,000 LF of bioengineered shoreline stabilization, and construction/ restoration of tidal Marsh wetlands. The bioengineering shoreline stabilization techniques for this project were highlighted in the FHWA Nature-Based Solutions for Coastal Highway Resilience White Paper. The project also included the beneficial reuse of dredged Material from relocated navigation channels to the eroded Malibu Beach. Michael Baker provided comprehensive engineering services for the replacement of the Route 52 Causeway and the reconstruction of approximately 2.8Miles of Route 52 from Route 9 in Somers Point to Bay Avenue in Ocean City crossing Great Egg Harbor Bay.

Rio Grande Avenue Drainage and Roadway Improvements, Wildwood, NJ. *Cape May County.* ENVIRONMENTAL LEAD. Responsible for completion of all environmental studies (environmental screening, wetland delineation, hazardous Materials, cultural resources, etc.) Required for the Concept Development, Preliminary Engineering, and Final Design supporting roadway improvements to Rio Grande Avenue in Wildwood, Cape May County. The project included roadway and drainage improvements to Mitigate a high accident rate, traffic congestion, and frequent roadway flooding including the reconstruction of an existing headwall. Required permits and approvals included NJSHPO Section 106 consultation, NEPA Category Exclusion Document, USACE Nationwide Permit 23, NJDEP Freshwater Wetlands Permit, Waterfront Development Permit, CAFRA Permit, and SESC certification from the Cape-Atlantic Soil Conservation District. All work followed the NJDOT Local Aid Process.

Merion Park Drainage and Roadway Improvements. *City of Ocean City.* ENVIRONMENTAL TASK LEAD. Responsible for environmental investigations and wetland delineation, development of USACE Jurisdictional Determination, USACE Section 404 Permit, NJDEP Coastal Wetlands, Coastal Area Facilities Review Act and Waterfront Development Permits, NJDEP Freshwater Wetlands Protection Act Permit, and developing and executing wetland delineation. Led coordination efforts with NJDEP Division of Fish and Wildlife and USFWS pertaining to threatened and endangered species and the NJ State Historic Preservation Office pertaining to the presence/absence of cultural resources. Michael Baker was contracted to analyze the existing drainage system for the Merion Park area and develop conceptual and final drainage design and roadway improvements. The drainage improvements will rehabilitate the eight drainage systems identified in the neighborhood, including replacement of tideflex valves and the existing bulkhead to reduce flooding as well as design for three pump stations.

FE A SIBILI T Y/ NEPA LE AD

Jessica Jahre, AICP, PP

Years experience 13

Ms. Jahre is a certified professional planner and a certified floodplain Manager with a background in climate resilience and adaptation, flood risk Management, and water resources planning. She has a strong background in program and project Management, communication, and strategic planning. Prior to joining Michael Baker,Ms. Jahre worked with NJ Department of Environmental Protection to expand its Climate Resilience Program and create the state's first climate resilience strategy. She has also previously worked in the private sector on hazard Mitigation plans, resilience plans, NEPA compliance, and flood risk reduction planning.

RELEVANT EXPERIENCE

New Jersey State Hazard Mitigation Plan Update. *NJ Office of Emergency Management.* PROJECT MANAGER. Ms. Jahre is leading the 2024 update to the NJ State Hazard Mitigation Plan. This project will include coordination with over 25 state agencies and plan participants. Michael Baker was contracted for the 2024 update after successfully updating the plan in 2019. This planning process will be the first state update that uses climate projections to analyze future risk to critical and state-owned assets. The enhanced risk assessment being performed will look at impacts of natural hazards on the built environment, socially vulnerable populations and the economy, and natural lands and ecosystems. This plan update also includes significant outreach to non-state organizations and participants to enhance our understanding of Mitigation capabilities across the state.

Climate Change Interagency Council Advisory Group Facilitation. *NJ Department of Environmental Protection.* PROJECT MANAGER. The Interagency Council on Climate Resilience is required to update progress on the NJ Climate Resilience Strategy every two years. The Council seeks to satisfy this requirement by creating Resilience Action Plans on specific impacts or concerns related to Climate Change. In 2022,Michael Baker was retained by NJ Department of Environmental Protection to assist in the development of the first Resilience Action Plan. As the Project Manager,Ms. Jahre is working with NJDEP to facilitate external advisory groups for these Action Plans. The first advisory group comprised of seven national experts on extreme heat and climate adaptation will convene Multiple times in 2023 to provide key feedback to state agencies on addressing extreme heat. In addition,Michael Baker is supporting the public outreach and feedback for the development of the Resilient Action Plan on Extreme Heat.

Hoboken Building Design Guidelines Addendum. *City of Hoboken.* PROJECT MANAGER. Ms. Jahre worked with the City of Hoboken to provide non-regulatory guidance on strategies for homeowners to address increased flooding associated with intensive precipitation events. This document is an addendum to the regulatory design guidelines adopted by the City in 2015. This project included a public survey and virtual public Meeting to gather feedback from residents. Ms. Jahre also led the development of the original building design guidelines at her previous firm.

Climate Resilience Independent Review. *Port Authority of New York and New Jersey (PANYNJ).* DEPUTY PROJECT MANAGER. Ms. Jahre conducted research and analysis for an independent assessment of the Authority's current state of climate resilience in the agency by evaluating the Authority's approach including projects, programs, policies, guidelines, and governance. Ms. Jahre worked to craft a resilience framework based on ongoing efforts within PANYNJ and best practices across the industry. This included research on the current Industry Practice, including the programmatic approach to resilience taken by peer agencies nationally and internationally using existing literature and other secondary data as it relates to aspects pertinent to the review of the Authority's resilience. Ms. Jahre worked with team Members to review the Authority's programs focused on and relevant to enhancing agency resilience, including emergency response/operations; capital planning; project design and delivery; studies, plans, and assessments; grants and funding; Enterprise Risk Management; risk disclosures, insurance, and financing; asset Management; workforce engagement and incentives;Media/ communications strategy; and government and community relations. Based on these findings. Ms. Jahre developed key recommendations

Michael Baker INTERNATIONAL

Education
M.R.C.P., 2010, City and Regional Planning, Rutgers University

Licenses/ Certifications
American Institute of Certified Planners, 2015

Certified Floodplain Manager, 2014

Professional Affiliations
American Institute of Certified Planners (AICP)

Association of State Floodplain Managers (ASFPM)

Jessica Jahre, AICP, PP

FEASIBILITY/NEPA LEAD

RELEVANT EXPERIENCE CONTINUED

for enhancement Measures to PANYNJ's current resilience program and identified solutions.

Non-Michael Baker Project Experience

NJ Climate Change Resilience Strategy. *New Jersey Department of Environmental Protection (NJDEP).* DEPUTY PROJECT MANAGER AND CO-AUTHOR. Co-authored New Jersey's inaugural Climate Change Adaptation Plan in response to Executive Order 89. This strategy provides a suite of forward-looking policy options to promote the long-term resilience of New Jersey to climate change. As a framework for policy, regulatory, and operational changes, the Resilience Strategy presents actions that New Jersey's Executive Branch can take to support the resilience of the state's communities, economy, and infrastructure. The Resilience Strategy includes 125 recommended actions across six priority areas. Under the guidance of the Chief Resilience Officer, she collaborated with staff across the Inter-agency Council on Climate Resilience to develop the priority areas and recommendations. Additionally, facilitated interagency workshops, stakeholder Meetings, and public Meetings to gather input on plan. Oversaw the technical contractor,Managed timelines and budget to deliver the plan within budget and with Minimal delays due to the public health crisis.

Resilient NJ Program. *New Jersey Department of Environmental Protection (NJDEP).* PLANNING PROGRAMS MANAGER. Oversaw the development of the Resilient NJ program. Resilient NJ is an assistance program to support local and regional climate resilience planning. Using the best available science on precipitation, temperature, and sea-level rise, Resilient NJ provides grants, tools, and technical assistance to communities to plan for how the changing climate May affect residents, businesses, and the natural and built environments. Led the launch of this Multi-faceted program over three years. During her tenure the program launched the first four regional resilience planning projects in New Jersey to address sea-level rise and precipitation-driven flood risk. Additionally, the program released the state's first guidance tool for planning for climate change at the local level. This guidance is a resource for individuals who represent, work, or volunteer for a Municipal or county government in New Jersey to understand how their community can proactively plan for the changing climate and build resilience into their local governance. Created this guidance for Municipalities to their obligations for the Municipal Land Use Law requirements, state Hazard Mitigation Plan requirements, and Plan Endorsement requirements. The resources also help communities to integrate equity considerations into climate resilience planning. Managed budgets, workflows, program staff, and technical oversight for all contracts and projects related to the Resilient NJ program. Also developed new grant proposal concepts and application Materials for federal grant opportunities, including a new funding partnership with the Department of Defense.

A Seat at the Table New Jersey Department of Environmental Protection. *(NJDEP).* PROJECT MANAGER. While all people living in the United States are affected by climate change, some communities and some populations are more vulnerable to changing climate conditions than others. While at NJDEP, oversaw several initiatives to enhance equity considerations in the Department's resilience planning efforts. These initiatives included a NOAA-funded project, executed by researchers from Rutgers University. This project identified opportunities to address needs of socially vulnerable populations as part of coastal community climate resilience planning, and policy options for efforts to address needs of socially vulnerable populations in community resilience efforts. Additionally, this project resulted in an online training Module for planning practitioners to incorporate best practices into resilience planning efforts, which was incorporated into the Resilient NJ toolkit.

Moodna Watershed Flood Mitigation Assessment. *Orange County, New York.* SENIOR PLANNER. Using funds from a 2016 grant program sponsored by the New England Interstate Waters Pollution Control Commission (NEIWPCC) and the New York State Department of Environmental Conservation-Hudson River Estuary Program (HREP), this project executed a flood assessment and flood Mitigation analysis using climate change projections for the communities within the Lower Moodna watershed (Cornwall, New Windsor, Cornwall-on-Hudson, and Woodbury). The project team assessed the facilities, infrastructure, and urban development that are at risk from flooding along the Moodna Creek and its tributaries within the study area; and second, developing a series of hydrologic and hydraulic Models to assess the extent of potential flooding from the 10 percent, 1 percent, and 0.2 percent, often referred to as the 10-year, 100-year, and 500-year, respectively, storm recurrence intervals within the study area. The Modeling included flows for these storm events under existing conditions and also hypothetical scenarios with predicted increases in precipitation and population growth. Conducted land use analysis, solution identification and impact analysis, as well as drafted the final project report.

DESIGN LEAD

Joseph Danyo, PE, PP

Years experience 44

Joe Danyo is the Chief Engineer and brings 44 years of experience in infrastructure design and construction Management, involving bridge design/rehabilitation, roadway widening/restoration, highway design, complex staging, environmental permitting, ITS, buildings/facilities, toll plazas, and construction supervision. He has successfully supervised the design of some of New Jersey's Most significant infrastructure improvement projects and has extensive knowledge with the State's administrative procedures, technical requirements, and operations, as well as overall experience in Managing Multi-discipline projects. With Joe, there is no learning curve – Joe knows what the clients expects from design consultants and has successfully delivered on past projects. in the transportation and building construction industry, including several projects in coastal environments and flood Mitigation. This experience provides him the ability to address issues early on so they do not become field issues or claims in the field.

RELEVANT EXPERIENCE

Facilities Improvement Program, Final Design Services, Turnpike North, New Jersey. *New Jersey Turnpike Authority.* PROJECT MANAGER. Responsible for final design for the replacement/rehabilitation of numerous Maintenance yards and facilities along the Turnpike. The project includes the replacement/rehab of Maintenance buildings, storage facilities, salt facilities, and other structures in the Maintenance yards specifically along the Turnpike North. This project is part of the overall Facilities Improvement Program to bring the Authority's Maintenance facilities on both the Turnpike and Parkway into a good state of repair. Michael Baker's contract for the Turnpike North includes six (6) new buildings and the rehabilitation of five (5) buildings, including administrative offices,Multi-use buildings, salt storage buildings, and Materials storage buildings. The scope of work includes architectural design;Mechanical, electrical and plumbing design; site/civil design; environmental permitting and hazmat investigations; stormwater Management; site lighting; geotechnical engineering and retaining walls; utilities engineering; and construction staging. Site-work is also required at the sites, in the form of rehabilitation and/or replacement of driveways, parking lots, and outside storage areas.

Combined Regional Maintenance Facility, Fort Dix, New Jersey. *U.S. Army Corps of Engineers.* CIVIL/HIGHWAY QA/QC REVIEWER. Michael Baker provided final design services for a $15M Combined Regional Maintenance Facility (CMF) at Fort Dix, NJ. The 50,400-square-foot facility is a combined vehicle Maintenance shop, and Mobilization and training equipment site that provides for the storage, inspection,Maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard, Army, Marine, and Navy Reserve units. Scope included site design including survey, drainage/SWM, utility extensions to serve the new facility, parking lots and yard areas, local roadway improvements, pavement design, security fencing, grading, and environmental permits.

Scudder Falls Bridge Replacement, Intelligent Transportation System Building. *Delaware River Joint Toll Bridge Commission.* DEPUTY PROJECT MANAGER/PROJECT MANAGER. Deputy Project Manager/Project Manager for final design and post-design services for the $390M replacement of the existing four-lane Scudder Falls Bridge over the Delaware River with a twin-span 1,800 ft. structure carrying six lanes of through traffic (three in each direction), and associated auxiliary lanes for entry/exit travel, and a pedestrian and bike shared use path connecting the two historic canals toe paths on each side of the river. The scope of work design services for the $2M Bridge Monitor and All Electronic Tolling (AET) equipment building in conjunction with the Scudders Falls Bridge design. The building will support the proposed AET system equipment, bridge security/monitoring, and Maintenance equipment and storage, with consideration for possible future equipment needs. It provides access to the AET gantry structure via in interior stair and roof access to a catwalk for vendor system access.

New Jersey Turnpike Secaucus Interchange, Sections No. 1 & 2, Contract Nos. SIP-101, 102, & 202. *New Jersey Turnpike Authority.* PROJECT MANAGER. Project Manager for above contracts on the $180M Interchange 15X.

Michael Baker INTERNATIONAL

Education
B.S., Civil Engineering, Rutgers University

Licenses/ Certifications
Professional Engineer, New Jersey

Professional Planner, New Jersey

Value Engineering Course, New Jersey Department of Transportation

48-Hour Hazardous Waste Operations and Emergency Response Training

ASHE

ASCE

Joseph Danyo, PE, PP

DESIGN LEAD

RELEVANT EXPERIENCE CONTINUED

Responsibilities associated with the building construction for the final design of the $15M SIP-202 Contract included site layout, grading, drainage/stormwater Management including Mechanical water treatment devices, site lighting designs, right-of-way plans, utility services, landscaping, constructability reviews, and a new 4,000-square-foot utility building with an elevator, and a 9-lane toll plaza and access tunnel, which included DCA reviews. Utility services involved routing the services approximately 1/2Mile to connect to existing facilities and included a sanitary force main with a wet well and pump station.

Replacement of District 6Maintenance Facility and Three State Police Stations, New Jersey. *New Jersey Turnpike Authority.* QA/QC MANAGER. Michael Baker provided supervision of construction services for replacement of the Maintenance building at Turnpike District 6 Yard and construction of Troop "D" Newark,Moorestown, and Galloway State Police Stations. The State Police Stations were brought up to contemporary law enforcement agency standards to Meet today's requirements and future needs, including the addition of fitness room and locker room facilities for female troopers. The new District 6Maintenance Yard provides updated equipment, expanded capabilities, and contemporary amenities for Turnpike Maintenance personnel to replace the overcrowded and obsolete facility. Michael Baker provided inspection staff, daily coordination, and negotiations with contractors; electronic document control; change order review and analysis; safety and incident Management;Meetings facilitation; and claims avoidance/resolution.

Rehabilitation of the Turnpike's Toll Plaza Utility Buildings and Tunnels. *New Jersey Turnpike Authority.* QA/QC MANAGER. QA/QC Manager for the Construction Management and Inspection services for the rehabilitation of 25 Toll Plaza Utility Buildings spread across 3 contracts; South, Central and North on the NJ Turnpike for approximately $16M in construction. These contracts address the toll plaza immediate needs for functionality such as stand-by power (utility building & ETC huts), public health (water, sewer, etc.), improved working conditions for the employees (HVAC-AC/heat/positive air), electrical/lighting, waterproofing, avoidance of Mold, asbestos abatement, security upgrades (doors windows, lighting, etc.), and structural repairs (slab replacements/repairs, tunnel repairs, roofs, etc.).

Route 52 Causeway Replacement. *New Jersey Department of Transportation.* QA/QC MANAGER. Responsible for oversight of feasibility studies, preliminary design, final design and construction support services for this $400MMulti-faceted, 3-mile transportation improvement project involving realignment and widening of the Route 52 Causeway and elimination of the Somers Point Circle. The project included a 3,500-sq. ft. new Visitor Center with associated utilities, parking lots, waterfront access ramps, and fishing piers with direct pedestrian access.

Roebling Station Park-and-Ride Facility, Florence Township, Burlington County, New Jersey. *New Jersey Transit (NJT)/ Agate Construction Company, Inc.* PROJECT MANAGER. Responsible for a design/build project involving a 220-space parking facility to be constructed on the site of the old Roebling Steel Plant which was a U.S. EPA Superfund site. The parking lot served the Roebling Station on NJT's Camden to Trenton light rail line. Design, included drainage/SWM basin that needed to be a closed system (separated from the contaminated soils), architectural block retaining wall, lighting, signing/striping, walkways, survey, cultural resources/SHPO coordination, environmental services and building rehabilitation of the weight station structure.

Northeast Inlet Redevelopment Area Infrastructure System Project, Atlantic County, NJ (1989-1993). *Client: Atlantic City Engineering Department.* PROJECT ENGINEER. Responsible for performing final design and construction Management/ inspection services for the redevelopment of the City's 75 acre Northeast Inlet section, which included the raising/ reconstruction of roadways to avoid flooding, installation of traffic signals,Modifications and upgrades to the stormwater drainage system, new/modifications to the water distribution system, landscaped promenade walkways, and the installation of new 2,500 feet of timber bulkheads. This work included coordinating/scheduling contractors, utilities, and developers; generating plans, CAFRA permit, EIS, specifications, and cost estimates; and reviewing/approving construction documents, shop drawings, field design changes, and contractor invoices for payment.

Union Lake Dam Rehabilitation,Millville, NJ. *New Jersey Division of Building and Construction.* CONSTRUCTION MANAGER. Responsible for concrete restoration work at the Union Lake Dam, a 35-foot-high, 2,000-foot-long earthen dam with a 200-foot-longMass concrete Main spillway. Work included vertical concrete spall repairs and the injection crack sealing of concrete on the spillway structure using Portadam containments (cofferdams), the installation of concrete baffle blocks, and channel scour prevention Modifications in a riprap area located immediately downstream of the stilling basin.

ENVIRONMENTAL DOCUMENTATION/PERMITTING, PERMIT COORDINATOR

Ebony Washington

Years experience 16

Ms. Washington has 16 years of experience as an environmental permitting specialist and has served as the environmental lead for numerous bridge and highway projects in New Jersey. Ms. Washington has practical experience and training in the implementation of the National Environmental Policy Act of 1969 (NEPA), Executive Order 215, ecological assessments, wetland delineations, environmental studies, socioeconomic and environmental justice analyses, and environmental permitting for public-sector projects, including the preparation of applications, plans, and reports supporting local, state, and federal permits. Ms. Washington has prepared numerous state (New Jersey and Pennsylvania) and federal permit applications, including New Jersey Department of Environmental Protection (NJDEP) freshwater wetlands; CAFRA; waterfront development; coastal wetlands; Delaware and Raritan Canal Commission; Green Acres; New Jersey Pinelands; U.S. Coast Guard Bridge; U.S. Army Corps of Engineers Section 404/10; and PADEP chapter 105 permits.

Through the environmental permitting process,Ms. Washington has developed relationships with reviewers at the regulatory agencies and has worked with these agencies to identify issues and develop agreeable resolutions efficiently. Additionally, collaborating with the engineers and planners,Ms. Washington has been heavily involved in evaluating proposed alternatives in regards to regulated resources. Her involvement is essential in developing a permittable solution that Minimizes environmental impacts while Meeting the project's purpose and need.

RELEVANT EXPERIENCE

Atlantic City Offshore Wind O&M Facility, Atlantic City, NJ. *Orsted.* PROJECT MANAGER. Responsible for providing environmental services for a proposed offshore wind operations and Maintenance facility in Atlantic City's inlet area. The project will build an in-water and Marine support facility, replace a failing bulkhead, install Moorings and floating docks, and prepare the property to support loading and training cranes. An access platform,Marine fueling facilities, construction trailers, and utilities are also part of the project. Ms. Washington managed the permitting and licensing effort for the development of an operation and Maintenance facility for an offshore wind developer. As part of her role on this job,Ms. Washington focused primarily on preparing the NJDEP land use and Atlantic City permits. The Atlantic City permit approval effort included obtaining site plan approval from the Atlantic City Planning Board Zoning Board, which required provisions for public hearings, responding to public comments, and requests for information from various public officials.

Ocean Wind 2 Construction and Operations Plan and Permitting,Monmouth County, NJ. *Orsted.* PROJECT MANAGER. The project includes providing environmental services for a proposed offshore wind operations and Maintenance facility in Monmouth County, NJ. As part of the project, geotechnical borings will be sited within the NJDEP defined coastal zone Management area and will require authorization through the NJDEP Division of Land Resource Protection in accordance with the Coastal Zone Management Rules (N.J.A.C. 7:7).Ms. Washington's effort included preparation of the NJDEP the land use permits required for the project's geotechnical investigation program. Ms. Washington also developed the required compliance documentation and site plan/impact drawings required for NJDEP review and permit issuance.

Facilities Improvement Program Maintenance District TMD 4, East Windsor Township,Mercer County, NJ. *Client New Jersey Turnpike Authority.* ENVIRONMENTAL SPECIALIST. Responsible for the preparation of a NJDEP Division of Land Use Regulation permits for Freshwater Wetlands General Permits 6 and 7 for the proposed improvements to New Jersey Turnpike Maintenance District 4 – (TMD 4) Hightstown. Also responsible for the preparation of a Delaware and Raritan Canal Commission (DRCC) Approval application for proposed project activities located within Review Zone B of the DRCC jurisdiction.

Wetland Delineation and Environmental Permitting,Mileposts 112 to 113 (NJTA OPS No. P3782),Middletown Township,Monmouth County, New Jersey. *New Jersey Turnpike Authority.* PROJECT MANAGER. Ms. Washington was Project Manager responsible for the preparation of the environmental screening report, wetland delineation, and NJDEP Land Use Permits. The wetland delineation was performed in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989). NJDEP Flood Hazard Area Control Act (FHACA) and Freshwater Wetlands General Permit 10B were procured for this project. In addition,Ms. Washington also prepared a riparian Mitigation

Michael Baker INTERNATIONAL

Education
M.U.P., 2009, Environmental Planning and Technology, New York University

B.A., 2005, Environmental Engineering, Lafayette College

Professional Affiliations
American Planning Association (APA)

Women's Transportation Seminar (WTS)

Ebony Washington

ENVIRONMENTAL DOCUMENTATION/PERMITTING, PERMIT COORDINATOR

RELEVANT EXPERIENCE CONTINUED

plan which included coordination with the Marsh Bog Brook I & II Mitigation Bank, NJDEP Mitigation Unit, and the New Jersey Turnpike Authority. This project entailed the rehabilitation and repair of two 120-inch corrugated Metal pipe (CMP) culverts, replacement of a 66-inch CMP culvert, and replacement of additional connecting CMPs within the project limits. All of these culverts convey a tributary of Nut Swamp Brook along the Garden State Parkway (GSP¬).

Wetland Delineation and Environmental Permitting, Rehabilitation of County Bridge R-24Mill Road over Rockaway Creek Readington Township, Hunterdon County, NJ. *Client: Hunterdon County.* ENVIRONMENTAL TEAM LEAD. Responsible for the preparation of NJDEP Land Use Permits for the original project scope involving the replacement of County Bridge R-24. Prepared NJDEP Permits including a Freshwater Wetlands General Permit 10A and NJDEP Flood Hazard Area Control Act Individual Permit as part of the permitting process. Ms. Washington also conducted a wetland delineation for regulated wetlands and State open waters following the procedures in the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands. She prepared an NJDEP Application for a Line Verification Letter of Interpretation. Other responsibilities include coordinating SHPO Section 106 Consultation and oversight of the Historic Architecture and Phase 1A Archaeological surveys and reports.

Wetland Delineation and Environmental Permitting, FREC Access Road Bridge Replacement over Toms River, Structure No. 3489-001, Jackson Township, Ocean County, NJ. *New Jersey Department of Transportation.* ENVIRONMENTAL TEAM LEAD. Responsible for conducting a wetland delineation, preparing the wetland delineation report and wetland plans during the Preliminary Engineering phase of this bridge deck replacement project. The wetlands delineation was performed in accordance with the Federal Manual for Identifying and Delineating Jurisdictional wetlands (1989) and the NJ Pinelands Commission Manual for Identifying and Delineating Pinelands Area Wetlands (1991). During Final Design,Ms. Washington prepared an NJDEP Freshwater Wetlands General Permit, an NJDEP Flood Hazard Area Individual Permit, and a NJ Pinelands Commission Development Approval for the bridge replacement.

Wetland Delineation and Environmental Permitting, Route 130 Westfield Avenue toMain Street Pavement Reconstruction Project, East Windsor Township,Mercer County, NJ, Cranbury Township,Middlesex County, NJ. *New Jersey Department of Transportation.* ENVIRONMENTAL TEAM LEAD. Responsible for the Management and preparation of NJDEP Land Use Permits. Preparation of NJDEP Land Use Permits including Freshwater Wetlands General Permits 2 and 10 and NJDEP Flood Hazard Area Control Act Individual Permit. Conducted wetland delineation, and prepared wetland delineation report, for regulated wetlands and State open waters following the procedures in the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands. Also responsible for the preparation of a Delaware and Raritan Canal Commission (DRCC) Approval application for proposed project activities location within Review Zone B of the DRCC jurisdiction.

Environmental Permitting, County Road 530, Southampton Township, Pemberton Township, and Pemberton Borough, New Jersey. *Burlington County.* ENVIRONMENTAL TASK LEAD. Responsible for preparation of NJDEP Individual Freshwater Wetlands and Flood Hazard Area Control Act Permits, and NJDEP Green Acres Diversion Application, Section 106 SHPO Consultation, and NJDEP Project Authorization under New Jersey Register of Historic Places Act for replacement of the existing culvert and hydraulic opening design for Goldy's Run under Magnolia Road, and the rehabilitation and extension of existing culverts for Goldy's Run and Birch Run under Route 530. All work was completed in accordance with FHWA, County, DVRPC Policies and Procedures, the NJDOT Procedures Manual, the Local Aid NJDOT Project Delivery Process, and State and Federal environmental regulations.

Environmental Permitting, Delancy Street Roadway Improvements. *City of Newark.* ENVIRONMENTAL TASK LEAD. Responsible for preparing and securing NJDEP Land Use permits for Freshwater Wetlands General Permits #10A and #11, Waterfront Development (In-water and Upland), Coastal Wetland Permit, and Flood Hazard Area Control Act Individual Permit associated with culvert reconstruction activities and stream cleaning. Aided in NEPA Environmental Reevaluation. Coordinated preparation of Hazardous Waste Site Investigation Report, PAECE Reports, and Remedial Action Work Plan. All work was completed in accordance with NJDOT Procedures Manual and State and Federal regulations.

ARCHITECT

David Tudryn, RA, AIA, LEED GREEN ASSOCIATE

Years experience 36

Mr. Tudryn currently represents Michael Baker as Vice-President, Department Manager for the northeast regions' architectural practice. He has overseen both small and large transit design teams that involve highly technical projects with extensive agency coordination and public involvement. His notable roles include Project Manager for Connecticut DOT's Eleven Hartford Line Rail Stations; Architect-of-Record for WMATA's Bladensburg Design-Build BEB-ready bus facility that will accommodate a fleet of 300 transit vehicles; Project Manager for CTDOT's New Haven's 300,000-square-foot Bus Facility; and Project Manager for the Jacksonville Transportation Authority's Transit Center which was a Construction Manager-at Risk (CMR), a $64Mcombined mass transit hub.

RELEVANT EXPERIENCE

Hurricane Sandy Emergency Services, Various Locations, East Coast. *FEMA.* SENIOR ARCHITECT. Managed the design team which developed concepts for flood mitigation measures and analyzed the potential flow of floodwaters through new high-rise structures at the World Trade Center. After the enormous calamity of Hurricane Sandy in 2012, many federal, state, and municipal agencies needed assistance to aid them in the mammoth cleanup effort and assist them in planning for future prevention. Michael Baker was tasked by several agencies to support them in their efforts. Assignments included ad-hoc GIS mapping and spatial data analysis for FEMA, including incorporation of datasets into various web services used to disseminate data to the public; emergency bridge inspection support services for the New Jersey and Virginia Departments of Transportation; a comprehensive water intrusion protection plan for the new World Trade Center in New York City; and detailed inundation mapping for the New Jersey Turnpike (NJTP) and Garden State Parkway (GSP).

Route 52 Causeway Replacement Project, Ocean City and Somers Point, New Jersey. *New Jersey Department of Transportation (NJDOT).* QA/QC. Responsible for providing quality assurance check of architectural plans. Michael Baker provided comprehensive engineering services for the replacement of the Route 52 Causeway and the reconstruction of approximately 2.8 miles of Route 52 from Route 9 in Somers Point to Bay Avenue in Ocean City crossing Great Egg Harbor Bay. Michael Baker's services included bridge and roadway design, environmental permitting, lighting design, traffic and intelligent transportation system design, utility relocation, community outreach, and construction management and inspection.

Facilities Improvement Program Final Design Services, New Jersey. *New Jersey Turnpike Authority.* ARCHITECT OF RECORD. Michael Baker provided final design services for the replacement or rehabilitation of maintenance buildings, storage facilities, salt facilities, and other structures in the maintenance yards specifically along the New Jersey Turnpike North. Michael Baker's contract included design for six new buildings and rehabilitation of five buildings. The scope of work included architectural design; mechanical, electrical, and plumbing design; site/civil design; environmental permitting and hazmat investigations; stormwater management; site lighting; geotechnical engineering and retaining walls; utilities engineering; and construction staging.

Concept Development Study for New Pedestrian Bridge and Rail Platform Expansion, New Brunswick, New Jersey. *New Jersey Transit Corporation.* ARCHITECT OF RECORD. Provided architectural design support and assisted in the coordination of the overall project with the railroads. Michael Baker performed a concept development study for the construction of a pedestrian bridge and walkway to connect a 1,275-space parking garage with the New Brunswick Train Station on the Northeast Corridor Line.

Highway Operations Control Center Renovation, Newington, Connecticut. *Connecticut Department of Transportation.* PROJECT MANAGER. Michael Baker is provided final design and construction phase support for approximately 14,000 square feet of control center renovations. Its services included architectural, mechanical, electrical, plumbing, and information technology systems (ITS) upgrades, as well as selections for furniture and consoles. The first renovated area is a former daycare center, which is being converted into approximately 8,400 square feet of office space for highway operations with a 50-foot-long

Michael Baker INTERNATIONAL

Education

Master's Certificate, 2008, Project Management, Drexel University

M.Arch., 2008, Architecture, University of Maryland

B.S., 1991, Architecture, Northeastern University

Coursework, 1990, Architecture, Boston Architectural College

Licenses/ Certifications

Registered Architect, New Jersey, 2012, 21AI01912900

Professional Affiliations

American Institute of Architects (AIA)

National Council of Architectural Registration Boards (NCARB)

David Tudryn, RA, AIA, LEED GREEN ASSOCIATE

ARCHITECT

RELEVANT EXPERIENCE CONTINUED

video wall and spaces for ITS staffing and support. This area includes three private offices, a library, a kitchenette, two bathrooms, and its own exterior entrance. The second renovated space is the former operations area, which Michael Baker converted into a traffic incident area with a traffic incident room containing a 20-foot-long video wall, a system support room, two conference rooms, and areas for storage and a nurse's station. Michael Baker also developed complex staging plans to maintain operations in these spaces during construction.

Scudder Falls Bridge Replacement, Final Design Services, Bucks County, Pennsylvania. *Delaware River Joint Toll Bridge Commission.* ARCHITECT. Michael Baker provided final design and post-design services for the Scudder Falls Bridge Replacement project. The existing four-lane bridge over the Delaware River was functionally obsolete and needed to be replaced to alleviate recurring current peak-period and emergency-incident traffic congestion and projected future traffic. Michael Baker designed replacement of the existing bridge with a twin-span structure carrying six lanes of through traffic (three in each direction), two auxiliary northbound lanes for entry/exit travel, and one auxiliary southbound lane for entry/exit travel. The scope of work also included drainage upgrades, approach widening, a bicycle/pedestrian walkway, new bridge inside shoulders, a new all-electronic toll (AET) collection system, an intelligent transportation system (ITS) equipment building, and noise-abatement walls.

CTL - NDC Newark. *CenturyLink.* ARCHITECT OF RECORD. Provided architectural oversight, technical review and code compliance review and served as architect-of-record for assignments in the State of New Jersey for CenturyLink.

Wells, Water Treatment, and Transmission Main Project, Beverly Hills, California. *City of Beverly Hills.* QA/QC. Responsible for providing oversight of the task order team and general quality assurance checking for the deliverable. Michael Baker provided engineering services to investigate the hydraulic, water quality, and physical requirements of a water exchange project to expand local water supply/production by developing groundwater in the La Brea Subarea, located primarily outside of Beverly Hills city limits within the City of Los Angeles.

CTTransit Hartford Dispatch Center, Connecticut. *CTTRANSIT.* PROJECT MANAGER. Responsible for providing technical oversight of the project team. Michael Baker developed full contract documents for renovations and HVAC, fire protection and electrical upgrades to CTTRANSIT's Busway Operations Center including their dispatch room, bus operations center, server, and telephone rooms.

Amtrak Nationwide AE Services IDIQ, Nationwide. *Amtrak.* ARCHITECT OF RECORD. Served as the Architect-of-Record. Michael Baker is providing architectural and engineering design and construction-phase services at various Amtrak stations nationwide. Each station includes a mixture of Americans with Disabilities Act (ADA) and state-of-good-repair (SOGR) station and platform improvements. Michael Baker's services have included schematic design, construction documentation and administration for architectural, structural, civil, stormwater, mechanical, and electrical engineering, along with cost estimating, bid review, construction administration, renderings, and presentations. Additionally, this project required coordination with the FRA, an SHPO review, and other third-party entities.

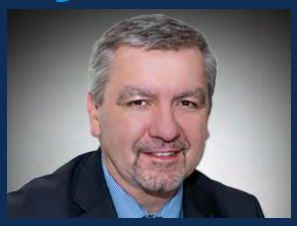
Improvements to Stamford Transportation Center, Stamford, Connecticut. *Connecticut Department of Transportation.* PROJECT DIRECTOR. Michael Baker is providing master planning and design services for renovations at the Stamford Transportation Center. The station is the busiest in Connecticut, providing train service for Metro North, Amtrak, and Shoreline East as well as bus services to New York City and throughout Connecticut. The first phase of the project began with an investigative study of passenger circulation through the station. Michael Baker led a team to inspect 17 escalators and five elevators to gather information on existing conditions and develop proposed options for modernization and improvements to the passenger experience. Future phases will include review and modernization of station mechanical and electrical systems, wayfinding signage, passenger tunnel investigation and improvements, overall station architecture, and other improvements to station infrastructure.

Fairfax County Department of Public Works and Environmental Services Consolidation, Fairfax, Virginia. *Fairfax County, DPW & ES.* ARCHITECT. Developed the approved architectural building elevation concept. Michael Baker is providing full construction documentation for site and architecture for Fairfax County's consolidation of its Department of Public Works and Environmental Services Stormwater Planning and Management Divisions with the Wastewater Collection Division into one facility located at the existing Wastewater Division's 14.39-acre site combined with an adjacent site. Michael Baker began assisting the county in 2013 by evaluating nine separate potential sites, ultimately providing the evaluations that would allow the county to select the highest and best site for the project. After the site was selected, Michael Baker team provided conceptual design options based on interviews and charrettes with the division personnel who will ultimately occupy the facility. The team is currently working on conceptual site and architecture designs

SITE/ROADWAY ENGINEERING

Sylvester Fryc, PE

Years experience 35



Mr. Fryc brings many years of experience in various aspects of engineering and has extensive knowledge of the challenges of roadway design. His experience includes oversight and development of roadway geometry, roadside protection design, drainage design, Right of Way impacts, and utility relocation schemes. Mr. Fryc is experienced in developing complete contract documents for multi-disciplined projects. His experience includes preparation of horizontal and vertical alignments, guiderail and barrier design, complex staging and Maintenance and Protection of Traffic plans, typical sections, cross sections, grading, earthwork and cost estimates. Mr. Fryc has seen numerous projects through from concept design to construction and understands the importance of producing a quality product.

RELEVANT EXPERIENCE

Scudder Falls Bridge Replacement, Final Design Services, Bucks County, Pennsylvania. *Delaware River Joint Toll Bridge Commission.* PROJECT ENGINEER. Roadway Design Task Leader responsible for final design and post-design services for the project. Michael Baker is providing final design and post-design services for the Scudder Falls Bridge Replacement project. The existing four-lane bridge over the Delaware River is functionally obsolete and needs to be replaced to alleviate recurring current peak-period and emergency-incident traffic congestion and projected future traffic. Michael Baker is designing replacement of the existing bridge with a twin-span structure carrying six lanes of through traffic (three in each direction), two auxiliary northbound lanes for entry/exit travel, and one auxiliary southbound lane for entry/exit travel. The scope of work also includes drainage upgrades, approach widening, a bicycle/pedestrian walkway, new bridge inside shoulders, a new all-electronic toll (AET) collection system, an intelligent transportation system (ITS) equipment building, and noise-abatement walls.

I-95/I-295 Re-designation Sign. *New Jersey Department of Transportation (NJDOT).* PROJECT MANAGER. Responsible for leading design team in various aspects of roadway design, oversight and development of signing plans, construction staging and scheduling, and utility relocation schemes. Responsibilities included development of complete contract documents including Contact Plans, Specifications, Construction Schedule and Construction Cost Estimate.

Rio Grande Avenue Road Improvements, Wildwood, New Jersey. *Cape May County.* PROJECT MANAGER. Responsible for project oversight. Michael Baker is providing design and engineering services for the widening of and improvements to Rio Grande Avenue. The purpose of the project is to reduce traffic congestion by providing two-way left-turn lanes, raise the roadway profile, improve the deficient drainage system, install a regional pump station, and enhance the gateway by adding streetscaping elements and destination signing. Michael Baker's services have included roadway and drainage design, pump station design, right-of-way plans, streetscape design, wayfinding, traffic engineering, environmental services, permitting, and grant administration support.

Route 1 and 9 at Haynes Avenue Bridge Replacement and Interchange Reconfiguration, Newark, New Jersey. *New Jersey Department of Transportation (NJDOT).* PROJECT ENGINEER. Highway Design Team Lead in responsible charge of horizontal and vertical geometric design, preparation of Maintenance and Protection of Traffic plans, preparation of Soil Erosion and Sediment Control Plans and environmental assessments to identify environmental resources and potential impacts. Michael Baker managed the reconfiguration of the Route 1 and 9 interchange at Haynes Avenue and the replacement of the bridge on Haynes Avenue over Waverly Yards. Michael Baker's services included roadway design, geotechnical design, structure design, highway lighting design, intelligent transportation system design, and right-of-way plan development. Signing and pavement markings were designed in accordance with the MUTCD and standard NJDOT practices, and included freeway segments, ramps, local streets, and a proposed roundabout construction.

Route 52 Causeway Replacement Project, Ocean City and Somers Point, New Jersey. *New Jersey Department of Transportation (NJDOT).* ASSISTANT PROJECT MANAGER. Responsible for geometric design (horizontal and vertical design), highway section design and design exceptions. Highway design involved the development of complex construction staging

Michael Baker INTERNATIONAL

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

A.A.S., 1987, Civil Engineering Technology, Mercer County Community College

Licenses/ Certifications
18.1.1 Value Engineering, 2016

3.1.1 Route Studies & Schematic Design - Minor Roadways, New Jersey

3.2.1 Route Studies & Schematic Design - Major Roadways, New Jersey

3.3.1 Route Studies & Schematic Design - Complex Highways, New Jersey

3.4.1 Minor Bridge Layouts, New Jersey

3.5.1 Major Bridge Layouts, New Jersey

Sylvester Fryc, PE

SITE/ROADWAY ENGINEERING

RELEVANT EXPERIENCE CONTINUED

plans and Maintenance and Protection of Traffic plans. Developed traffic signage and striping plans. Developed conceptual alternatives for configuration of ramps, elimination of the traffic circle, and avoidance of sensitive wildlife habitats and residences. Developed overall Access Summary Report and Access Cut-Out Plans for affected properties along the project corridor in accordance with the NJ State Highway Access Management Code. Michael Baker provided comprehensive engineering services for the replacement of the Route 52 Causeway and the reconstruction of approximately 2.8 miles of Route 52 from Route 9 in Somers Point to Bay Avenue in Ocean City crossing Great Egg Harbor Bay. Michael Baker's services included bridge and roadway design, environmental permitting, lighting design, traffic and intelligent transportation system design, utility relocation, community outreach, and construction management and inspection.

I-95/295 Redesignation Sign Replacement, New Jersey. *New Jersey Department of Transportation (NJDOT).* PROJECT MANAGER. Responsible for leading design team in various aspects of roadway design, oversight and development signing plans, construction staging and scheduling, and utility relocation schemes. Responsibilities included development of complete contract documents including Contact Plans, Specifications, Construction Schedule and Construction Cost Estimate. Michael Baker developed sign design and plans for the replacement sign panels; developed traffic control details; conducted additional field investigation of the sign structures to determine structural attachments required; and developed construction details for the I-95/295 redesignation sign replacement project. Additionally, Michael Baker prepared final structures documents and final roadway plans; completed signing plans; developed construction cost estimates, specifications, and construction schedule; prepared the final design submission package; submitted the PS&E package; and performed construction.

Merion Park Drainage Conceptual Design, Ocean City, New Jersey. *City of Ocean City, New Jersey.* PROJECT MANAGER. Responsible for the analysis of the existing drainage system for the Merion Park area and development of a conceptual and final drainage design and roadway improvements for the entire area. Michael Baker performed a detailed review and analysis of the existing drainage system for the Merion Park area and developed a conceptual drainage design. The proposed improvements were based on a number of assumptions due to limited information available (e.g., survey limitations, existing utilities information, etc.). Michael Baker provided a proposal to develop final design documents for the new drainage system and roadway improvements to reduce flooding. Michael Baker also prepared applications for required permits.

Route 280/21 Interchange Improvements, Newark, New Jersey. *New Jersey Department of Transportation (NJDOT).* QA/QC. QA/QC reviewer for the final design for this complex urban interchange. Michael Baker provided final design services for a complex urban interchange reconstruction. The project includes intricate ramp design and flyovers in a confined urban area; five new bridges, including one curved girder structure; and 10 soldier pile retaining walls in an area that is currently experiencing settlement issues. Design included managing the geotechnical exploration program in conjunction with hazardous material sampling; extensive utility relocations; pavement design; design exceptions; right-of-way; lighting; intelligent transportation system; four traffic signals; and environmental permitting.

I-80 EB, Retaining Wall Replacement Mileposts 1.2 – 1.5 in Hardwick and Knowlton Townships, Warren County. *NJDOT.* TECHNICAL ADVISOR. Michael Baker has been contracted to provide emergency design services and preliminary engineering services for the I-80EB Wall along the Delaware River in Hardwick and Knowlton Townships, Warren County. In April 2022, emergency repairs were completed at the wall to address the undermined foundation section and restore the embankment. Michael Baker prepared the New Jersey Department of Environmental Protection Flood Hazard Area Control Act Individual Permit. No work was proposed below the ordinary high-water line or within wetlands.

STORMWATER MANAGEMENT

Lori Wade, PE, CPSWQ

Years experience 21

Lori Wade is a Civil Engineer and Certified Professional in Stormwater Quality with over 18 years of experience in water resources engineering, including Stormwater Management, floodplain management, and drainage design for local, state, and federal government projects. She is experienced in designing drainage systems in tidally influenced areas including design for tide check valves and stormwater pump stations. She designs stormwater BMPs including infiltration and detention basins, swales, and water quality treatment devices and is on the forefront of implementing green infrastructure such as curb bump outs, bio swales and trenches to the maximum extent feasible. Lori is responsible for the Final Design submission of plans, specifications, and cost estimates as well as submitting for various permitting agencies such as the Soil Conservation Districts for Soil Erosion and Sediment Control applications and the New Jersey Department of Environmental Protection for Flood Hazard Area (FHA) Individual and general permits. She knows the requirements set forth in the latest NJ Stormwater Management Rules effective March 2, 2021 and understands how to demonstrate compliance for the project. She has worked on numerous flood control projects from concept design through construction.

RELEVANT EXPERIENCE

West 17th Street Flood Mitigation Concept and Construction Design, Ocean City, NJ. *City of Ocean City.* LEAD DRAINAGE ENGINEER. This project proposes improvements to address frequent flooding in the West 17th Street residential area in Ocean City, Cape May County, New Jersey. The West 17th Street development is located in a low-lying area prone to chronic flooding during various tidal and rain events. Michael Baker performed conceptual and is currently advancing final design. Lori is overseeing the development of the drainage design and plans that will include the construction of a new stormwater pumpstation, roadway improvements, and installation of new stormwater pipes, and Soil Erosion and Sediment Control Plans.

Merion Park Drainage and Roadway Improvements, Ocean City, New Jersey. *City of Ocean City, New Jersey.* LEAD DRAINAGE ENGINEER. Responsible for evaluating an existing drainage system in the residential Merion Park neighborhood, a low lying area that is prone to flooding during storm events and daily high tides. For the Conceptual Design Study, Michael Baker provided inlet/spread and pipe capacity analysis, modeling, and conceptual layout and report for drainage and grading improvements to eight outfall locations. The Phase 1 Design project rehabilitated four of the neighborhood's eight drainage systems and included roadway improvements, existing drainage inlet and pipe replacement, and three pump stations to facilitate efficient drainage and minimize existing utilities' relocation. Michael Baker developed final design plans, including typical sections; construction, drainage, and utility plans; profiles; bulkhead replacement plans; pump station design; electrical design; construction details; and outfall cross sections. Work required NJDEP permits in accordance with the NJDEP Storm Water Management Regulations and FHA Control Act.

Scudder Falls Bridge Replacement, Final Design Services, Bucks County, Pennsylvania. *Delaware River Joint Toll Bridge Commission.* TASK MANAGER. Responsible for leading the task of finalizing the stormwater management and drainage design. In Pennsylvania, low impact/ green infrastructure practices will be implemented through the design of rain gardens and grass swales along the majority of the interstate accounting for over 1,000 feet of linear stormwater conveyance. In addition, three new basins are proposed in addition to the retrofitting of an existing basin to increase its efficiency. In NJ, right-of-way is limited. Vegetated swales are proposed where feasible to supplement the construction of three new large stormwater basins to meet the NJ Department of Environmental Protection Stormwater Management Rules (N.J.A.C. 7:8). In addition to stormwater management and drainage design, will provide quality control of the hydrologic and hydraulic model for the new pier alignment for the Scudder Falls Bridge including the oversight of net fill calculations for fill in the regulated flood hazard area. Proposed design includes coordination with regulations of various agencies including NJDEP, NJDOT, Delaware and Raritan Canal Commission and Soil Conservation Districts in Pennsylvania and New Jersey. Michael Baker is providing final design and post-design services for the Scudder Falls Bridge Replacement project. The existing four-lane bridge over the Delaware River is functionally obsolete and needs to be replaced to alleviate

Michael Baker INTERNATIONAL

Education
B.S., 2003, Civil Engineer, The Pennsylvania State University

Licenses/ Certifications

Professional Engineer, New Jersey, 2011, 24GE04953400

Certified Professional Storm Water Quality, Worldwide, 2014, 1001

Professional Affiliations
American Council of Engineering Companies (ACEC) Water and Wastewater Committee Chair

American Society of Highway Engineers (ASHE) Past President Southern NJ Chapter

Lori Wade, PE, CPSWQ

STORMWATER MANAGEMENT

RELEVANT EXPERIENCE CONTINUED

recurring current peak-period and emergency-incident traffic congestion and projected future traffic. Michael Baker is designing replacement of the existing bridge with a twin-span structure carrying six lanes of through traffic (three in each direction), two auxiliary northbound lanes for entry/exit travel, and one auxiliary southbound lane for entry/exit travel. The scope of work also includes drainage upgrades, approach widening, a bicycle/pedestrian walkway, new bridge inside shoulders, a new all-electronic toll (AET) collection system, an intelligent transportation system (ITS) equipment building, and noise-abatement walls.

26th – 34th Street Flood Reduction Improvement Project, Ocean City, New Jersey. *City of Ocean City.* DRAINAGE DESIGN LEAD. Michael Baker provided modeling and design services for drainage improvements for a 280-acre section of the City between the Bay and West Avenues and 26th – 34th street that has suffered from regular tidal and nuisance flooding. Michael Baker modeled the one-, two-, five-, and 10-year storm events and developed outflow curves that were paired with pump stations to achieve efficient sizing of a new system with offline pump capacity. The drainage team then developed final design plans, including typical sections; construction, drainage, and utility plans; profiles; design for four new pump stations; electrical design; construction details; and outfall cross sections.

South Street and Adams Street Drainage Improvements, Newark, New Jersey. *City of Newark.* PROJECT MANAGER. Managed a comprehensive drainage study and design for the combined sewer overflow (CSO) community of Ironbound surrounding the South and Adams Street corridor. The area suffers from frequent flooding that is stifling business growth, creating toxic environments from CSOs and causing property and personal damage. Michael Baker studied the roadway drainage and overall drainage patterns of the network of ditches draining to Newark Bay. Design included replacement of over 4,000 linear feet of drainage pipe, cleaning existing drainage systems, pump station, tide control check valve, and installation of green infrastructure to retain rainfall. The design was coordinated closely with the Ironbound Community Corporation and incorporating the Green Streets Initiative.

Rio Grande Avenue Drainage and Roadway Improvements, Wildwood, NJ. *Cape May County.* TECHNICAL LEAD. Drainage design manager for the pump and pipe system in Wildwood, New Jersey. This project had several constraints due to outfall locations and numerous utilities in this shore area. Michael Baker is providing design and engineering services for the widening of and improvements to Rio Grande Avenue. The purpose of the project is to reduce traffic congestion by providing two-way left-turn lanes, raise the roadway profile, improve the deficient drainage system, install a regional pump station, and enhance the gateway by adding streetscaping elements and destination signing. Michael Baker's services have included roadway and drainage design, pump station design, right-of-way plans, streetscape design, wayfinding, traffic engineering, environmental services, permitting, and grant administration support.

Route 52 Causeway Bridge Replacement Project with 9th Street Drainage Improvements, Ocean City and Somers Point, NJ. *New Jersey Department of Transportation.* DRAINAGE AND SWM LEAD. Responsible for drainage and SWM design including new pipes, bicycle and eco safe inlets accommodating ADA curb ramps and drainage at various commercial access driveways, manholes, scuppers, seventeen (17) bioretention, infiltration and extended detention basins, and 3 water quality treatment devices in accordance with the NJDOT drainage design manual and NJDEP BMP Manual to meet NJDEP stormwater quality requirements. She was also responsible for conducting scour analysis at pier for the bridge. As well as raising the roadway over a foot in some locations along 9th Street in Ocean City to reduce the frequency of roadway flooding/road closures without adversely impacting offsite drainage and addressing contaminated groundwater along 9th Street by proposing HDPE pipe with baffles (to address buoyancy/pipe uplift) to prevent the contaminated groundwater from entering the drainage system and discharging to the bay.

Delancy Street Roadway Improvements, Newark, NJ. *City of Newark, NJ.* DRAINAGE ENGINEER. Responsible for laying out a proposed drainage design in this flat, low lying area with tidal impacts including new pipes, inlets, and manholes in accordance with the NJDOT Design Manual and recommendations set by the City of Newark. Close coordination of utilities and ROW was also required. Responsible for SWM design which included manufactured treatment devices and a detention basin along the project to meet water quality requirements and reduce peaks to existing outfalls in accordance with the NJDEP SWM Rules. Michael Baker provided engineering and environmental services for comprehensive improvements to Delancy Street, a two-lane arterial roadway located in the southeastern section of the Ironbound neighborhood. Michael Baker completed plans for horizontal and vertical alignment; signage upgrades; pavement marking and striping; MPT; ROW; utilities; sidewalk improvements, including high visibility crosswalks to meet Americans with Disabilities Act (ADA) requirements; specifications; cost estimates; construction scheduling; environmental permitting; and hazardous waste management.

STRUCTURAL ENGINEERING

Hamid Ikram, PE

Years experience 25

Mr. Ikram is a Technical Manager/Senior Structural Engineer with more than 25 years of experience in the design of bridges, VMS sign structures, guide sign structures, retaining walls, traffic signal supports, and culverts. Having led the structural design for the Michael Baker on various NJDOT, PANYNJ and NJTA and various County projects, including many bridge rehabilitations and new bridge projects. Mr. Ikram is very familiar with the design needs for all types of project. He is also familiar with all aspects of project delivery from concepts through design, inspection, permitting and construction. Hamid's expertise is in bridge repair, rehabilitation, and reconstruction projects for transportation clients; his experience includes field inspections, bridge rating, cost estimating, prioritization of repairs analyses, alternative analysis reports, preliminary and final design for super and substructure repairs, and construction support. Mr. Ikram is well versed in the design and construction of bridges using Accelerated Bridge Construction (ABC) techniques. Hamid's experience includes AASHTO LFD, AASHTO LRFD and AASHTO Bridge Rating as well as ACI, ASIC and IBC.

RELEVANT EXPERIENCE

Routes 23, 80, and 46 Interchange Improvement Project, Wayne, New Jersey. *New Jersey Department of Transportation.* STRUCTURAL ENGINEER. Michael Baker is providing bridge and roadway design and engineering services for improvements to the Route 23, Route 80, and Route 46 Interchange. The proposed improvements provide greater mobility, reduce congestion, enhance safety through simplicity of movement, shorten travel time through the interchange, and feature elements that will improve drivers' expectations. The existing interchange design is currently missing two connections. One is from I-80 EB to NJ 23 NB/SB and US 46 WB. The existing interchange requires a driver to proceed eastbound to Interchange 54 to turn around to access these roadways. The other connection is from southbound NJ 23 to westbound I-80. The existing interchange requires a driver to follow circuitous path along NJ23SB, Ramp F, NJ 23NB and Ramp I to access I-80 WB. For the project, Michael Baker is providing highway design, structural engineering, geotechnical engineering, an environmental technical study (ecology), traffic control and staging, traffic modelling and analysis, signing and striping, highway lighting, pavement design, and utility engineering.

NJ Turnpike Bridge Deck Repairs and Resurfacing and Miscellaneous Structural Repairs, Contract Nos. T100.197, T100.243, T100.257, T100.299, T100.340, T100.379, T100.404, T100.412, T100.466 and T100.518, T100.560 and T100.600 (2011-Present). GSP Bridge Deck Repairs and Resurfacing and Miscellaneous Structural Repairs, Contract Nos. P100.230, P100.231 (2012). *New Jersey Turnpike Authority.* PROJECT ENGINEER. Yearly work included inspecting approximately 50 bridges, developing a list of required repairs for the inspected bridges, prioritizing the repairs to maximize effectiveness of the construction budget, and developing plans and specifications and cost estimates to repair the bridges. Specifically, work included bridge field inspection, developing prioritized deck and structure repair details for construction scope to maximize effectiveness of the construction budget, and developing plans and specifications to repair the bridges. Bridge Deck Repairs included: deck replacement, panelized (stringer to stringer and diaphragm to diaphragm) deck replacement, deck spall repair, wearing surface replacement, thin polymer overlay installation and Methyl Methacrylate deck floods. Miscellaneous Structural Repairs included: welded and bolted steel member repair to address deterioration and impact damage, steel member replacement, substructure spall repair, ASR damage repairs, substructure erosion damage repairs, drainage repairs, installation of laminated elastomeric bearings, steel rocker and plate bearings and seismic isolation bearings, noisewall panel repair, and structure painting. These repairs were scheduled to address deterioration discovered by our inspectors and repair of unanticipated conditions found in the field. Other tasks include Repair of Category A defects, coordination with RR, municipalities, NJDOT, PANYNJ, and NJTA Operations for staged construction and detour routes, coordination of GPR shoulder pavement evaluation, Road User Cost analysis, electrical modifications, utility impacts, contractor access, drainage improvements/repairs, bridge painting, and coordination with ongoing construction contracts. Most importantly all repairs we designed to be performed in stages and minimize delays to NJ Turnpike traffic. Post design services included addressing RFI's, reviewing shop

Michael Baker INTERNATIONAL

Education
M.C.E., Civil Engineering, University of South Florida

B.S., Computer Sciences, York University

B.C.E., Civil Engineering, University of Engineering and Technology, Punjab

Licenses/ Certifications
Professional Engineer - Structural, New Jersey, 2019, 24GE05489800

Professional Engineer - Structural, Ohio, 2011, PE.75257

Hamid Ikram, PE

STRUCTURAL ENGINEERING

RELEVANT EXPERIENCE CONTINUED

drawings, and adjusting plans to field conditions.

Cape May County Emergency Repair of Stone Harbor Blvd. - 96th Bridge (2016-2017). *Cape May County.* PROJECT ENGINEER. Emergency Inspection and Repair design and Post design services for the cracked and section loss superstructure members of moveable bascule span of the 96th Bridge, Cape May County. Project included lifting of the bascule span using temporary truss above the deck, structural repairs of fracture critical members, electrical and mechanical inspection with fast tracked repair design, load rating, plan preparation, contractor coordination, shop drawing review and RFI resolution during ongoing construction. The bridge was restored to normal operation within two months.

Cape May County Priority Repair of Stone Harbor Blvd - 96th Bridge (2016-Present). *Cape May County.* PROJECT ENGINEER/ PROJECT MANAGER. Four priority repairs contracts including Inspection and Repair design and Post design services for the cracked and section loss floor beams and stringers including bascule span repairs for fracture critical members. Project included the structural repairs of fracture critical members, Floor beams, stringers, electrical and mechanical inspection, load rating, plan preparation, contractor coordination, shop drawing review and RFI resolution during ongoing construction.

Cape May County Corson's Inlet and Grassy Sound Bridges rehabilitation (2019-Present). *Cape May Commission.* PROJECT ENGINEER. This project includes the Inspection and Rehabilitation of the two bridge Corson's Inlet and Grassy Sound bridge, Cape May Commission. Project included the structural repairs of steel members, Floorbeams, stringers to increase the capacity and load rating of bridges, deck replacement of one span, electrical and mechanical inspection, load rating, plan preparation, estimates, specifications, contractor coordination, and shop drawing review.

Rio Grande Avenue Road Improvements. *Wildwood, New Jersey.* STRUCTURAL LEAD. Michael Baker is providing design and engineering services for the widening of and improvements to Rio Grande Avenue. The project included curved retaining walls, underground water tanks and two floor structure to install the generator above the high flood level. Michael Baker's services have included roadway and drainage design, pump station design, structural design, environmental services, permitting, and grant administration support.

NJTA OPS No. T3725 Supplement A, Bridge Deck and Superstructure Reconstruction (2020-Present). *New Jersey Turnpike Authority.* STRUCTURE LEAD. Responsible for preliminary and final design performed in accordance with the latest updated design criteria in the NJTA's Design Manual for Structures. The T100.588 and T100.586 contract ($50M) was decks for 4 bridges, which 2 included new superstructures in addition to new bearings, raising the roadway profile, roadway resurfacing, and safety improvements.

NJTA OPS No. T3605 Supplement A, Bridge Deck Reconstruction and Lengthening, Structure No. 30.75R (2019-Present). *New Jersey Turnpike Authority.* Structure Lead. Responsible for the Authority's accelerated $17.4M Bridge Lengthening Project. The project included replacement of Structure No. 30.75 over the Turnpike. Responsible for managing the structures group, coordination with other disciplines, and the development of the Contract Documents. The design included pile supported foundations, utility relocations, staged construction to maintain traffic and improvements to the substandard geometric features. Structure design involved replacing existing 4 span bridge with two span continuous bridge removing the piers to allow future Turnpike widening.

Route 52 Causeway Replacement Project, Ocean City and Somers Point, New Jersey. *New Jersey Department of Transportation.* STRUCTURAL ENGINEER. $400M replacement of a 2-mile-long causeway over Great Egg Harbor Bay. Involved in seismic geotechnical investigation, 3D seismic modeling analysis, and structure design. Provided post design review including 20 retaining walls. Revised the design to accommodate the utilities and soil conditions. The seismic analysis used site specific spectral developed through the establishment of design level rock motions, site response analysis, and ground and foundation motion computations. Soil-foundation interaction and impedance calculations were used in the 3D structural seismic model. The bridge design consisted of a continuous 10,800-ft. and 88-ft. prestressed, multi-girder bridge made continuous for live load having individual span lengths in excess of 165 linear ft. The scope also included the design of a curved 4 span continuous, CIP trapezoidal slab beam bridge post tensioned transversely and longitudinally.

I-280/Route 21 Interchange Improvements, Newark, New Jersey. *New Jersey Department of Transportation.* STRUCTURAL ENGINEER. Final design for this $100M complex urban interchange. Responsible for design of the deck replacement at Route 280 over Broadway, and design of the superstructure replacement at Route 280 over MLK Boulevard utilizing Inverset solutions, including bearing replacement, complex MPT, and shop drawing reviews. Scope of work includes design of 5 new bridges (including an outrigger structure and curved girder structure), 16 retaining walls, and 4 sign structures; geotechnical foundation design; and complex construction traffic control and staging plans including the use of temporary walls to support I-280 during construction. Project includes coordination with the City of Newark and rail agencies.

GEOTECHNICAL ENGINEERING

Michael Yang, PE, PH

Years experience 38

Dr. Yang is a technical manager in geotechnical engineering with extensive geotechnical engineering experience. His responsibilities include project management, staff supervising and mentoring; geotechnical exploration; pavement design; soil improvement design and construction; numerical modeling of soil-structure interaction problems; pile testing; and design review. He is experienced in a wide range of soil and rock conditions in the Northeast region, experienced in geotechnical engineering practice in Highway, Transit, and Industrial Facilities. Dr. Yang has extensive foundation design and analysis experience for highway structures by using both LRFD and ASD methods. He is a FHWA-NHI approved LRFD for highway bridge substructures and retaining walls training instructor (Course No. 130082). He is highly skilled in the spreadsheet application development to solve a wide range of geotechnical problems. Dr. Yang has also published more than 20 technical papers on a wide range of topics: from dynamic compaction design and monitoring for deep fills as well as saturated soft soils, to temperature effects on buried earth pressure cells.

RELEVANT EXPERIENCE

Unified Security Forces Operations Facility, McGuire Air Force Base, Burlington County, New Jersey. *Army Corps of Engineers, New York District.* GEOTECHNICAL ENGINEER. This project consisted of exploring the subsurface conditions using soil borings and on-site percolation test, evaluating the conditions encountered, developing geotechnical recommendations. Prepared geotechnical recommendations for the foundation design, ground-supported slabs, earthwork, below-grade walls, pavement sections, stormwater management facilities, and other geotechnical concerns. All of the investigations and recommendations were performed in accordance with the Army Corps of Engineers manuals.

Combined Maintenance Facility (CMF), Fort Dix, Burlington County, New Jersey. *Army Corps of Engineers, Louisville District.* GEOTECHNICAL ENGINEER. Performed geotechnical field investigations for this facility. Prepared geotechnical recommendations for the foundation design, ground-supported slabs, earthwork, below-grade walls, pavement sections, stormwater management facilities, and other geotechnical concerns. All of the investigations and recommendations were performed in accordance with the Army Corps of Engineers manuals.

Garrett and Howard Counties Landfill Instrumentation and Monitoring. *Maryland Environmental Services.* GEOTECHNICAL ENGINEER. The project involved the geotechnical instrumentations and waste leachate monitoring in the landfill leachate collection system using shredded rubber tires. Reviewed the interim geotechnical reports and prepared the final geotechnical and leachate monitoring report.

Geotechnical Investigation and Design of an Embankment Dam, Barbados. *Sir Williams Construction Group.* GEOTECHNICAL ENGINEER. This project involved the geotechnical plan, investigation and design of the first embankment dam in the Barbados Island. The technical challenge was to design an embankment dam in the tropical marine clay with very high plasticity on a coral reef island. Planned geotechnical field and laboratory investigations program, directed and reviewed the geotechnical report and the dam design documents.

St. Mary's River State Park Dam Safety Inspection and Dam Safety Repair Design and Construction Services, St Mary's County, Maryland. *Maryland Department of Natural Resources (DNR) and Maryland Department of General Services (DGS).* GEOTECHNICAL ENGINEER. This dam consists of an earth fill embankment of approximately 1670 ft long and 38 ft high. The dam impounds a lake of 250 acres, and is classified as high hazardous dam and is regulated by Maryland Department of Environment (MDE). Performed dam safety inspection, subsurface investigation and geotechnical and structural engineering integrity evaluations in accordance with the MDE Dam Safety Program. Reviewed the final geotechnical report. Based on the safety inspection results and geotechnical/structural analysis, provided recommendations concerning the dam's long-term safety requirement.

Falls Road Golf Course Irrigation Embankment Safety Repair Design, Montgomery Co., Maryland. *Falls Road Golf Course Grounds Department.* GEOTECHNICAL ENGINEER. Project involved evaluating the safety need of this embankment dam at high flood design level and

Michael Baker INTERNATIONAL

Education

Ph.D., 2000, Civil Engineering/ Geotechnical, The University of Tennessee, Knoxville

M.S., 1989, Civil Engineering/ Geotechnical, Wuhan Institute of Rock and Soil Mechanics, CAS

B.S., 1986, Civil Engineering, Huazhong University of Science and Technology

Licenses/ Certifications

OSHA 40-Hour HAZWOPER Certification

Professional Engineer, Maryland, 2004, 30934

Professional Engineer, New Jersey, 2009, 24GE04826000

Professional Engineer, New York, 2012, 090717-1

Professional Engineer, Pennsylvania, 2002, PE061372

Michael Yang, PE, PH

GEOTECHNICAL ENGINEERING

RELEVANT EXPERIENCE CONTINUED

providing geotechnical analysis and design services. Reviewed previous geotechnical investigation and embankment construction drawings, performed seepage and slope stability analysis in accordance with Dam Safety Program. Prepared Gabion wall geotechnical analysis spreadsheets. Reviewed and sealed the construction drawings in accordance with State Dam Safety Requirement.

Brandon Woods Regional SWM Facility Embankment Inspection and Evaluation, Anne Arundel Co., Maryland. *Constellation Real Estate Group, Inc.* GEOTECHNICAL ENGINEER. Project involved project embankment inspection and geotechnical evaluations for the safety purposes. Performed slope stability analyses for the high pool level as well as rapid drawdown conditions. A three dimensional numerical seepage analysis was also performed to simulate the seepage flow under the complex boundary conditions.

Bryan Park Dam & Forest Hill Lake Park Dam Emergency Inspection. *City of Richmond, Virginia.* GEOTECHNICAL ENGINEER. The dam was toped during the Hurricane Gaston, 2004. The City of Richmond concerned the dam's safety in the later storm events. Performed detailed emergency dam safety inspection within the same day of request. The dam safety inspection was strictly followed the Virginia Dam Safety Program. Prepared a geotechnical report concerning dam safety on the second day. The possible causes of the problems were identified, the methods to correct the problems were proposed, and a construction cost was estimated in the report. The quick response allowed the client having time to correct the dam safety problems.

Evaluation of Elkridge Landing Road MSE Wall Stabilization at Baltimore/Washington International Airport, Baltimore County, Maryland. *Maryland Aviation Administration.* GEOTECHNICAL ENGINEER. This project involves the evaluation of the stabilization plan of a 25 years MSE wall near the Baltimore/Washington International Airport. This 20 ft high retaining wall is the first metal straps with pre-cast concrete panel MSE wall in the state of Maryland. The backfill material consisted of on-site residual silty gravel. Two sinkholes opened behind the wall panel after two heavy storms. The previous consultant performed the site investigation and drainage system evaluation using CCTV inspection. The remediation recommendation was the horizontal grouting in front of the MSE wall. Responsibility involves the evaluation of the geotechnical remediation recommendations provided by other consultant. Extensive literature review related to MSE wall failure case histories, evolution of backfill material for the MSE walls. Based on the site visits and careful analysis of the historical records of the wall construction and repair, it is found that the cause of the sinkhole openings are due to the surface drainage and wall construction was found acceptable. The new recommendation was only change the drainage direction and this recommendation is very cost effective. Authored the MSE wall evaluation report.

Jackson Mill Lake Dam Seepage Rehabilitation. *Cape May County, New Jersey.* GEOTECHNICAL ENGINEER. This 50 years old embankment dam was constructed with permeable silt materials with steel sheeting at upstream side. During the rehabilitation construction process, a piping problem at the downstream side was first identified by the construction inspector after a heavy rain. Performed site reconnaissance, reviewed existing construction documentations and subsurface conditions. Provided immediate action plan to mitigate the increasing piping problem. The safety of the embankment dam was secured.

Public and Private Developments. *Various Clients.* GEOTECHNICAL ENGINEER. Geotechnical and foundation recommendations for various public and private clients. Sample projects including geotechnical investigation for a minor league baseball stadium; Residential buildings and parking lot pavement design; Site geotechnical evaluation for large commercial development; Building distress evaluation and remediation; Porous pavement design for county parks; Stormwater management Pond geotechnical investigations; Wireless tower geotechnical design; Pavement design and pavement management for City governments.

Scudder Falls Bridge Replacement, Final Design Services, Bucks County, Pennsylvania. *Delaware River Joint Toll Bridge Commission.* GEOTECHNICAL MANAGER. Geotechnical Manager for the replacement of the Scudder Falls Bridge carrying Interstate 95 over the Delaware River. Responsible for the development and implementation of a geotechnical boring program. Responsible for developing, executing and overseeing this large-scaled subsurface exploration programs for the proposes structures and highway facilities; establishing soil/rock profiles and design parameters of geotechnical analysis, design, and construction purposes; supervising and performing designs of the above-mentioned shallow and deep foundations, as well as earth support systems under static and dynamic (seismic) loading in accordance with the latest LRFD protocol; developing mitigation measures for embankment settlement and stability; analysis and design of both temporary and permanent earth support structures; interpreting geotechnical instrumentation programs, developing geotechnical specifications and construction notes; reviewing construction documents; providing geotechnical field services in the construction stage.

CLAIM ANALYSIS

Ralph Eberhardt, PE

Years experience 45

Mr. Eberhardt is a manager responsible for the operation of Michael Baker's Lehigh Valley (Allentown) Office as well as technical projects. As a surveyor, contractor, engineer, construction manager and office executive, Mr. Eberhardt has years of experience on highway, transit, building,railroad, and airport projects, and has lead Michael Baker's Lehigh Valley presence since 2003. His local experience includes the Lehigh Valley International Airport Terminal Connector Building Construction Inspection, Allentown State Hospital Redevelopment Feasibility Study, Americus Hotel Renovation Independent Cost Estimate, South Whitehall Township's Wehr's Dam, and Owners Rep for City Center Lehigh Valley. He has also become a valuable resource for Michael Baker offices across the country. Mr. Eberhardt has a strong background in surveying, civil engineering, construction management, estimating, and business management, as well as extensive hands-on field experience. His expertise has also been called upon by counsel for claims support, litigation support, and expert witness services.

RELEVANT EXPERIENCE

Terminal Construction Inspection, Lehigh Valley International Airport (ABE), Hanover Township, Pennsylvania. *Lehigh Northampton Airport Authority.* PROJECT MANAGER. Responsible for client liaison and coordination, staff performance, schedule, quality and financial results. As local point of contact, responsible for maintaining connection with client representative to assure satisfaction. Michael Baker is providing construction inspection services to the Lehigh-Northampton Airport Authority (LNAA) at the Lehigh Valley International Airport (ABE) for the Terminal Connector project. The three-year, $35 million connection project will create a new, wider TSA checkpoint on an above-ground walkway between the main terminal to the Wilfred M. "Wiley" Post Jr. Concourse. LNAA is committed to creating a sustainable and energy-efficient project and is anticipated to meet LEED gold certification (Leadership in Energy and Environmental Design).

Americus Hotel Cost Estimating, Allentown, Pennsylvania. *ANIZDA (Allentown Neighborhood Improvement Zone De.* PROJECT MANAGER. Provided client liaison, proposal assistance and post-delivery client follow-up. Michael Baker developed a detailed comprehensive construction cost estimate to complete renovations to the 1920's era Americus Hotel to bring it to AAA 3-diamond rating.

Allentown State Hospital Feasibility Study, Allentown, Pennsylvania. *Lehigh Valley Economic Development Corporation.* MANAGER. Principal-in-Charge, Legislative Office and Local Liaison. Responsible for oversight of team, communication with PA State Senator and PA House Representative leading up to, throughout and after completion of study, as well as acting as point of contact for local business leaders and decision-makers. Michael Baker was selected as one of three consultants to assist with implementation of the EPA Brownfield Assessment Grant. One of the highest priority projects was reuse planning for the former Allentown State Hospital site. Work for the reuse planning included determination of environmental conditions, market feasibility, transportation analysis, utility assessment, and construction cost opinions for the Allentown State Hospital property.

City Hall and Public Works Lobbies Design Renderings, Allentown, Pennsylvania. *City of Allentown, Pennsylvania.* PROJECT MANAGER. Responsible for client liaison and coordination, staff performance, schedule, quality and financial results. As local point of contact, responsible for maintaining connection with client representative to assure satisfaction. Michael Baker developed interior design renderings for two of the city of Allentown's most visible and active buildings: Allentown City Hall and its public works office known as Bridgeworks. Michael Baker conducted interactive site visits with the client representative at each location and then provided draft renderings for review, comment, and resubmittal as final deliverables. Michael Baker also provided high-level cost estimates for each location for the client's budgeting purposes.

Allentown City Hall Lobby Renovation Support, Allentown, Pennsylvania. *City of Allentown, Pennsylvania.* PROJECT MANAGER. Responsible for client liaison and coordination, staff performance, schedule, quality and financial results. As local point of contact, maintain connection with client representative to assure

Michael Baker INTERNATIONAL

Education
M.B.A., 1998, Business Administration, Lehigh University

B.S.C.E., 1986, Civil Engineering, The Pennsylvania State University

A.S., 1981, Surveying, The Pennsylvania State University, Mont Alto Campus

Licenses/ Certifications
Professional Engineer, Pennsylvania, 1992, PE043059E

Professional Engineer, New Jersey, 1996, 24GE03887800

Professional Engineer, Maryland, 1996, 21917

Professional Affiliations
American Society of Civil Engineers (ASCE)

Ralph Eberhardt, PE

CLAIM ANALYSIS

RELEVANT EXPERIENCE CONTINUED

satisfaction. Michael Baker developed bid documents for the renovation of the Allentown City Hall lobby. The project included field-locating features as a substitute for original plans. The scope also included design drawings, specifications, bid support, and construction-phase services.

City Center Program Management, Allentown, Pennsylvania. *Two City Center.* PROJECT MANAGER. Responsible for client liaison, quality assurance and staff performance. Michael Baker provided program management support for the planning, design, construction, and operation of three multi-million-dollar buildings, which are part of a new, mixed-use, office, entertainment, retail, and residential complex in the heart of the city. Michael Baker's services for the construction of all three buildings included attending weekly coordination meetings during construction with the construction manager and contractor representatives and reporting on activities, reviewing physical progress in relation to the scheduled core-shell and tenant fit-out milestones, and providing guidance on the permanent management of the facilities and commissioning of critical equipment. Michael Baker also was responsible for coordinating the multiple, interdependent contracts involved in the construction of these facilities.

Lehigh River Waterfront Complex Contract Review, Allentown, Pennsylvania. *The Waterfront Redevelopment Partners, LP.* PROJECT MANAGER. Pursued, secured, and managed work with new client to provide expert commentary on AIA contracts between developer and architect, and developer and construction-manager-at-risk. Michael Baker provided contract administration support services for the planning, design, and construction of an eight-story, 125,000-square-foot office building and associated infrastructure and off-site improvements. Michael Baker's services included a detailed review of proposed contractual language, as revised by the developer, architect, and construction manager-at-risk.

Wehr's Dam Repair, South Whitehall Township, Pennsylvania. *South Whitehall Township.* PROJECT MANAGER. Responsible for original client liaison and coordination, staff performance, schedule, quality and financial results. Responsible for maintaining connection with higher level client representatives to assure satisfaction. Michael Baker developed full bid documents for the repair of Wehr's Dam in South Whitehall Township. The scope included compiling all previously developed environmental permits and manuals as well as provision of technical specifications and consultation on up-front contract specifications. Michael Baker attended pre-bid meetings, fielded pre-bid questions, consulted the owner on contractor selection, and conducted a pre-construction meeting. The scope also included part-time construction inspection and construction phase services such as meeting facilitation, document control, request for information (RFI) responses, and environmental permitting agency liaison.

Billera Hall Gymnasium Floor Study, DeSales University, Center Valley, Pennsylvania. *DeSales University.* PROJECT MANAGER. Responsible for marketing client, negotiation and execution of agreement, management of staff and oversight of final deliverable, as well as follow-up and finalization. Michael Baker conducted a preliminary investigation into reported accumulation of condensation (generally during the summer months) on the floor of the Billera Hall gymnasium. Michael Baker performed an initial site investigation with a client representative, held a follow-up meeting/conference call with the client, and developed a written report of findings and recommendations for follow up corrective action(s).

140 N. Broad Parking Garage Feasibility Study, Philadelphia, Pennsylvania. *Glemser Real Estate, LLC.* PROJECT MANAGER. Responsible for marketing client, negotiation and execution of agreement, management of staff and oversight of final deliverable, as well as follow-up and pursuit of additional assignments. Michael Baker provided a concept parking plan to incorporate 30 parking spaces into a workable footprint for an elevated parking structure. Michael Baker checked the plan against local zoning requirements and property setback distances, evaluated potential grade alterations and stormwater runoff, performed a desktop geological study, and developed a structural concept plan of the parking structure.

St. Luke's University Health Network Kitchen Renovation Feasibility Study, Bethlehem, Pennsylvania. *St. Luke's Hospital Network.* PROJECT MANAGER. Responsible for overall client liaison, quality assurance and staff performance. Michael Baker performed site investigations of the building systems related to the kitchen area and developed an existing conditions survey and report of the findings. Michael Baker developed a detailed site assessment of the existing condition of the kitchen area and basement level; coordinated with the kitchen consultant on kitchen layout; provided a feasibility study that investigated layout options, including wall reconfigurations; and developed cost estimates for the options

CONSTRUCTION INSPECTOR

Jonathan Conte, CMIT

Years experience 11

Mr. Conte has progressive Project Management, Field Inspection, and Construction Scheduling experience for various public agency clients in the New Jersey and New York Metro Area. Specific project experience includes construction of resiliency parks, storm sewers, storm water collection systems manholes, catch basins, water mains, hydrants, curbs, sidewalks, pedestrian ramps, and curb to curb roadway restoration. Trained in the principles of construction management, Mr. Conte brings a unique perspective to project administration and prides himself on establishing project efficiencies on all of his projects.

RELEVANT EXPERIENCE

Northwest Resiliency Park, Hoboken, New Jersey. *City of Hoboken.* SENIOR INSPECTOR. Michael Baker is providing full-time construction management for the construction of a 5.4 acre interactive urban park in the city of Hoboken, which incorporates sustainable design, extensive stormwater management features, including collection and storage of all storm runoff into an underground one-million-gallon stormwater storage tank. As part of the project, Michael Baker is overseeing extensive soil sampling and testing of this former industrial site, coordinate with local sewer authority for pump station construction, and manage construction of numerous park features, including play equipment, building structures, athletic facilities and other interactive features. Michael Baker is performing utility coordination, supervise the construction of the extensive stormwater sewer system, and manage the construction of a park building and community room. Additionally, our team will oversee attainment of SITES v2 sustainability certification, conduct public engagement, including updating the project website, and complete and submit all close-out documents. In addition to his role in park construction oversight, Mr. Conte is serving as the Assistant Scheduler performing schedule update reviews and analysis in Primavera P6.

Amtrak Nationwide AE Services. *Amtrak Fulton KY Station.* SCHEDULER. Michael Baker is providing architectural and engineering design and construction-phase services at various Amtrak stations nationwide. Each station includes a mixture of Americans with Disabilities Act (ADA) and state-of-good-repair (SOGR) station and platform improvements. Michael Baker's services have included schematic design, construction documentation and administration for architectural, structural, civil, stormwater, mechanical, and electrical engineering, along with cost estimating, bid review, construction administration, renderings, and presentations. Mr. Conte has provided plan review and baseline schedule preparation services for Amtrak's Fulton, KY station redevelopment utilizing Primavera P6.

QED1005-Dist Watermain Replacement LIC, Queens, New York. *NYCDDC Scope.* OFFICE ENGINEER/SENIOR INSPECTOR. Responsible for overall construction management of a $30M dollar infrastructure replacement project in New York City. Responsible for ensuring overall contractor compliance with specifications and ensuring the project finishes on time/budget. The scope of project work included construction inspection and project management for the installation of replacement distribution water mains in Long Island City and Astoria, Queens, NY. The project included the replacement of approximately 92,000 LF of 6", 12", and 20" ductile iron water main pipe as well as the requisite roadway restoration required for such activities. The project included work performed in both commercial and residential areas as well as work in and around transit facilities for NYCT and Amtrak. Major Project tasks include reviewing inspector reports for accuracy of measurements and ensuring that pay items are calculated in compliance with contract specifications; monitoring the total project budget and ensuring all field work conforms to contract budgetary constraints; Tracking all project progress and submitting contractor billing requests via DDC PIMS management software; Creating detailed estimates and performing BID analysis of contract items to forecast contract cost overruns and underruns; negotiating contract overruns and change orders with the project's contractor; ensuring contractor compliance with local, state, and federal regulations; Producing project tracking sheets to monitor the progress of work and

Michael Baker INTERNATIONAL

Education

M.S, 2022, Construction Management, NYU Tandon, Brooklyn, New York

M.B.A., 2011, Finance/Management, Fordham University

B.A., 2004, Economical/ International Studies, Fordham University

Licenses/ Certifications

NICET Level III – Highway Construction Inspection

2023, 145929

ACI Concrete Field Testing Technician - Grade 1, New York, 2026, 01357932

ICC Structural Masonry Special Inspector, New York, 2016, 8486575

Occupational Safety & Health Administration (OSHA), New York, 2018, 36-601511217 – OSHA 30

Construction Management Association of America, CMIT

Jonathan Conte, CMIT

CONSTRUCTION INSPECTOR

RELEVANT EXPERIENCE CONTINUED

completion of contractual obligations; Verifying that the contractor has obtained all necessary permits, certificates, licenses, insurances or approvals required for the performance of the work; Performing office management tasks including outfitting and ongoing maintenance of the project field office and monitoring of field staff attendance and payroll.

The Reconstruction of Fordham Plaza, Phase II. *NYCDDC Scope.* COMMUNITY CONSTRUCTION LIAISON/INSPECTOR. The scope of project work included the redesign and reconstruction of Fordham Plaza, an approximately 1.75 acre, open air plaza and transit hub in Bronx, New York. The plaza is a partial bridge structure traversing over Metro North Railroad (MNR) tracks and the MNR Fordham Station. Reconstruction work included the replacement and relocation of underground utilities including gas, electric, and water main, the ground-up construction of 5 distinct building structures of varying size, regrading for proper drainage, sidewalk concrete placement, landscaping, street light replacement and relocation, and electrical upgrade for transit improvements. Major Tasks – Major Project tasks included coordinating with project architects and designers to monitor submittal status and contractor's compliance with contract specifications and design intent; reviewing inspector reports for accuracy of measurements and ensuring that pay items are calculated in compliance with contract specifications; observing field operations and tabulating field quantities for major work operations including concrete pours, asphaltic concrete placement, and structural work; performing field sampling of materials under the guidance and supervision of certified inspectors; checking contractor's survey control points for accuracy and proper placement; creating surveys and estimates of project quantities to ensure contract budget remains on target; creating project as-built drawings via MS Visio including sidewalk field cards and fixed asset reporting; coordinating with the CM team and contractor to structure and adjust the project schedule around the needs of the local community stakeholders; regularly disseminating information on construction progress and schedule to project stakeholders.

The Reconstruction of Fordham Plaza, Phase I. *NYCDDC Scope.* COMMUNITY CONSTRUCTION LIAISON/INSPECTOR. The scope of project work included the redesign and reconstruction of the roadways abutting Fordham Plaza, an approximately 1.75 acre, open air plaza and transit hub in Bronx, New York. The plaza is a partial bridge structure traversing over Metro North Railroad (MNR) tracks and the MNR Fordham Station. Reconstruction work included the replacement of a 12" vitrified clay sewer line, redesign of roadway layout and development of a bus turnaround loop, replacement of concrete roadway base, asphaltic concrete and sidewalks, replacement of catch basins, and replacement of traffic signals and street lights. Major Tasks – Major Project tasks included coordinating with the CM team and contractor to structure and adjust the project schedule around the needs of the local community stakeholders; regularly disseminating information on construction progress and schedule to project stakeholders; fielding community concerns and working with the project's contractor to adjust operations and schedule to meet the needs of the community; tabulating field quantities for major highway work operations including concrete pours, asphaltic concrete placement, and replacement of concrete sidewalks and curbs; monitoring construction activities to ensure compliance with contract specifications; creating surveys and estimates of project quantities to ensure contract budget remains on target; observing field testing and sampling of materials; assisting the project's Office Engineer in developing tracking tools for monitoring contract submittals and schedule progress; reviewing inspector reports for accuracy of measurements and ensuring that pay items are calculated in compliance with contract specifications; creating project as-built drawings via MS Visio including sidewalk field cards and fixed asset reporting.

Reconstruction of Sidewalks and Curbs at Various Locations, Bronx, New York. *NYCDDC Scope.* OFFICE ENGINEER. The scope of project work included construction inspection and management for the installation of new sidewalks and curbs at various locations throughout the borough of Bronx, New York. Major Project tasks included reviewing inspector reports for accuracy of measurements and ensuring that pay items are calculated in compliance with contract specifications and payment terms; monitoring the total project budget and ensuring all field work conforms to contract budgetary constraints; tracking all project progress and submitting contractor billing requests via DDC PIMS management software; conducting field surveys to mark the limits of damaged sidewalk from the New York City Department of Transportation lists; verifying the replacement of steel and concrete faced curbs and sidewalks at designated locations; coordinating with the local community for the duration of the project; checking contractor's Maintenance and Protection of Traffic (MPT) for compliance with governmental agency specifications; inspecting ADA compliance of all pedestrian ramps constructed; inspecting curb line reveals; producing and verifying detailed homeowner sidewalk assessments via MS Visio; producing project tracking sheets to monitor the progress of work and completion of contractual obligations; verifying that the contractor has obtained all necessary permits, certificates, licenses, insurances or approvals required for the performance of the work; supervising the performance of the inspection team in the field

CPM SCHEDULING

Juan Uribe

Years experience **31**

Mr. Uribe is an experienced Construction Scheduler with strong skills in organizing, operating, and executing schedules for large scale projects using project management methodologies, project management tools and data bases required for scheduling and planning. He has experience in Baseline and his work includes updating schedules, work break down structures, cost analyses, claim mitigation, and claim analysis for different projects including, railroads, rail stations, airports, highways, bridges, oil and gas pipelines, production facilities, pump stations, production plants and environmental projects. Mr. Uribe also has extensive experience using Primavera planning and scheduling software.

RELEVANT EXPERIENCE

Northwest Resiliency Park, Hoboken, New Jersey. *City of Hoboken.* SCHEDULER. Responsible for developing, updating, tracking and managing all construction schedules, updates, baselines, changes of plan, and claims. Monitored and reported due dates, critical path progress, and milestone accomplishments using Primavera Project Planner P6. Michael Baker is providing full-time management for the construction of a 5.4-acre interactive urban park in the city of Hoboken. Construction will include sustainable design and extensive stormwater management features, such as an underground one-million-gallon tank that will collect and store all stormwater runoff. As part of the project, Michael Baker is coordinating with the local sewer authority for on-site pump station construction under a separate contract. The project scope also includes managing construction of an extensive and complex stormwater sewer system, building structures, athletic facilities, play equipment, and other interactive features. Michael Baker is also performing utility coordination, overseeing attainment of SITES v2 sustainability certification, conducting public engagement, updating the project website, and managing all requisitions for disbursement of New Jersey Infrastructure Financing Program payments to the city of Hoboken.

Demolition and Site Preparation for the Red Hook Combined Sewer Overflow Abatement Facility, RF3 CP-1, Brooklyn, New York. *New York City Department of Environmental Protection.* TECHNICAL ASSISTANT. Responsible for developing, updating, tracking, and managing all construction schedules, updates, baselines, changes of plan, and claims. Monitored and reported due dates, critical path progress, and milestone accomplishments using Primavera Project Planner. Michael Baker is providing construction management services for the demolition of building structures and site preparation as the first phase of construction of the Red Hook Combined Sewer Overflow Abatement Facility. Michael Baker's proactive approach has prevented any schedule delays and resulted in zero claims and no accidents on site. Services include all demolition, utility disconnects, and regulated materials abatement of the project site.

Construction Management Services for Upgrade of Newtown Creek Water Pollution Control Plant, New York City, New York. *New York City Department of Environmental Protection.* SCHEDULER. Responsible for claim analysis for NYDEP for the following contracts: NC50E, NC50G, NC60G, and NC60E. Michael Baker is providing Construction Management Services as part of a joint venture, including Project Management and Resident Engineering Inspection services, in connection with the following NYCDEP Construction Contracts totaling over $1.5B in construction costs. NYC's Newtown Creek Water Pollution Control Plant (WPCP), is the largest of its 14 wastewater treatment plants. The plant is undergoing a major capital improvement and upgrade program to expand its intended capacity from 1.2 to 1.8 cubic meters per day – a 50% increase. Process improvements will result in dramatic reductions of biochemical oxygen demand (BOD), and will help bring NYC into compliance with the secondary treatment standards required under the Clean Water Act. Michael Baker is performing construction management services for portions of Phase 2 and 3 of the upgrade of the Newtown Creek WPCP.

South Street and Adams Street Drainage Improvements, Newark, New Jersey. *City of Newark, New Jersey.* SCHEDULER. Responsible for updating, tracking, and managing all schedule updates and baselines. Monitored and reported due dates, critical path progress, milestones,

Michael Baker INTERNATIONAL

Education
B.S., 1993, Petroleum Engineering, Universidad Industrial de Santander, Colombia

Juan Uribe

CPM SCHEDULING

RELEVANT EXPERIENCE CONTINUED

and accomplishments using Primavera Project Planner. Michael Baker provided a comprehensive drainage study and design for the combined sewer overflow community of Ironbound surrounding the South and Adams Street corridor. The area suffers from frequent flooding that is stifling business growth, creating toxic environments from combined sewers, and causing property and personal damage. Michael Baker studied the roadway drainage and overall drainage patterns of the network of ditches draining to Newark Bay. Following the study, alternatives were developed to separate the sewers in the most critical downstream areas and install green infrastructure to retain rainfall. Michael Baker also assisted the client with long-term prioritization for future separation of sewers. The designs were coordinated with the Ironbound Community Corporation and incorporated the Green Streets Initiative as well as the Passaic Valley Sewerage Commission.

Construction Management and Construction Inspection Services for the Reconstruction of Route 52 and the Route 52 Causeway - Contract B, Somers Point to Ocean City, New Jersey. *New Jersey Department of Transportation (NJDOT).* SCHEDULER. Responsible for developing, updating, tracking and managing all construction schedules, updates, baselines. Monitored and reported due dates, critical path progress, milestones and accomplishments using Primavera Project Planner. Michael Baker is providing construction management and construction inspection for the reconstruction of approximately three miles of New Jersey Route 52 from Route 9 in Somers Point to Bay Avenue in Ocean City. The reconstruction includes the replacement of the Route 52 Causeway, which consists of four low-level concrete bridges, including two bascule spans, with two main bridges. 3,300 feet and 5,500 and in length, that are separated by 2,000 feet of roadway section on one of the islands. Construction management services include quality reviews and monitoring construction schedules. Construction inspection services include daily inspection of all structural work, paving, and drainage. The full project scope included approximately 7,000 ft. of new and widened roadway construction and the construction of a 3,500 sf new Visitor Center with associated utilities.

Construction Management and Construction Inspection Services for the Reconstruction of Route 52 and the Route 52 Causeway - Contract A, Somers Point to Ocean City, New Jersey. *New Jersey Department of Transportation (NJDOT).* SCHEDULER. Responsible for developing, updating, tracking and managing all construction schedules, updates, baselines. Monitored and reported due dates, critical path progress, milestones and accomplishments using Primavera Project Planner. Michael Baker is providing construction management and construction inspection for the reconstruction of approximately three miles of New Jersey Route 52 from Route 9 in Somers Point to Bay Avenue in Ocean City. The reconstruction includes the replacement of the Route 52 Causeway, which consists of four low-level concrete bridges, including two bascule spans, with two main bridges. 3,300 feet and 5,500 and in length, that are separated by 2,000 feet of roadway section on one of the islands. Construction management services include quality reviews and monitoring construction schedules. Construction inspection services include daily inspection of all structural work, paving, and drainage. The full project scope included approximately 7,000 ft. of new and widened roadway construction and the construction of a 3,500 sf new Visitor Center with associated utilities.

Trenton Transit Center Rehabilitation Construction Management Services, Trenton, New Jersey. *New Jersey Transit Corporation.* SCHEDULER. Responsible for developing, updating, tracking and managing all construction schedules, updates, baselines. Monitored and reported due dates, critical path progress, milestones and accomplishments using Primavera Project Planner. Participated in claim analysis and claim mitigation.

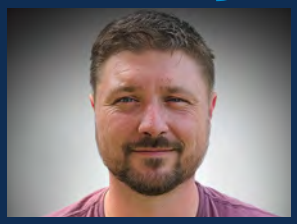
Wilmington Station Renovation and Restoration Construction Management and Inspection, Wilmington, Delaware. *Amtrak.* SCHEDULER. Responsible for developing, updating, tracking and managing all construction schedules, updates, baselines. Monitored and reported due dates, critical path progress, milestone accomplishments using Primavera Project Planner. Worked with resident engineer and field manager in claims mitigation, development of time impact evaluation forms and tracking its impact on the schedules for potential claims or extensions of time. Michael Baker provided construction management and inspection services for the restoration and renovation of the historic Wilmington Station. Michael Baker's services included preconstruction design reviews; risk analyses; constructability reviews; review of value engineering proposals; construction scheduling, quality assurance and quality control reviews; monitoring the construction budget and minimizing change orders; and construction inspection. All construction work was performed without disruptions to train service.

Delaware River Heritage Trail CM, Burlington County. *Burlington County.* SCHEDULER. Responsible for developing, updating,tracking and managing all construction schedules, pdates, baselines, changes of plan, and claims. Monitored and reported due dates, critical path progress, and milestone accomplishments using Primavera Project Planner.

COST ESTIMATING

Jeffrey Weiss, CCT, CQM-C

Years experience 19



Mr. Weiss is a construction specialist within the Construction Services Department of Michael Baker. Since joining Michael Baker, he has been actively involved in preparing cost estimates, construction schedules, and providing construction management services for various clients while utilizing the latest software and industry technologies. Upon graduating from the University of Pittsburgh, with a Bachelor of Science in Civil Engineering and a certificate of Construction Management, Mr. Weiss entered the construction industry as a surveyor. He then progressed to a project engineer and superintendent, where he gained valuable knowledge as to how construction projects are phased, scheduled, constructed, and managed. This experience enabled him to successfully transition into a project management role where he worked on numerous projects that have included commercial, religious, industrial, military installations, hospitals, medical institutions, educational, and correctional facilities. Having managed projects for both general contractors and construction managers, while working with both union and open shop contractors, Mr. Weiss possesses the unique ability to relate to and work with a client from concept through design and construction to commissioning. His knowledge and experience have carried over to Michael Baker where he draws on this experience to provide the highest quality outcome in all aspects of a project.

RELEVANT EXPERIENCE

Hartford Line Railroad Stations Design, New Haven, Connecticut to Springfield, Massachusetts. *Connecticut Department of Transportation.* COST ESTIMATOR. Responsible for providing quantity take-offs and construction cost estimates for multiple project locations across all phases of design. Michael Baker is developing the design for 11 new or upgraded high-speed passenger rail stations from New Haven, Connecticut, to Springfield, Massachusetts. The Connecticut Department of Transportation's new CT Rail "Hartford Line" project represents a broad partnership between the state of Connecticut, Amtrak, and the Federal Railroad Administration, along with the states of Massachusetts and Vermont. Michael Baker is preparing erosion and sedimentation control and designs for pedestrian bridges and parking facilities that comply with Americans with Disabilities Act (ADA) standards. Additional services include preparing permit applications, performing right-of-way and utility coordination, constructability reviews, and construction management, and overseeing landscape design. Projects are in Enfield, Windsor Locks, Windsor, Hartford, Newington, West Hartford, Berlin, Meriden, Wallingford, North Haven, and New Haven. As of 2020, the stations in New Haven, Meriden, Wallingford, Berlin, and Hartford are complete.

Full Facility Renovation Design-Build RFP, Orangeburg Army Reserve Center, Orangeburg, New York. *U.S. Army Corps of Engineers, Louisville District.* COST ESTIMATOR. Responsible for providing construction cost estimates for the design-build RFP to renovate an existing Army Reserve Center. Estimating services included development of pricing for the Full Facility Assessment, along with MCACES estimates for the final proposed design. Michael Baker developed a design-build request for proposal (RFP) for the Full Facility Renovation Project of the Orangeburg, New York Army Reserve Center(ARC). This project included renovation to the existing 168-member ARC training building, organizational maintenance shop, military equipment parking area, and a privately owned vehicle parking area on an 18.40-acre site. Michael Baker led a reboot meeting, attended site visits, produced drawings using CADD technology. The scope of work also included completing specifications using SPECSINTACT, presenting the final design-build RFP, and discussing comments at a two-day meeting.

Architecture-Engineering (A-E) Services in Support of Hill AFB 75th CEG/CEN, Hill Air Force Base, Utah. *Department of the Air Force.* COST ESTIMATOR. Responsible for providing MCACES estimates for multiple projects. Projects included demolition, renovation, new construction, site development, fire protection, and mechanical replacement. Michael Baker is providing architecture and engineering services for project at Hill Air Force Base. Its services include architecture designs, agency coordination, demolition, and structural, HVAC, electrical, mechanical, plumbing, communication, and fire suppression engineering. Designs include construction documents, demolition plans, structural calculations, code requirements, and detailed cost estimates.

Michael Baker INTERNATIONAL

Education

B.S., 2004, Civil Engineering/ Construction Management, University of Pittsburgh

Licenses/ Certifications

Construction Quality Management for Contractors, 2012

Certified Cost Technician, 2022

Professional Affiliations

Association for the Advancement of Cost Engineering International (AACEI)

Construction Management Association of America (CMAA)

Jeffrey Weiss, CCT, CQM-C

COST ESTIMATING

RELEVANT EXPERIENCE CONTINUED

Design, Resident Engineering, and Construction Management Services for the Coney Island Water Pollution Control Plant Upgrade, Brooklyn, New York. *New York City Department of Environmental Protection.* COST ESTIMATOR. Responsibilities included providing construction cost estimating services at various levels of design for multiple layouts. Michael Baker, in joint venture with another firm, has been providing design, resident engineering, and construction management services for the upgrade of the 100-million-gallon-per-day Coney Island Water Pollution Control Plant. The upgrade includes design and construction of new aeration and odor control systems, new primary settling tanks and sludge degritting facilities, new final settling tanks, disinfection facilities, and a new power substation and other buildings, and reconstruction of the main sewage pump station, settling tanks, and gravity thickeners. The upgraded plant provides treatment for 100 million gallons per day of wastewater at average conditions, and maximum capacity was increased from 140 to 200 million gallons per day, with 85 percent pollutant removal.

IRS Service Center Modernization, Ogden, Utah. *General Services Administration.* COST ESTIMATOR. Responsible for reviewing contractor change order requests and developing Independent Government Estimates to validate proposed changes. Michael Baker provided architectural and engineering services for the 500,000-square-foot Department of the Treasury Internal Revenue Service (IRS) Service Center Building, owned by the General Services Administration. For this project, Michael Baker developed infrastructure and upgrades to address critical needs, reduce future maintenance, improve life safety, resiliency, sustainability, and efficiency, and minimize repair costs. The project provided architectural engineering, lighting and utilities upgrades, pre-design program verification, and bid packaging including concept design documents, design development documents, construction documents, specifications, cost estimates, value engineering services, computer-aided design and drafting, building information modeling, and construction phase services for the interior and exterior construction

Gate and Access Design for Morley and Grand Drainage Tunnels, Nogales, Arizona. *U.S.* ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT. Cost Estimator. Responsible for quantifying and compiling cost estimates. This Task Order provided the design services for the United States Army Corps of Engineers (USACE) – Fort Worth District to develop the analysis and construction documents to construct at total of 4 gates (2 ea.) inside the tunnels and stairwell access points between the gates into the Grand and Morley Tunnels (box culverts) within the footprint of the DeConcini Port of Entry in Nogales, AZ in Border Patrols Tucson Sector. The stairwell access for the Grand Tunnel was placed in the center of southbound lane 2. A minimum of one southbound access lane into Mexico had to remain open at all times and construction activities were limited to the hours of 10 pm to 6 am. From 6 am to 10 pm at night all lanes had to be open to southbound traffic. The project included survey, mapping, aerial photography, hydraulic analysis, a Design Analysis Report, and project plans, cost estimates, and specifications at 15%, 60%, 90% and 100% submittals. We also developed the RFP package. The RFP included construction plans and specifications for the addition of two new stairwell access points into each of the two existing tunnels, and four new gates. Post design services are not a part of this project and were done under a separate task order.

Camp Alvarado, Extension II (TO 0028), Kabul International Airport (KBL), Kabul, Afghanistan. *U.S. Army Corps of Engineers, Transatlantic Middle East District.* COST ESTIMATOR. Responsible for cost estimating and document control. Michael Baker prepared design-build documents for construction of two aircraft parking aprons; two aircraft pre-engineered building hangars; an office building with restrooms, a break room, and showers; an extension of the existing passenger terminal; an additional entrance gate with sally port and guard building; site improvements including asphalt paved entrance road and vehicle parking; and utility infrastructure (electrical, mechanical, plumbing, drainage, and information systems). Michael Baker provided a cost estimate and construction schedule as part of the design deliverables.

Environmental and Asbestos Remediation Services, Ashtabula County, Ohio. *Ashtabula County Port Authority.* COST ESTIMATOR. Provided construction cost estimates and site survey for feasibility of remediation of industrial facility. Michael Baker completed previously initiated investigations and remedial tasks necessary to advance the former First Energy Plant C through the Ohio Environmental Protection Agency (OEPA) Voluntary Action Program (VAP). The plant is being operated as a pumping station for the intake/release of water from Lake Erie for use by local manufacturers. Michael Baker provided environmental program management support, including facility engineering, compliance, permitting, bid specifications, and bid analysis for plumbing, electrical, structural, and remedial actions at the facility. Michael Baker led the client's successful effort to obtain a Clean Ohio Revitalization Fund grant for $3 million in 2007 and a Covenant Not to Sue (CNS) for the site from the VAP in December 2012. Michael Baker also performed Phase I and II environmental site assessments, asbestos and hazardous materials surveys, asbestos abatement design and oversight, and soil and fly ash remediation design and oversight

Patrick H. Hicks
Construction Inspector

Education
Civil Engineering and Construction Management, Burlington County College, 1995
Architectural Construction Drafting & Design, Star Design School of Drafting & Electronics

Professional Certifications
NICET IV – Highway Construction
NICET III – Water & Sewer Lines
ACI – CCTC
ACI Grade 1 Certified
SAT Certified
TCP Certified (Rutgers)
OSHA 10-Hour Construction Health & Safety Training
OSHA Fall Protection Training

Mr. Hicks has over 25 years of experience on heavy highway projects comprised of bridge, roadway, electrical and facility construction. He has served as Resident Engineer, Traffic Control Coordinator, and Construction Inspector on projects for the NJTA, NJDOT, and several New Jersey Counties.

NJTA A3902 Generator Replacement at Interchange 13, Northern Division Headquarters, and Interchange 15W, Contract No. T500.620; Lighting Improvements and Standy Generator Replacement at Turnpike Interchange 17E, Contract No. T200.637; and 2022 HVAC Upgrades at Various Locations, Contract No. A500.642; 1/23-Present; $11.3M. Construction Inspector for two of these construction contracts, as a subconsultant to Michael Baker, for the Authority. Work on Contract No. T500.620 ($2.5M) and Contract No. T200.637 ($8.8M) consisted of generator placement, generator and controller pad concrete and reinforcing, conduit, wiring, upgrading of existing generator controllers to connect to the replacement generators, demolition of existing generators and enclosure buildings. Contract No. T200.637 ($8.8M) also included removal of existing roadway lighting structures, junction box foundations, new wiring, and installation of new LED lighting structures. As Construction Inspector, he was responsible for managing and recording daily activities and pay quantities in a daily report in CapEx. Responsible for being present for scheduled DCA inspections, as required. Other duties included witnessing on-site materials testing and verifying that the work was performed in accordance with the plans and specifications. *Reference: NJTA, Rich Reuter (732) 750-5300*

NJTA A3803 Lighting Improvements at Interchanges 98, 117, 118, 102, and 105, Contract Nos. P200.533, P200.537, P200.566, and P200.610; 1/21-12/22 $12.61M. Construction Inspector for this lighting and related road improvements project at Interchange 114 on the Garden State Parkway. Work items on the project included inlet filters, beam guide rail, berm surfacing, #6 A.W.G. multiple lighting cable, miscellaneous electrical work, load center cabinets, temporary lighting, removing and salvaging existing facilities, righted nonmetallic conduit,, junction boxes, junction box foundations, concrete bases, #2/0 A.W.G. power cable, various types of ground wire, 2-way duct bank, 3-way duct bank, 4-way duct bank, RMC, transformers, lighting standards, luminaires, seeding, lighting manholes, utility relocation, and MPT. As Construction Inspector, he was responsible for managing and recording daily activities and pay quantities in a daily report in CapEx. Responsible for being present for scheduled DCA inspections, as required. Other duties included witnessing on-site materials testing and verifying that the work was performed in accordance with the plans and specifications. Scheduled and conducted punch list inspections and assisted in determining substantial completion and project completion. *Reference: NJTA, Daniel Hesslein (732) 750-5300 x8544; NJTA, Joy Christian (732) 221-0634 (Mobile)*

NJTA A3713 New Jersey Turnpike – Garden State Parkway Lighting Improvement at Interchange 114, Contract No. P200.532; 1/20-12/20; $2.9M. Served as Construction Inspector on this project located at Interchange 114 on Garden State Parkway. Construction Inspection services on this contract consisted of inspection of Soil Erosion controls, excavation/embankment, bituminous paving Trench Repairs, concrete placement, sheeting installation, Coordination of old Lighting system removal with JCPL, coordination of Lighting System connection to offsite utility, traffic control coordination with Contractor, NJTA Traffic Operation and NJSP. Oversaw lighting system testing, in addition to lighting standard, conduit, wiring, luminaires, and related electrical equipment installation inspections. Managed and recorded daily activities and pay quantities in a daily report in CapEx. Witnessed on-site materials testing and verified that the work was in accordance with the plans and specifications. Scheduled and conducted punch list inspections and assisted in determining substantial completion and project completion. Churchill performed in-house quality reviews of project documentation, in addition to status reports and invoices consisting of preparation of monthly progress reports, invoices, and supporting materials. *Reference: NJTA, Daniel Hesslein; NJTA, Joy Christian*

NJTA A3713 Interchange 11 Replacement of North Ramp Gates, Contract No. A200.439; 1/19-1/20; $3.47M. Construction Inspector on this project located at Interchange 11 on the New Jersey Turnpike. Construction Inspection services on this contract consisted of erosion and sedimentation control, excavation/embankment, guiderail, bituminous paving, concrete placement, sheeting installation, gate and gate control system installation, lane control systems, traffic control coordination, traffic striping, system testing, and other incidental work in addition to conduit, wiring and related electrical equipment. The construction inspector managed and recorded daily activities and pay quantities in a

daily report in CapEx. The inspector was present for scheduled DCA inspections if required for this project and witnessed on-site materials testing and verified that the work was in accordance with the plans and specifications. The inspector, with the assistance of the Project Manager, scheduled and conducted punch list inspections and assisted in determining substantial completion and project completion. As Construction Inspector, he was responsible for managing and recording daily activities and pay quantities in a daily report in CapEx. Responsible for being present for scheduled DCA inspections, as required. Other duties included witnessing on-site materials testing and verifying that the work was performed in accordance with the plans and specifications. Scheduled and conducted punch list inspections and assisted in determining substantial completion and project completion. *Reference: NJTA, Daniel Hesslein; NJTA, David Colella (732) 379-1094*

Guiderail Improvements in 10 Locations, Gloucester County; 1/17-12/17; $1.2M. Served as Resident Engineer for this project that included the replacement of guiderail at 10 locations in Gloucester County. The various improvements and replacements consisted of concrete repairs, constructed guiderail, as well as embankment and stream stabilization. Some existing parapets were removed, replaced, and upgraded to truck parapets. Duties included serving as the client's direct on-site representative to the contractor, direct supervision of a field Inspection staff, performing quality assurance and quality control oversight of major items of work in progress and ensuring that the project was constructed in accordance with the project plans and specifications, checking accuracy of inspection reports, monitoring progress schedule and progress, resolving conflicts between inspection staff and contractor, preparing change orders, preparing monthly pay estimates and project close-out. *Reference: Gloucester County, Vincent M. Voltaggio (856) 307-6600*

NJTA GSP P3448 Shoulder Restoration and Improvements MP 90.5 to 99.5 Contracts P200.200 & P200.201; 10/12-1/17; $170M. Traffic Control Coordinator/Construction Inspector on two concurrent NJTA projects. The project included widening travel lanes to 12 feet and completing mainline travel lane improvements in each direction on the Garden State Parkway. Major work items included removal of 3 existing bridges, construction of 3 new bridges and the widening and redecking of 7 existing bridges. The project also required the removal of portions of 2 existing bridges, as well as 340,000 SY of complete roadway milling, reprofiling activities to improve drainage, 200,000 tons of HMA paving, construction to extend existing culverts, the installation of 13 new permanent sign structures, relocation of one ground-mounted Dynamic Message Sign to an overhead sign structure including relocation of fiber optic utility to DMS sign; drainage improvements including 14 stormwater management basins and recharge swales, additional signage and signing delineations, upgrades to interchange lighting including replacement of every light pole and junction box, traffic striping, maintenance and protection of traffic and other miscellaneous work. Guide rail and Median Crossover Protection items for this project included for 22 flared guide rail terminals, 35,900 LF of guide rail removal, 40,500 LF of beam guide rail and 8,100 LF of reset beam guide rail, guide rail posts, as well as the installation of QuadGuard Impact Attenuators, release terminals and parapet and pylon extensions, and installation of 4 in-pavement wireless sensors at two locations. Construction inspection duties included the inspection of guide rail improvements, drilled shaft foundations for JCPL Utility Transmission Line Relocations, overhead and cantilever sign structure foundations, reinforced concrete storm sewer installation, water main extension at shoulder widening and fiber optic utility transmission and distribution line installation and relocation and other roadway improvements. Culvert repairs at Sawmill Creek and Hurley Pond included inspection of storm sewer flow diversion, cleaning of silt and sediment and removal of loose structural materials from existing pipe and drainage structures, CCTV inspection of existing conditions, stream flow diversion with pump-thru-pipe drain system, fabrication and installation of structural steel ribs and reinforcement steel, placement of reinforcing / welded wire fabric, pneumatically applied Portland Cement within the 142" x 102" pipe arch culvert and 96" concrete pipe repairs. Traffic Control Coordinator responsibilities included review and coordination of numerous contractor's lane closing submissions, coordination of detour route verification and approval process with numerous agencies; coordination of NJSP traffic slowdowns and escorts for setting of beams and escort of wide loads, daily coordination and review of all lane closings; traffic shifts with the project RE's, NJTA traffic operations, NJSP, NJTA liaison engineer, NJDOT traffic operations, Monmouth and Ocean county engineers; reviewed all MPT devices on both projects and provided deficiency lists to the RE's, liaison engineers and contractors. Construction duties included performing quality assurance oversight of major items of work in progress and ensuring project was constructed in accordance with project plans and specifications, review of all inspectors' Daily Construction reports and quantity reviews. *Reference: NJTA, Joseph Johnson (732) 750-5300 x8254; GPI, Richard Seamon (908) 236-9001*

NJDPMC T0278-00 Springfield Rest Area Building Repairs for the DPMC, Burlington Township, NJ; 4/99-4/00; $300K. Construction Inspector for this project to convert sewer and water facilities at the Springfield Rest Area to local municipality services. The project included a 2 mile water main on force main extension on a stretch of Route I-295. Duties included documentation of quantities and ensuring contractors' work maintained conformance with project plans and specifications.

Michael Baker

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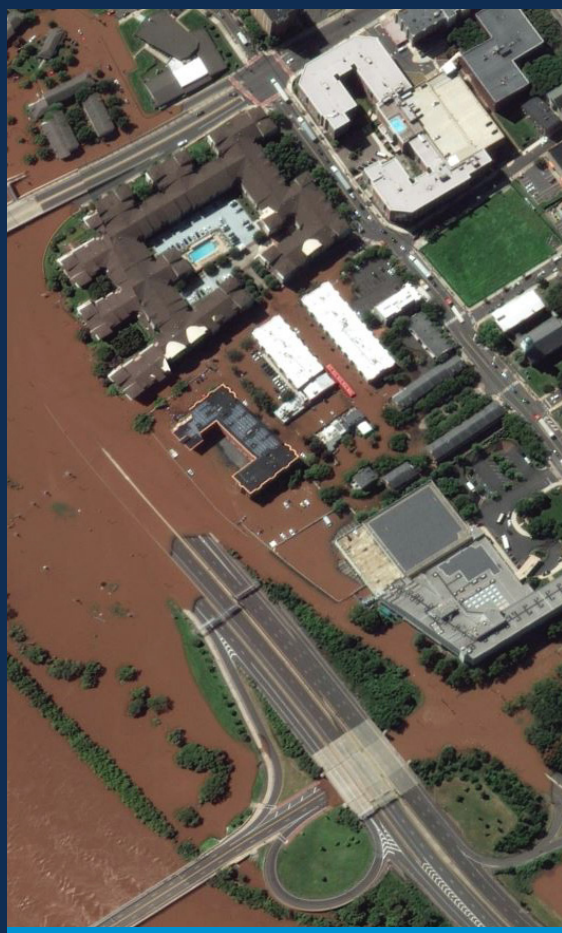
300 American Metro Boulevard · Suite 154
Hamilton, NJ 08619

FEE PROPOSAL

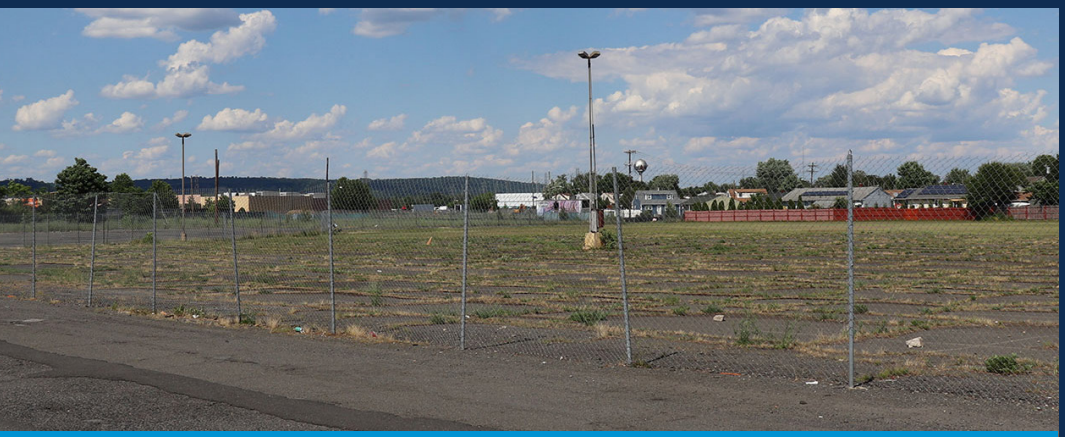
CMF-004 WORK ORDER NO. 02
DCA RESILIENT COMMUNITIES

Kingwood, NJ: Replacement of Existing Emergency Response Facility

Stormwater Management

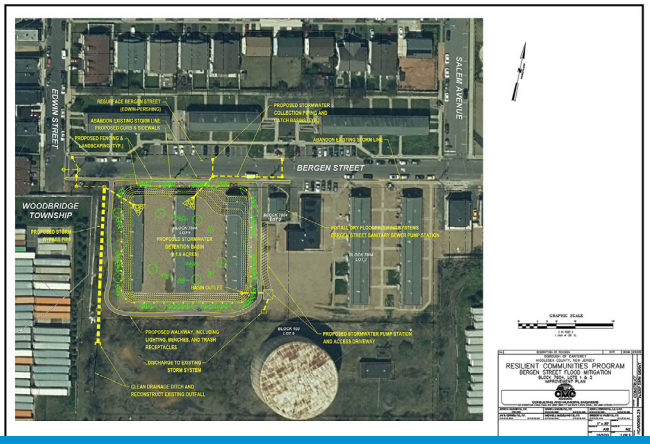


Hurricane IDA Flooding Devastation



Manville, NJ: Rustic Mall Lot Proposed for Future DPW & OEM Facilities

Bio-Retention Basin



Carteret, NJ: Proposed Stormwater Plan

DPMC PROJECT #J0405-00 | MAY 16, 2024

SUBMITTED TO
NJ DEPARTMENT OF THE TREASURY, DIVISION OF PROPERTY MANAGEMENT & CONSTRUCTION

CMF SERVICES FEE PROPOSAL
DCA RESILIENT COMMUNITIES - CONSTRUCTION MANAGEMENT FIRM

THIS FEE PROPOSAL TO BE RETURNED ELECTRONICALLY
VIA EMAIL TO: christopher.geary@treas.nj.gov & jennifer.roeckel@treas.nj.gov

DATE: May 16, 2024
PROJECT #: J0405-00 CMF-004
WORK ORDER #: 02

THIS PROPOSAL DUE DATE, NO LATER THAN 2:00 PM, MAY 16, 2024

FIRM NAME: Michael Baker International, Inc.

THE UNDERSIGNED PROPOSES TO PROVIDE ALL PROFESSIONAL SERVICES REQUIRED IN THE SCOPE OF WORK AND THE IDIQ TERM CONTRACT CMF-004 AGREEMENT BETWEEN THE STATE OF NEW JERSEY AND THE CMF.

SUB-TOTAL CMF TASK/LABOR/FEE SHEET - Tasks 1 -6	$	1,004,516.00
SUB-TOTAL CMF TASK/LABOR/FEE SHEET - Tasks 7 - 11	$	573,860.00
TOTAL NOT TO EXCEED (NTE) FEE FOR CMF SERVICES	$	**1,578,376**
REPRODUCTION ALLOWANCE	$	**2,000**
ALLOWANCES PROPOSED BY CMF (Mileage for inspections & meetings)	$	**15,000**
	$	
	$	**$17,000.00**
TOTAL WORK ORDER NTE AMOUNT	$	**$1,595,376.00**

THE LEVELS AND CORRESPONDING HOURLY RATES INCLUDED IN THIS WORK ORDER PROPOSAL WILL BE FOR THE BASE PERIOD OF TERM CONTRACT CMF 004. **WORK ORDER PROPOSAL GOOD FOR 60 DAYS AFTER THE DUE DATE.**

SIGNATURE

Vice President

TITLE

CMF TASK/LABOR/FEE SHEET

FIRM: __Michael Baker International, Inc._____

Project # J0405-00; Work Order# 02
Project Name: DCA RESILIENT COMMUNITIES
CONSTRUCTION MANAGEMENT FIRM

PROJECT PHASE OR TASK	CMF's LEVEL OF EFFORT IN HOURS/FEE								TOTALS PER TASK
	LEVEL	7	6	5	4	3	2	1	HOURS
	*HOURLY RATE	$277.00	$255.00	$206.00	$168.00	$141.00	$94.00	$80.00	$ AMOUNT
Task 1	HOURS	0	120	1004	0	0	0	0	1124
DESIGN OVERSIGHT	AMOUNT	$0.00	$30,600.00	$206,824.00	$0.00	$0.00	$0.00	$0.00	$237,424.00
Task 2	HOURS	0	156	868	0	0	0	0	1024
GENERAL REPORTING REQIREMENTS	AMOUNT	$0.00	$39,780.00	$178,808.00	$0.00	$0.00	$0.00	$0.00	$218,588.00
Task 3	HOURS	0	0	59	236	472	0	0	767
INSPECTIONS AND PHOTOGRAPHS	AMOUNT	$0.00	$0.00	$12,154.00	$39,648.00	$66,552.00	$0.00	$0.00	$118,354.00
Task 4	HOURS	0	156	815	0	0	0	0	971
CONTRACTOR DELIVERABLE REVIEW	AMOUNT	$0.00	$39,780.00	$167,890.00	$0.00	$0.00	$0.00	$0.00	$207,670.00
Task 5	HOURS	0	100	200	200	0	0	0	500
PROVIDE INDEPENDENT COST ESTIMATES (ICE)	AMOUNT	$0.00	$25,500.00	$41,200.00	$33,600.00	$0.00	$0.00	$0.00	$100,300.00
Task 6	HOURS	0	156	400	0	0	0	0	556
SCHEDULING, MASTER SCHEDULE	AMOUNT	$0.00	$39,780.00	$82,400.00	$0.00	$0.00	$0.00	$0.00	$122,180.00
	HOURS	0	688	3346	436	472	0	0	4942
NOT TO EXCEED TOTALS	AMOUNT	$0.00	$175,440.00	$689,276.00	$73,248.00	$66,552.00	$0.00	$0.00	$1,004,516.00
							CMF SERVICES	HOURS	4942
							SUB-TOTAL CMF SERVICES - Tasks 1 - 6	AMOUNT	$1,004,516.00

CMF TASK/LABOR/FEE SHEET
FIRM: Michael Baker International, Inc._____

Project # J0405-00; Work Order# 02
DCA RESILIENT COMMUNITIES
CONSTRUCTION MANAGEMENT FIRM

PROJECT PHASE OR TASK	CMF's LEVEL OF EFFORT IN HOURS/FEE								TOTALS PER TASK
	LEVEL	7	6	5	4	3	2	1	
	*HOURLY RATE	$277.00	$255.00	$206.00	$168.00	$141.00	$94.00	$80.00	HOURS / $ AMOUNT
Task 7	HOURS	0	0	0	236	0	0	0	236
STATEMENT OF ASSURANCES COMPLIANCE	AMOUNT	$0.00	$0.00	$0.00	$39,648.00	$0.00	$0.00	$0.00	$39,648.00
Task 8	HOURS	0	0	258	1108	0	0	0	1366
PROJECT CMF REVIEW OF CONSTRUCTION CONTRACTOR INVOICES	AMOUNT	$0.00	$0.00	$53,148.00	$186,144.00	$0.00	$0.00	$0.00	$239,292.00
Task 9	HOURS	0	60	454	678	0	0	0	1192
MEETINGS AND CONFERENCE CALLS	AMOUNT	$0.00	$15,300.00	$93,524.00	$113,904.00	$0.00	$0.00	$0.00	$222,728.00
Task 10	HOURS	0	0	56	112	0	0	0	168
CONTRACT MODIFICATIONS	AMOUNT	$0.00	$0.00	$11,536.00	$18,816.00	$0.00	$0.00	$0.00	$30,352.00
Task 11	HOURS	0	0	40	200				240
PROJECT CLOSEOUT	AMOUNT	$0.00	$0.00	$8,240.00	$33,600.00	$0.00	$0.00	$0.00	$41,840.00
NOT TO EXCEED TOTALS	HOURS	0	60	808	2334	0	0	0	3202
	AMOUNT	$0.00	$15,300.00	$166,448.00	$392,112.00	$0.00	$0.00	$0.00	$573,860.00
								CMF SERVICES HOURS	3202
								SUB-TOTAL CMF SERVICES - Tasks 7 - 11 AMOUNT	$573,860.00

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