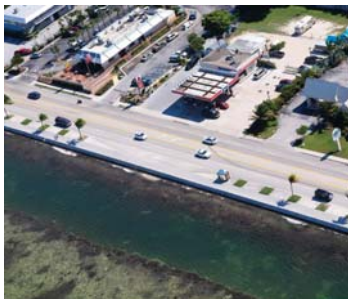
City of Key West
General Engineering Services





RFQ No.: 12-005

Date: August 1, 2012

Time: 3:00 P.M.

Copy

City of Key West
Request for Qualifications for General Engineering Services

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3142 Boog Powell Court, Key West, Florida, 33040 ■ 305.294.9059 ■ amec.com

August 1, 2012

City Clerk
City of Key West
3126 Flagler Avenue
Key West, Florida 33040

Re: RFQ No. 12-005 - Request for Qualifications for General Engineering Services

Dear Selection Committee Members:

AMEC Environment & Infrastructure, Inc. (AMEC) is pleased to submit our qualifications to you for the City of Key West's General Engineering Services contract. AMEC is a focused supplier of consultancy, engineering, and project management services to its customers in the world's environment and infrastructure, oil and gas, minerals and metals, and clean energy markets. With 27,000 people in approximately 40 countries worldwide, 200 of whom work and reside in the Central Florida area, we have a strong reputation for balancing global excellence with local, cost-effective delivery.

AMEC is a multidisciplinary engineering and geologic services firm with lengthy roots in the South Florida area and includes the firms previously operating under the names *Mactec Engineering and BCI Engineers & Scientists, Inc.* With an office located in the Florida Keys since 2004, AMEC is highly interested in providing the City of Key West with Civil, Utilities, and Environmental Engineering for the City's General Engineering Services contract. We have reviewed the City of Key West's RFQ and understand the need to provide an exceptionally qualified team to perform these services.

AMEC has been providing master engineering services to many Florida municipal and regional governmental agencies for an extended period of time. We are confident our extensive experience will provide the City of Key West with a cost-effective team to provide solutions to your engineering needs. A few of our active municipal and/or government clients include:

- City of Dade City
- City of Fort Lauderdale
- City of Key West
- City of Lakeland
- City of St. Petersburg
- City of Tampa
- Citrus County
- Florida Department of Transportation
- Florida Department of Environmental Protection
- Hillsborough County
- Lake County
- Miami-Dade County
- Monroe County
- Pinellas County
- Southwest Florida Water Management District
- Volusia County Master Water Resources Services
- South Florida Water Management District
- Polk County

Throughout Monroe County, AMEC has completed many projects with other public agencies including: City of Key West, Monroe County, The Village of Islamorada, City Electric Systems, Florida Department of Transportation – (FDOT District 6) and LAP Projects with the Florida Department of Environmental Protection – (FDEP Greenways and Trails). Our management performance record for these agencies is reflected by the fact that we have been re-selected for additional contract terms on several of the above contracts.

As required in the RFQ, our inspection and management staff have experience with FDOT LAP requirements and will ensure they are being adhered to by the contractors performing construction work. Our staff is seasoned in this regard and is up to date with all of the latest FDOT LAP checklists, training, and QA/QC guidelists outlining all of the requirements for this project. AMEC has direct experience on the key issues of these projects which may include:

- Working with property owners along the various corridors whose properties may encroach upon the right-of-way
- Ability to assist the contractor with field adjustments that meet ADA requirements when space is limited
- Knowing when to consult the designer of record when the intent of his drawings cannot be met due to actual field conditions
- Keen ability to facilitate the project to keep construction moving forward
- Our team has performed quality control and verification testing on hundreds of lanes, miles of roadway and thousands of feet of sidewalks/bike paths for a multitude of City, County, FDOT, and FDEP projects
- Our previous experience with this type of work will allow us to monitor contractor operations to ensure compliance with stormwater pollution prevention plans (SWPPP)

We are pleased to submit this proposal, highlighting our staff, past performances, required forms and overall qualifications of our team. On behalf of AMEC, we would like to thank you and the City of Key West for considering us for this assignment. Should you have any questions or comments regarding the information provided please feel free to contact us.

Sincerely,

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QA/QC Manager
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Section 1
Company Profile

Company Profile

AMEC is a focused supplier of high-value environmental, engineering, and project management services to the world's natural resources, nuclear, clean energy, water and environmental sectors. With annual revenues of more than $4.5 billion, AMEC designs, delivers, and maintains strategic and complex assets for its customers. Since 2000, Engineering News Record magazine has ranked AMEC among the top international design firms. AMEC has also ranked at the top of its sector in the Dow Jones Sustainability Index since 2005.

Our growth strategy over the last 10 years has transformed our business from a UK construction company to an international project management group. This transformation has accelerated recently with disposals and acquisitions designed to increase focus on our core businesses. During 2011, our overall workforce headcount grew with more than 8,000 people recruited mirroring our key growth areas. This included the acquisition of both **BCI Engineers & Scientists, Inc. and MACTEC Engineering and Consulting, Inc.** AMEC now employs people in around 40 countries worldwide in three main divisions – Natural Resources, Power & Process, and Environment & Infrastructure.

AMEC's Environment & Infrastructure consulting business employs approximately 7,000 people in 175 offices worldwide. During the past 30 years, AMEC has offered multidisciplined solutions through civil engineering, surveying, architectural services, environmental services, geotechnical engineering, program management, materials testing and engineering, and water resource services to public and private clients. AMEC's Florida operation employs approximately 500 people in offices located in every region of the state.

Office Locations

AMEC's Florida operation includes approximately 100 people in the South Florida area. The company can draw on its experienced local managers and geographical reach to support the needs of clients, regardless of project size and complexity. AMEC's depth of global resources allows us to provide our clients with innovative solutions engineered to fit perfectly with local project challenges.

AMEC's project team offers extensive knowledge of regional issues of importance to Key West and, given our close proximity, **will enable the AMEC project team to rapidly respond to all project needs.** In addition to the Key West and Miami offices, AMEC has 13 additional offices in the state, as shown in the map. The Key West and Miami AMEC office will manage the professional staff for this contract. Our additional Florida offices, West Palm Beach, Lakeland, and Orlando can provide additional resources as-needed.

The proximity of our office's will allow for frequent visits for transfer of plans and information, and meeting participation. AMEC's highly-qualified professionals will be able to act as an extension of City Staff when the need arises. The AMEC team brings specialized Florida knowledge and experience to our clients with aided service delivery driven by AMEC's expansive financial, project management, and IT systems. Utilizing these combined services allows us to draw on vast resources of personnel and experience to meet our clients' needs.

World skills on your doorstep

We are more than 27,000 people in more than 40 countries globally - **but focused on you.**

Our skills and experience around the world are key elements in choosing AMEC. Our clients know we can rise to the challenge. We say "on your doorstep" because our customers recognize the **value of our local presence.**

Company Qualifications

We understand the challenges facing government agencies today with an ever increasing demand for services while operating under budget constraints and shortfalls. We have firsthand experience with the City of Key West's varying project needs and our wealth of knowledge and expertise delivered by our skilled professionals will provide you with the assurance that tasks will be completed competently, professionally, on time, and within budget. In our daily activities our professionals strive to become transparent extensions of your staff so that together we can tackle any challenge effectively, efficiently, and in a way that satisfies our ultimate clients - the citizens you serve.

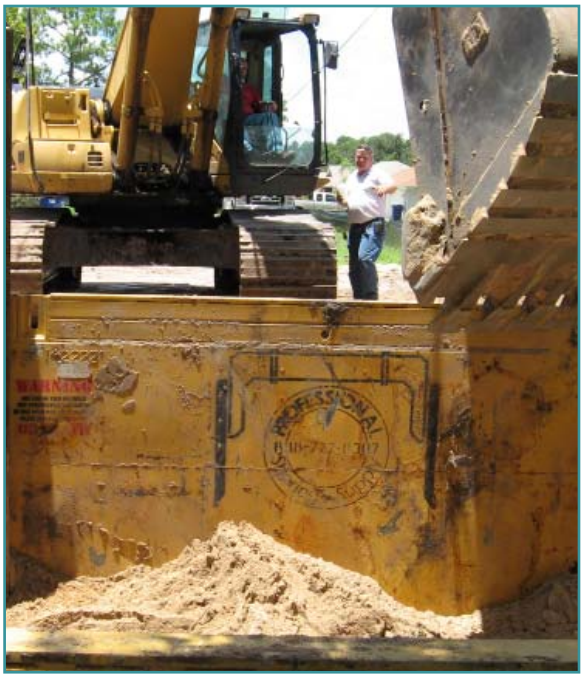
As a single-source consulting firm, AMEC offers our municipal clients a diversity of engineering, environmental, and surveying services ranging from stormwater master planning to roadway design. Our depth of global resources allows us to provide our clients with innovative solutions engineered to fit perfectly with your business challenges.

AMEC has provided sustainable and comprehensive solutions to challenges that affect our communities for more than 40 years. Our civil engineering team has worked on 100+ continuing master engineering services contracts for local governments throughout Florida during the past few decades, which have included community redevelopment and revitalization, utilities engineering and roadway design, stormwater retrofit and drainage design, streetscaping, stormwater master planning, and parks and recreational facilities. Our experience also includes working with municipalities similar in size to the City of Key West (approximately 25,000 residents), including Groveland, Lady Lake, Inverness, St. Cloud, LaBelle, Stuart, Arcadia, Highland Park, Dundee, Avon Park, Sebring, and Fort Meade.

AMEC won first place for its implementation of the Florence Villa Redevelopment project in Polk County from the American Planning Association, and Common Ground Park and Playground in Lakeland recently received an award from the Florida American Planning Association for the facility's innovative design, contribution to the community, and impact on neighborhood revitalization.

Critical Services

AMEC's team is comprised of a group of uniquely qualified and experienced professionals who possess a comprehensive understanding of all of the services that may be required under this contract including roadway design and redevelopment services, intersection improvement projects, sidewalk and pedestrian facilities, parks and recreational facilities, utilities engineering, stormwater management, site design, permitting, and construction phase assistance. Additionally, as we are a full service A/E/C firm we are able to supplement our team with additional in-house resources if needed. The following sections contains descriptions of our extensive expertise providing civil, utilities, and environmental engineering services.



Civil Engineering & Infrastructure Services

AMEC's Civil Engineering Group has successfully provided state and local government, Community Redevelopment Areas (CRA), and private corporations with civil and infrastructure-related design and management services. Our services have spanned the full gamut of engineering and scientific support from due diligence assessments and project planning to post construction monitoring. Within Florida, our Civil engineering group has been providing these services for more than 30 years. **Our staff has developed a reputation for its ability to work closely with our client - completing our services on schedule and within budget.**

We are proficient in the following work areas:

- Compliance Management & Maintenance
- Utilities Engineering (Water, Sewer & Reuse)
- Roadway & Intersection Design

- Parks & Recreational Facility Design
- Community & Neighborhood Redevelopment
- Stormwater Services (Retrofit, Master Planning, Monitoring, Compliance)
- Recreational Boardwalks, Walk Paths & Pedestrian Trails
- Construction Management Technology (CMT)
- Site/ Land Development Engineering
- Streetscaping, Traffic Flow Optimization & Calming
- Construction Administration & Construction Engineering & Inspection (CEI)

Our staff has the experience and expertise to provide economical solutions to a wide variety of general civil engineering tasks. We have extensive experience working with local municipalities and counties in the areas of grant support, project planning, property due diligence, engineering design, regulatory permitting, public education and awareness, and comprehensive construction management. We have completed numerous grant related projects including Community Redevelopment Block Grant (CDBG) (El Nino Grande, Community Redevelopment, and Economic Development), FDEP (Water Facilities and 319 stormwater), Florida Recreational Development Assistance Program (FRDAP), Environmental Protection Agency (EPA) Grants and others. Additionally, we have worked successfully with a number of grant administrators in obtaining funding and completing engineering, permitting, and construction support for a variety of projects.

AMEC's civil group has completed numerous award-winning projects involving community based recreational facilities. We thoroughly understand the need to work closely with community groups in developing park plans. Our experience involves amenities such as:

- Boardwalks, walk paths & trails
- Pedestrian bridges
- Playing fields (soccer, football, baseball, softball
- Stormwater parks
- Educational kiosks & displays
- Restroom facilities
- Innovative special needs playgrounds

Our designs focus on providing the highest quality recreational facilities/areas possible within the allocated budget. Cost estimates are provided as early as possible in the design process to allow the client and design team to make decisions as to the level of improvement and or expansion possible. Trails, boardwalks and access areas are designed to meet current American Disability Act (ADA) compatibility requirements. We have also assisted our clients in the selection of equipment (lighting, playground, and pre-manufactured amenities such as gazebos, pedestrian bridges, trash receptacles, etc.). Parking areas are designed to be user friendly, compliment the overall vision of the community, and satisfy the requirements of the owner (paved or stabilized green areas).

Many of our projects involve a dedicated educational element including kiosks and special displays, educational gazebos and demonstration areas. Several of our most recent projects involve the design and permitting of boardwalks that traverse wetlands, water bodies, estuaries, and other environmentally sensitive areas. In fact, one project required the

creation of a boardwalk that weaves and winds through the tree tops of a very unique wetland/ lake system.

Roadway and Intersection Improvement

AMEC's professional engineers are well versed in the design of roadway projects, which have included everything from alleys to major arterial roadway improvements. Elements of our roadway and transportation proficiencies involve evaluation of roadway infrastructure to determine traffic volume and flow, topographic survey, soil borings, pavement design, geotechnical investigations, right-of-way control mapping, roadway plans, drainage plans, signing and pavement marking plans, signalization plans, utility relocation, drainage design, intersection design and improvements, and safety upgrades.

Members of our team have designed new roadway alignments through both undeveloped and developed areas including the widening and/or rehabilitation of existing roadways. Projects have consisted of both rural and urban typical sections and an assortment of "blended" typical sections. Our design complies with FDOT standards while incorporating the details and specifications desired by our clients. Much of our experience with local street design involves the retrofit and upgrade of all associated infrastructure including drainage, stormwater management, water and sewer utilities, and traffic flow optimization.

Site Design and Permitting

AMEC routinely provides site planning and design services to municipal and private clients. Our Project Team members possess the skills and expertise to take a site development project from start to finish. These services typically include:

- Feasibility Analysis
- Boundary & Topographic Survey
- Phase I & Phase II Environmental Evaluations
- Land-Use Planning
- Conceptual Design
- Geotechnical Investigation & Analysis
- Stormwater Management Design
- Landscape Architecture
- Agency Permitting
- Public Meetings
- Contractor Bid Phase Services
- Construction Observation
- Site Certifications

In addition to our site design and permitting services, AMEC offers architectural design services for new construction and renovation projects.

Commercial Revitalization, Economic Development & Streetscaping

Our streetscape projects have included areas requiring extensive utility relocation to provide necessary pedestrian access and satisfy current ADA and Florida Accessibility Code for Construction. Much of our past experience in streetscape work has involved downtown historical business areas that were developed many years ago. As a result, these areas are characterized by narrow and obstructed pedestrian walkways, little or no landscaping, numerous overhead utilities, inadequate parking capacity and inefficient traffic patterns. Our design team has worked very closely with various municipalities and counties to understand their needs and share their vision. It is our goal to fully support our clients in developing the ambiance and overall image they desire for their city, county or neighborhood.

Some of our recent designs have included major modifications to the roadway systems and related traffic flow patterns, reconstruction of sidewalks and pedestrian cross walks, landscaped common areas, medians, and islands, improved pedestrian safety, traffic calming elements, signage and marking, optimization of parking capacity, and supplemental lighting for aesthetics and personal safety. Many times these activities lead to opportunities to enhance and upgrade existing infrastructure to accommodate future growth.

Our staff has extensive experience working with various grant administrators by providing documentation, budget summaries, and design details to satisfy the needs of the funding agencies. We provide accurate cost estimates at specified intervals in the design process that allows the City to optimize improvement plans while remaining within the limited funding allotment. Keeping close tabs on expected construction costs is often critical in a grant funded activity since communities often opt to supplement outside funds with other available fund sources during the design phase of the project. We also value engineer all of our plans and have sometimes outsourced our plan constructability reviews to qualified contractors. This allows us to obtain a realistic and independent plan review and avoid costly surprises.

Construction Phase Assistance

The AMEC Project Team is composed of various staff who have prepared construction cost estimates and bid specifications for numerous government/public works projects. As such, we are aware of municipal procedures for completing projects of this nature. We currently use software that assists us in providing comprehensive specifications in the Engineers Joint Contract Documents Committee (EJCDC) Construction Specifications Institute (CSI) Master Format. Our work with various county, municipal, and FDOT clients has enabled us to recognize situations where special provisions are required to supplement standard specifications.

Having been responsible for plan and specification quality reviews we can attest that a solid, well-prepared construction plan set and accompanying specification package can lead to minimal confusion and misinterpretation which, in turn, results in a reduction of overall construction costs.

In addition, we maintain a library of current construction cost information that allows us to develop accurate cost estimates for all project elements. Historically our construction cost estimates are within 10% of actual construction cost for our civil engineering projects.

The AMEC Team has significant experience in providing comprehensive construction engineering inspection (CEI) services. We strive to develop good working relationships with all project participants by encouraging an open and frequent line of communication. Our services generally include material and compaction control, soil density measurements (laboratory and field), concrete sampling and testing, overall construction quality control, review and approval of change order and payment requests, review and approval of shop drawings and alternative materials, photographic and narrative documentation development, dispute resolution, and comprehensive contract management.

Much of our CEI experience has included work on multi-million dollar civil works projects such as large earth dams and new mining facilities. However, we also routinely provide CEI/Construction Management Technology (CMT) services for our master engineering and redevelopment contracts, such as the City of St. Cloud's neighborhood revitalization that included the inspection of potable water, stormwater and sewer replacement, and subsequent road replacement for 14 streets in an existing residential neighborhood.

Most of our technicians are FDOT and American Concrete Institute (ACI) certified in various testing and construction management elements. Our construction engineering inspection and management services are supported via our in-house USACE-validated soil and materials testing laboratory at our Tampa location. In addition, we also maintain certification in confined space entry and rescue to enable us the flexibility to legally access and inspect manholes, inlets, pipes, and other confined spaces. We own and maintain all of the specialized equipment necessary for such inspections.

Utilities /Stormwater Engineering

From a utilities/environmental engineering standpoint our services include feasibility and engineering reports, design, permitting, bidding assistance and construction management for water, wastewater and water reuse facilities. During the last 15 years our staff has been continuously involved on a number of projects related to the renewal and replacement of aging water and wastewater infrastructure. We also assist our clients with the design, permitting and management of new capital improvements necessary to support Florida's growing population.

Our team has extensive experience working with various grant administrators, providing the necessary documentation to satisfy the needs of the funding agencies. We provide accurate cost estimates at specified intervals in the design process that allows the County to optimize improvements with the available funds. We also value engineer all of our plans and have on occasion outsourced our plan constructability reviews to qualified contractors. **This allows us to obtain a realistic and independent plan review and avoid costly surprises.**

Plans developed by our team are typically provided to the client at various stages throughout the project (30, 60, 90, and 100 percent completion). This allows the client sufficient time for review and comment. Plans are generally provided in hardcopy and digital (CD) format, and are available in any software the City may choose, including AutoCAD, MicroStation, or GIS (Arcview and ArcInfo). Our design and plans will accommodate FDEP, City, and FDOT standards.

A recently completed example includes our firm's work with the City of Groveland on a CDBG funded project, which involved the design of approximately 2,200 linear feet of gravity sewer with two lift stations, as well as 1,900 linear feet of force main and 1,400 linear feet of water main. A portion of the roadway within the project's right-of-way was completely replaced and the remainder was milled and resurfaced. A challenge faced by the project team was the narrow right-of-way, which could have created conflicts with other water and sewer utilities and separation requirements without careful planning and implementation.

Utility Locate

To prevent possible conflict with existing underground utilities, prior to performing any subsurface exploration we will contact the Florida State Sunshine Utility Location Service and will contact the MDCPS's Utility Department to verify the locations of their existing underground utilities on the site. In order to minimize risk, AMEC will also review the MDCPS plans of private utilities, not members of Sunshine, and to check for conflicts with existing private utilities at the proposed test locations. After review of the available utility information, staking of the test locations is performed, which consists of using a hand held GPS locator to identify locations for the boring, paying attention to overhead

lines and various other limitations that would make the boring location unacceptable. Once an area has been staked, a Sunshine Ticket is called in by staff engineer with proper descriptions to help locator clear the ticket, which will allow us to drill the locations found within the Sunshine Ticket. Once the staked area is cleared by Sunshine Ticket, the drilling package is compiled by the Field Supervisor. The package consists of the clear Sunshine Ticket, Pre-Job Brief Attendance Sheet, field boring log with appropriate sampling protocol using the appropriate ASTM standards, and sampling protocol sheet, with the depth of the boring.

An example of AMEC's comprehensive approach to clearance of utilities is the Florida Department of Transportation (FDOT) I-595 Corridor Improvement project in Broward County which consisted of drilling approximately 2,700 boring locations with no time lost claims from any drill teams that participated in this program. The drilling was provided in an accelerated schedule to ensure that the design teams could meet the tight timelines established on the onset of this project. **AMEC believes in safety first when providing the subsurface exploration services and maintained a very safe workplace environment throughout this project.** This safety culture was created on the first day of the project with team meetings and team building activities, which consisted of a comprehensive health and safety plan, daily tailgate meetings, and a team of engineers that ensured the boring locations chosen for drilling were called into Sunshine Ticket clearance system. These professionals met in advance of any drilling to adjust chosen locations if the clearance team identified any underground or above ground safety concerns.

Surveying and Mapping

Within the Florida operations of AMEC exists an established and experienced surveying and mapping group. Formed and developed over the past twenty-four (24) years by Michael Jones, PLS, and Charles Gardiner, PLS, the surveying and mapping group consists of seven professional land surveyors, five field crews, four survey technicians, and two administrative assistants.

Our surveying and mapping group has a remarkable record of continuity with the management function remaining intact for 24 years and all key staff having a minimum of 12 years of working together. It is important to note that this group has remained together and working as a team through several acquisitions and mergers.

Our firm has been providing surveying and mapping services in the state since 1987. We have focused on providing our services to public sector clients and, as a result, we have established and maintained successful business relationships with a number of governmental clients through continuing surveying and mapping service contracts, including:

- Seminole County 1992-96, 2002-present
- Orange County, 1999-present
- City of Ocoee, 1999-present
- Orlando Utilities Commission 1998-present
- City of Orlando 1993-99, 2001-2008, 2011-present
- Florida Department of Environmental Protection (FDEP) 1992-present
- St. Johns River Water Management District (SJRWMD) 1994-present
- South Florida Water Management District (SFWMD) 2002-present
- Southwest Florida Water Management District (SWFWMD), 2005-present
- Tampa Bay Water(TBW), 2008-present
- Florida Department of Transportation (FDOT), 1992-present
- U.S. Army Corps of Engineers (USACE), 2002-present
- U.S. Department of the Interior, National Park Service (NPS) 2004-2009
- U.S. Department of Agriculture/ Natural Resources Conservation Service (USDA/NRCS) 2005-present

We offer the City a consultant with continuity of management and staff with a proven record of successful performance on similar continuing surveying and mapping services contracts.

Stormwater Management and Water Quality

The AMEC project team is comprised of staff having extensive drainage and stormwater related project design and construction experience. We have developed numerous stormwater management facilities for public and private entities. We are recognized around the state for having the experience and qualifications necessary to efficiently and effectively plan, design, and implement stormwater related projects. On the other end of the spectrum, we have completed all aspects of very large regional projects from concept design through as-built certification including post construction monitoring. AMEC is recognized as pioneers in the stormwater management arena. We have the unique ability to seamlessly accommodate both the science and engineering aspects of stormwater and receiving waterbody quality dynamics. We are also unique in our breadth of stormwater expertise that includes:

- TMDL Development & Compliance
- Basin Management Action Planning
- WMD/FDEP Rule Making support via TAC Involvement
- Regional Scale Watershed Management Planning
- Stormwater Master Planning
- Stormwater Utility Development
- Minimum Flows & Levels
- NPDES Program Management
- Comprehensive Compliance & Maintenance Management

Our team often recommends and incorporates a multiple use approach to stormwater management and flood abatement projects. Much of our experience involves the development of facilities that provide multiple benefits including flood attenuation, water quality improvement, wildlife habitat, educational opportunities, passive recreational uses and stormwater reuse. In this manner, our clients are able to broaden their funding opportunities and maximize the overall benefit of any project to the community.

Over the years, AMEC's project team has assisted numerous clients secure funds for water quality related projects. We have tapped into various funding sources including FDEP, CDBG, State Revolving Fund (SRF), Section 319, and Florida Forever. In addition, our team has also assisted communities in the development of stormwater utilities and Municipal Separate Taxing Unit (MSTU)/Municipal Separate Benefit Unit (MSBU) taxing districts.

Environmental Services

AMEC's Environmental Engineering group provides a full complement of engineering, geologic and environmental services in the areas of assessment and remediation. We are widely recognized in South Florida for our ability to innovate cost-effective and integrated strategies for complex situations and obtain regulatory approvals of our solutions. Our comprehensive team of experts has extensive experience in the following areas:

- Phase I & II Environmental Site Assessments (ESAs)
- Test Pit explorations
- Wetland Delineations
- Wetland Mitigation Costing & Coordination
- Risk Assessments
- Soil & Solid Waste Excavations & Remediation
- Groundwater Cleanup
- Underground Storage Tank Closures
- Remedial Plan Development & Cost Estimating
- Regulatory Permitting & Compliance Monitoring
- Engineering Control & Institutional Controls Applications
- Comprehensive Hydrologic & Water Quality Modeling
- Regulatory Negotiations

Phase I Environmental Site Assessments

ESAs are performed in accordance with the American Society for Testing and Materials (ASTM) Guideline E-1527, which is endorsed by USEPA (40 CFR 312) as sufficient for ensuring compliance with the innocent landowner exclusion from liability under the Superfund Amendments and Reauthorization Act (SARA). AMEC's capability and approach for performing ESAs for Florida governments under ASTM E-1527 requirement is demonstrated by our extensive experience performing ESAs for Broward, Miami-Dade and Palm Beach Counties, SFWMD, and several private clients. AMEC has performed more than 450 ESAs for state and local government agencies in Florida since 1999, most for large parcels to be acquired for conservation.

The 2005 AAI Rule (40 CFR 312) increased and standardized the information to be assessed by an Environmental Professional (EP) to comply with the requirement of "all appropriate inquiry". The AAI rule mandates that EPs must conduct all appropriate inquiries, and the EP must possess "sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding the presence of a release or threatened release to the surface or subsurface of a property". The EP must hold certain degrees or be practicing within this field for a certain number of years. AMEC has a large professional staff that satisfies the new requirements for EPs.

The 2005 AAI Rule resulted from concerns over the poor quality of a significant percentage of Phase I ESAs. Because of AMEC's high standards and the high level of focused investigation we have always put into preparation of Phase I ESAs, these rule changes did not significantly alter the high quality product we have produced for years.

Groundwater Sampling

A successful groundwater sampling effort can range from plume chasing and screening with a DPT rig with a deployable screen point stainless steel sampler, collecting multiple samples from discreet intervals at the same locations to collecting groundwater samples from temporary or permanent monitoring wells installed at strategic locations based on available information.

AMEC maintains its own equipment room for staging and equipment decontamination (decon) in a laboratory environment and has its own supply of deionized/organic free water for decon and for use in

the field for QA blanks water. We maintain in-house pumps, mulitmeters, supplies, and materials necessary to collect groundwater samples under any condition.

AMEC and our chosen subcontractors for analytical services maintain stringent QA/QC measures in our sampling and analytical programs. Experienced personnel, good equipment, and reliable support add to the successful execution of our sampling projects. Our personnel are all experienced with FDEP and EPA Region IV sampling protocols and follow procedures to assure uniformity of product. Groundwater sampling is conducted under the "low-flow" sampling guidelines set forth in Chapter 62-777, FAC, which includes measuring relevant field parameters until they are stabilized within the acceptable ranges set forth in the SOPs.

In order to streamline groundwater sampling, AMEC brings multiple sets of equipment to the field, such as pumps and meters, which enables us to sample multiple wells at the same time, reducing the necessary time in the field, ultimately saving time and money. This also ensures that if any equipment malfunctions in the field, there is always a backup on hand, enabling the task to be completed on time without the need

to cancel the event or have to wait for replacement equipment to arrive.

AMEC has a strong background in interpreting groundwater quality data, Florida hydrogeology, and contamination assessment methodology to accurately interpret the conditions being observed and monitored during site investigations. They have experience to clearly identify and interpret investigative findings and clearly convey them to our client as work is ongoing. In addition, they have an understanding of the investigation objectives thus ensuring that the objectives are met at the completion of the project and presented in a logical, defensible format that will withstand legal litigation.

Sample Coordinates

At the conclusion of a field event, AMEC uses global positioning satellite (GPS) units to obtain latitudinal and longitudinal coordinates to accurately identify the location of monitoring wells and sample locations for placement on sample maps. AMEC also has the in-house capabilities of creating very accurate base maps with our Trimble handheld GPS unit. This system not only enables us to pinpoint sample locations to within 1-foot accuracy but also can be used to create basemaps detailing building locations, monitoring wells, utilities, and other pertinent site features.

Quality Assurance, Laboratory Requirements and Health and Safety

Any successful sampling program is rooted in the strong comprehension of regulatory requirements set forth by the State and Federal agencies. AMEC maintains the highest standards of quality and expertise by making sure our personnel are trained and have a strong working knowledge of the requirements set forth for the different programs that we work under. Our sampling programs in Florida are conducted in accordance with the FDEP's Standard Operating Procedures for Field Activities (DEPSOP-01/001) to ensure that all field testing activities are performed and all environmental samples are collected, properly.

AMEC is also knowledgeable of the required types and amounts of quality control samples that must be collected as part of any sampling program including trip blanks, field blanks, duplicates, matrix spike/matrix spike duplicates, and rinsate blanks.

AMEC has provided turnkey design services to large industrial, DOD, and public agency clients for more than 50 years. AMEC has strong, proven credentials in design services, and provides full turnkey services in design, construction, and O&M. AMEC Florida offices have completed more than1 50 RAPs and remedial designs for 15 different DOD (U.S. Navy and Army) facilities. Treatment processes that have been successfully employed include standard techniques such as air stripping and carbon adsorption, and also innovative processes such as in-situ advanced oxidation and bioremediation.

AMEC's designs encompass a wide range of available technologies and are not affected by the ownership of any specific patent or process. If needed, AMEC's Design Service Center (DSC) provides clients access to our nation-wide experience in designing remedies for a wide range of other sites.

Section 2
Team Structure & Qualifications

The AMEC team has been carefully assembled and organized to provide superior expertise, experience, resources, and service to the City of Key West. Highly experienced and uniquely qualified individuals have been chosen to fulfill key team roles. AMEC's team will be led by a seasoned and highly experienced project manager and several task leaders that will be assigned based on specific task assignments.

AMEC has an office located in Key West, comprised of a staff whose families live, work, and play in Monroe County. AMEC has been working in the Florida Keys for more than 15 years and the Company and its employees have performed work on 250+ projects in the engineering, inspection, environmental, and construction field similar to the scope of services requested by the City.

We will staff this project with local personnel and we can provide a mobile construction materials testing laboratory on-site, if necessary. AMEC will provide significant cost savings and simplify project logistics due to our local staff who can respond to emergencies, as well as during night or weekend work, unlike firms located outside of the Keys. In addition, AMEC's South Florida office is located at 5845 NW 158th Street in Miami. These central locations enhance our ability to be responsive to the City's needs.

AMEC understands that the successful economical execution of this contract must be accomplished through an effective Management Plan. Our Management Plan will be led by **Mr. Ricardo Fraxedas, PE**. In order for the project to be conducted in a concise, comprehensive, and orderly manner, AMEC has formulated an organization and management plan with components tailored to be responsive to the needs of this contract and to provide a simple and straightforward, yet thorough approach to performing our services.

As the Project Manager for the City of Key West opportunity, Mr. Fraxedas will monitor each contract assignment to ensure that projects are staffed appropriately, our team is delivering high quality service, and our corporate commitment is maintained throughout the contract term. In addition, he will also assure that proper resources are available to complete each project, and that the project focus sufficiently addresses and integrates the spectrum of potential project issues ranging from broad policy level implications to individual property owner concerns.

Mr. David Romano, PE, will serve as Quality Assurance Manager for the Key West General Engineering Services opportunity. Combining 21 years of construction engineering and materials research experience with his design and permitting aptitude, Mr. Romano provides clients with a valuable resource for resolving issues and managing large infrastructure projects. He will assure that AMEC's internal project execution controls are followed properly such that each project is delivered in an efficient, technically sound, timely, and cost effective manner.

The survey group, led by **Mr. R. Michael Jones, PLS, CFedS,** and **Charles "Chip" Gardiner, PLS, CFedS,** have focused on providing our services to public sector clients and, as a result, have established and maintained successful business relationships with a number of governmental clients, including Orange County Public Schools, FDEP, the St. John's River Water Management District (SJRWMD), Orange and Seminole Counties, the Cities of Orlando, Ocoee, and Apopka, FDOT, the USACE, the U.S. Department of the Interior, National

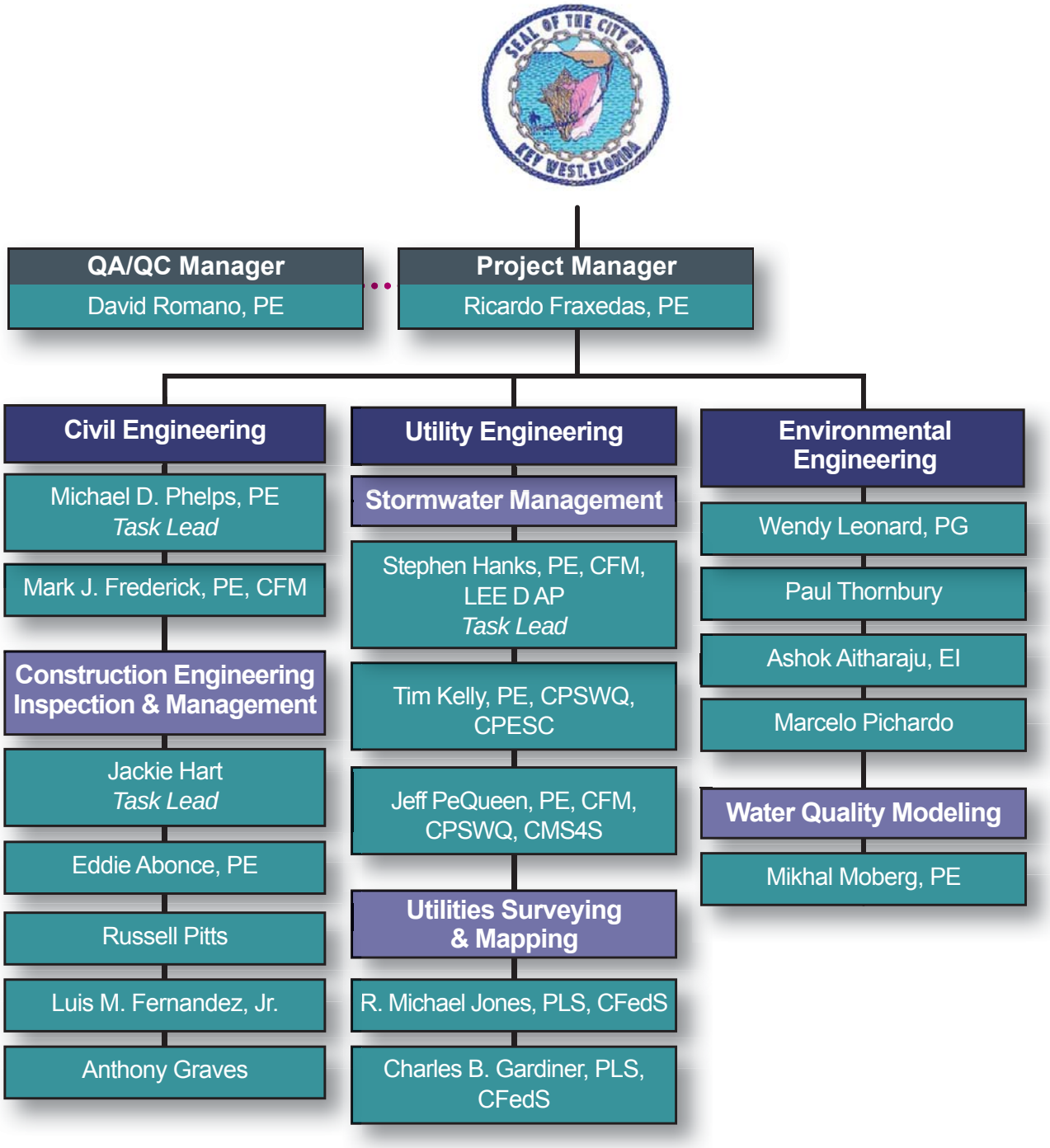
Park Service (NPS) and the U.S. Department of Agriculture/Natural Resources Conservation Service (USAD/NRCS).

Notably, it is imperative for the consultant to have a "deep bench" of staff from whom to pull on for any contingency tasks. AMEC is a large firm, but most importantly we have a deep bench in the water resource and civil engineering areas that provide NPDES services, Total Maximum Daily Load (TMDL) services, water quality sampling services, stormwater master plans, training, educational services, and/or develop stormwater retrofit projects. Please reference our staff organizational chart for a glimpse of the multiple and experienced staff that are available to serve the City on this contract. A deep, experienced bench translates to rapid delivery of quality products to help the City maintain compliance and complete other services for its citizens.

Team Structure

AMEC's team is structured to ensure clear lines of authority and accountability. The project team includes three essential functional components – contract management, project management, and QA/QC. Each project will be completed using multi-disciplined teams comprised of a task leader, and a project engineer, along with adequate and dedicated support personnel. Each project will be managed by the same project manager throughout the duration of the project to provide continuity from project initiation through final certification of construction. We have established this process of project management continuity through the execution of similar contracts and requests by our clients. We have been very successful with this innovation and migration from traditional project management techniques where the manager changes from the design phase to permitting to development of bid documents and construction. It is AMEC's experience that assignment of dedicated-compact teams is critical to maintaining data continuity, lines of authority, and accountability throughout the project.

Organizational Chart



Ricardo Fraxedas, PE

Project Manager

Mr. Ricardo Fraxedas is a Chief Engineer with 33 years of environmental engineering experience. He has an extensive background in environmental regulatory affairs and resolution of environmental issues for commercial and government clients. He has been responsible for assessments, remediation, and litigation support for a variety of industries and sites, including airports, fuel terminals, manufacturing facilities, educational facilities, and waste disposal sites in the U.S., Caribbean, and Latin America. He has authored articles and presented numerous lectures on environmental consulting, site assessments, design of remediation systems, and environmental regulatory compliance and sustainability. He has also served as an expert witness on various environmental compliance, remediation, and permitting matters and has provided review and interpretation of Latin American environmental regulations for multinational clients.

Prior to joining AMEC, Mr. Fraxedas served as the head of the hazardous materials section for Miami-Dade County, Florida. In this role, he authored the county's underground storage tank regulations and industrial waste pretreatment regulations. He was responsible for the investigations and remediation of contaminated sites, including one of the first Superfund cleanups to be completed.

Key Projects

CANALS INVENTORY, WATER QUALITY ASSESSMENT, AND GIS SERVICES

Monroe County Marine Resources Department, Florida

Project Manager: Services provided included inventory and assessment to determine physical characteristics of water in canals in residential areas of the South Florida Keys. Services included review of existing data and setup of GIS database and metadata file of information on canal system.

FLOOD CONTROL GATES ENVIRONMENTAL SURVEYS AND CONSULTING

U.S. Air Force, Homestead, Florida

Principal Engineer: Services provided included surveying and consulting, including underwater observations, performed as part of an effort to repair and rehabilitate a malfunctioning flood control gate at Homestead Air Force Reserve Base in South Florida. Manually operated gates located in 10-foot-deep drainage canals constructed over an area of known soil and groundwater contamination (developed with protective liner to impede leaching). Performed environmental consulting including data review and agency coordination between DERM, USACE, FDEP, EPA, and base environmental management personnel.

STORMWATER SAMPLING, MONITORING, AND REPORTING PROGRAM

Miami-Dade Aviation Department, Florida

Project Manager: Managed MDAD's monthly background stormwater sampling and reporting, primary and secondary outfall sampling, and water quality monitoring at the upstream outfall locations. Performed oversight of weather monitoring, investigative sampling as required to validate exceedances in laboratory results, and BMP sampling to assess the effectiveness of the oil/water separator systems at MIA.

EVERGLADES PHASE I ENVIRONMENTAL SITE ASSESSMENTS

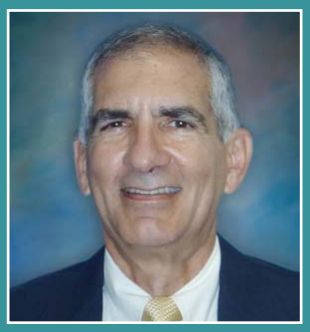
National Park Service, Florida

Principal Engineer: Provided environmental planning services and documentation, environmental compliance services, environmental/occupational training services, waste management services, GIS and remediation services review, and input of Phase I reports for land acquisition.

01 CONTRACT

Miami-Dade County Department of Environmental Management, Florida

Program Manager: Services provided under the contract include all requested environmental services for all Miami-Dade County Departments. Services provided have included water quality prediction modeling for proposed alterations to the inlets of a "lagoon beach" for the Parks Department as well as numerous contamination assessments and cleanups for sites including Miami International Airport, the Port of Miami, and the Virginia Key wastewater treatment plant.



Education

- M.S. Environmental Engineering, University of Florida, 1977
- B.S. Microbiology, University of Florida, 1975

Registrations & Certifications

- Professional Engineer, Florida No. 43287
- Qualified Stormwater Management Inspector, Florida No. 25665

Experience

- AMEC: 2003
- Industry: 1979

David C. Romano, PE

QA/QC Manager

Mr. David Romano currently serves as a Senior Project Engineer for AMEC's South Florida region. He previously held engineering positions as CEI area manager, technical director and government liaison for the concrete industry, and supervisor of FDOT - independent assurance operations for asphalt construction. Combining 21 years of construction engineering and materials research experience with his design and permitting aptitude, Mr. Romano provides clients with a valuable resource for resolving issues and managing large infrastructure projects.

His role as senior project manager include the following qualities: leadership and supervision of construction inspection staff; certification of materials (in LIMS, Profile and SharePoint; preparation of final estimates; analyzing construction schedules (Primavera); contract negotiation and contract management; and preparation of field change orders and supplemental agreements.

Key Projects

U.S. 1 RESURFACING PROJECTS

Florida Department of Transportation, Florida

Senior Project Engineer: Currently provides CEI services to the D-6, Marathon Operations Center under the residency contract (AMEC is a subconsultant to METRIC Engineering). Performs oversight for these widening and resurfacing projects.

GEIGER CREEK BRIDGE REHABILITATION PROJECT

Monroe County, Florida

Project Manager: AMEC was hired to provide contract administration and inspection of the replacement of Geiger Creek Bridge, a design-build project. The project was funded by the American Recovery and Reinvestment Act (ARRA) and required additional documentation for verification and contract compliance. The project was completed on-time and within budget.

BRIDGE REPLACEMENT PROJECTS

City of Fort Myers, Florida

Project Manager: Provided contract administration and inspection of several bridge and culvert replacement projects throughout the City. Two of the projects were funded by the ARRA and required additional documentation for verification and contract compliance. The projects were completed on time and within budget.

VIA COCONUT POINT ROAD, FOUR-LANE NEW CONSTRUCTION

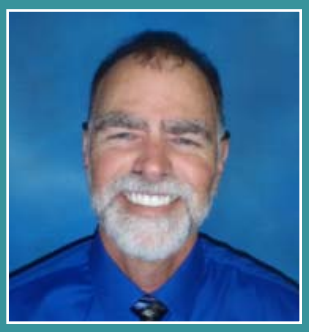
Estero, Florida

Senior Project Engineer: This project consisted of constructing three phases of new roadway from U.S. 41 to north of Corkscrew Road in Estero, Florida. The project included construction of a round-a-bout on Williams Road (which is the largest in the County), lighting, sidewalks, and a privacy wall. The drainage improvements included construction of a large spreader swale that abuts a protected wetland. There were many challenges to overcome as a result of constructing the roadway through a wetland; including dewatering restrictions, turbidity reporting, and pond excavation. Upon completion of construction, the staff proceeded to certify the project for acceptance by Lee County DOT and Community Development Services as part of a Development Order. The project required close coordination with the Water Management District staff and Lee County. Provided CEI staffing, engineering services, inspection of utilities (including watermains, pump stations, and sanitary sewers), and final certification to the SFWMD.

I-75 AT ALICO ROAD INTERCHANGE

Florida Department of Transportation, Florida

Senior Project Engineer: This $37.5-million project included realignment of the ramps and widening the overpass at the Alico Road Interchange at I-75. The project included a $1.4 million joint participation agreement with Lee County Utilities for relocation of watermains and removal of asbestos pipe. Role involved preparation of the final estimate, final material certification, and preparation of the final payment for the Lee County JPA contract.



Education

- B.S. Civil Engineering, University of Florida, 1990
- B.S. Forest Land Management, University of Florida, 1978

Registrations & Certifications

- Professional Engineer, Florida No. 48238, Louisiana No. 35632
- CTQP Asphalt Paving Technician, Level 1 & 2
- CTQP QC Manager
- CTQP Final Estimates, Level II
- Advanced Work Zone Traffic Control, BT-05-078
- Primavera Project Planner (P3) Scheduling
- DEP Stormwater, Erosion & Sediment Control Inspector
- FDOT Consultant Project Manager Training, BT-06-0065

Experience

- AMEC: 2010
- Industry: 1990

Michael D. Phelps, PE

Civil Engineering Lead - Senior Civil Engineer

Mr. Michael Phelps has more than 17 years of experience with a wide variety of civil engineering projects. He has completed transportation projects, intersection improvements, utility system design, parks and recreational facility projects, and civil engineering for public facilities. Mr. Phelps is experienced in cost estimation, preparation of contract documents and specifications, project management, and field inspections.

He has managed several continuing contracts for engineering services for counties and cities. In that role, he has successfully prepared team management plans to properly staff multiple, concurrent task assignments to maintain schedules and budgets to meet client needs. He is highly-experienced in managing the overall contract as well as individual task assignments for municipal continuing services contracts.

Key Projects

VARIOUS MUNICIPAL PROJECTS
City of Bartow, Florida

Contract/Project Manager: Responsible for municipal services projects for the City. Recent projects included the US 98 Water Main Relocation and U.S. 17 Water Main Repair projects. Both projects were completed in accordance with FDOT Design Standards as well as the Standard Specifications for Road and Bridge Construction. The projects also required FDEP permitting and certifications.

VARIOUS MUNICIPAL PROJECTS
City of Eagle Lake, Florida

Contract/Project Manager: Responsible for municipal projects and on-call services. Recent projects include the Eagle Avenue Stormwater Improvements and the U.S. 17 Sidewalk Improvement projects. The U.S. 17 Sidewalk Improvements were completed in accordance to FDOT and ADA requirements.

POLK COUNTY TRANSPORTATION DIVISION
Polk County, Florida

Contract/Project Manager: Responsible for several projects including stormwater management projects for roadways throughout Polk County. Projects include, Garden Grove Feasibility Study, West Hancock Street Drainage Improvements, Experiment Station Road Improvements, and Crystal Lake Drive Improvements.

POLK COUNTY PARKS AND NATURAL RESOURCES DIVISION
Polk County, Florida

Contract/Project Manager: Involved in the successful completion of more than 40 projects. Representative projects include the Inwood Neighborhood Drainage Study and Improvements, Simmers-Young Park, Christina Park, Woodland Area Drainage Improvements, Lake Gwyn Water Restoration and Flood Protection, Village Park Drainage Improvements, Red Hawk Neighborhood Drainage Improvements and FEMA Hazard Mitigation Grant Funding (HMGF) assistance.

VARIOUS MUNICIPAL PROJECTS
City of Lakeland, Florida

Contract/Project Manager: Responsible for municipal projects including stormwater management, water quality projects, parking studies, and construction inspection services. Most recently completed the award winning project, Lake Hollingsworth Westside Stormwater Treatment Project. This project included the preliminary project development, design and permitting, and construction phase services for roadway, pedestrian trail, and stormwater improvements.

POLK COUNTY UTILITY DIVISION
Polk County, Florida

Contract/Project Manager: Involved with utility system design and rehabilitation projects throughout Polk County. Major project include the Polk County Utilities and Haines City Water Main Interconnect, Lily Lake Water and Wastewater Transmission System Design, Waverly Water Transmission System Design, Frostproof Water Main Extension, U.S. 27 Water System Improvements, S.R. 540 Water Main Extension, Moore Road Water Main Extension, and Pine Glen Subdivision Water Service Retrofit.

Education

- M.S. Water Resources, University of Central Florida, 1994
- B.S. Civil Engineering, University of Central Florida, 1992

Registrations & Certifications

- Professional Engineer, Florida No. 53315

Experience

- AMEC: 2011
- Industry: 1993

Software Proficiency

- Modeling: SWMM, HEC-1, HEC-2, HEC-RAS, HEC-HMS, HEC-6, HEC-UNET, AdICPR, WSPRO, ACES
- WaterCAD
- ArcView GIS

Mark J. Frederick, PE, CFM

Civil Engineer

Mr. Mark Frederick works in AMEC Central Florida's Civil Engineering group on a variety of civil site development, stormwater, and roadway projects. His experience includes more than 10 years of diverse engineering experience in serving public and private clients. He is able to incorporate CAD, GIS, and modeling software to analyze and design engineering systems.

Mr. Frederick also has experience with permitting projects through various regulatory agencies including the SWFWMD, FDEP, FDOT, and several local government agencies.

Key Projects

SR 540 (WINTER LAKE ROAD) - MITIGATION PROJECT

Florida Department of Transportation

Engineer of Record: This was a mitigation project resulting from the Lake Hancock Lake Level Modification project involving the design and permitting of drainage and roadway improvements along a 0.7 mile segment of State Road 540 in accordance with FDOT design criteria. The project also involved offsite drainage improvements on Polk County's Circle-B-Bar Reserve property. Responsibilities included preparation of drainage calculations, reports, construction plans, and SWFWMD permitting.

SE 3RD STREET – CULVERT REPLACEMENT

City of Mulberry, Florida

Engineer of Record: This project involved the replacement of deteriorated corrugated metal culvert pipes conveying Ellis Branch, a tributary to the Alafia River, under South East 3rd Street. Design was completed in accordance with FDOT and City of Mulberry design criteria. Responsibilities included preparation of drainage calculations, alternatives analysis, reports, construction plans, construction administration, and SWFWMD permitting.

MARTIN LUTHER KING BOULEVARD – STREETSCAPE PROJECT

City of Haines City, Florida

Project Engineer: This project involved roadway and intersection improvements associated with a streetscape plan along a 0.5 mile segment of Martin Luther King Boulevard. Design was completed in accordance with FDOT and City of Haines City design criteria. Responsibilities included preparation of drainage calculations, roadway alignment evaluation, construction plan preparation, and coordination with the landscape architect.

C-STREET AREA SEWER REPLACEMENT

City of Lake Wales, Florida

Project Engineer: This project involved preliminary engineering involving the analysis of approximately 5 miles of sanitary sewer within a residential area of Lake Wales. Designed per FDEP and City of Lake Wales criteria. Responsibilities included completing a preliminary engineering report to identify existing system deficiencies and proposed corrective alternatives, coordinated with the client regarding the preferred route and other design aspects, and completed detailed analysis of the selected design alternative.

CABOT COMMERCE CENTER

Chestnut Hill Investments, Lakeland, Florida

Project Engineer: This project involved the development of a 61 acre Industrial Warehousing/Distribution Center located within the Green Swamp Area of Critical State Concern. Designed per City of Lakeland, SWFWMD, FDOT, Polk County, FEMA, and Florida Department of Community Affairs (FDCA) criteria. Project responsibilities included due-diligence report, flood study, conceptual site planning, meetings with various review agencies, pre-development drainage conditions evaluation, proposed stormwater management facilities, construction plan preparation, design of potable water and wastewater systems including an onsite sanitary sewer lift station, and FDOT roadway improvements to accommodate proposed left and right turn lanes.

Education

- B.S. Civil Engineering, Purdue University, 2005

Registrations & Certifications

- Professional Engineer, Florida No. 70671
- Certified Floodplain Manager

Experience

- AMEC: 2010
- Industry: 2000

Professional Affiliations

- Florida Engineering Society - Ridge Chapter President, 2010-2011
- National Society of Professional Engineers
- American Society of Civil Engineers

Professional Achievements

- FES, Ridge Chapter, Young Engineer of the Year Award recipient, 2008 & 2009
- ASCE, Ridge Branch, Young Engineer of the Year Award recipient, 2011

Jacqueline Hart, EI

Senior Project Manager

Ms. Jacqueline Hart's 20+ years experience includes the project management of transportation projects for highway widening, bridge construction, and milling and resurfacing. In addition to project management for large projects, she has performed inspections on several highway bridge reconstructions including the inspection of reinforcement and the monitoring of bridge deck pours including slab thickness checks. Her expertise also includes construction materials investigation, including the evaluation of the integrity of concrete members. She has performed augercast pile installation inspections, failure surveys for construction materials, building condition surveys, pavement condition surveys and has actively been involved in projects involving the evaluation of the integrity of concrete members using ultrasonic equipment, Windsor probe and Swiss hammer tests, and pacometer surveys.

Key Projects

(US-1) N. ROOSEVELT ROADWAY RECONSTRUCTION

Florida Department of Transportation
District 6, Key West, Florida

Project Administrator/Contract Support Specialist: Responsible for management and scheduling for multiple project FINs and JPA's under one contract, each invoiced and tracked separately. Provided construction engineering and inspection (CEI) services for 1.5 miles of North Roosevelt Boulevard in Key West. The project is approximately a $42 million dollar construction scope including full reconstruction of the roadway in a highly urban area of Key West, with the installation of a new seawall, drainage structures, lighting and signalization.

FKOHT GRASSY KEY TRAIL CEI SERVICES

Florida Department of Environmental Protection, Grassy Key, Florida

Project Coordinator: CEI services during the construction phase of the project, to observe and document the general construction progress and means and method being implemented to finish the work. The operations to be inspected include the earthwork such as embankment and base placement, concrete for structures, and asphalt placement. From MM 59.9 to MM 65.6, US1, Florida Keys.

MARATHON KEY ROADWAYS AND BRIDGES CEI SERVICES

Florida Department of Transportation
District 6, Florida

Project Manager: Responsible for management and scheduling for multiple project under one contract. Provided CEI services for variety of roadway and bridge projects throughout the Lower Keys area from Marathon to Key West. Projects included highway milling and resurfacing; road widening and reconstruction; rehabilitation of rigid pavements, bridge substructure spall repair, bridge substructure crack injection, bridge joint repair and installation, bridge cathodic pile jacket protection systems, and landscaping.

STATE ROUTE 5A KEY WEST RECONSTRUCTION CEI

Florida Department of Transportation, Key West, Florida

Project Manager: Responsible for dual roles as project administrator and contract support specialist for overall administration and oversight. Provided CEI and management for reconstruction, lighting, and drainage installation of 2 miles of major state highway in Key West for South Roosevelt and Flagler Avenue; rehabilitation of Snake Creek Bridge approach slabs and embankments with soil injection stabilization; Matecumbe landscaping; and Sadowski Causeway drainage improvements.

JEWFISH CREEK BRIDGE DESIGN-BUILD GEOTECHNICAL SERVICES

Florida Department of Transportation Key Largo, Florida

Project Administration and Monitoring: Responsible for assisting with the financial management and technical consulting of field work. AMEC served as geotechnical consultant to Granite/Jacobs design-build team for replacement of Jewfish Creek Bridge, 1½-mile-long high level bridge, supported on redundant and non redundant drilled shafts, over the Intracoastal Waterway, along with widening of 5 miles of approach road supported on organic soils improved by dry soil mixing. Provided geotechnical engineering, over water and land soil borings, 4-inch diameter rock coring, rock coring, lab testing, drilled shaft installation inspection, and foundation evaluations.

Education

- B.S. Civil Engineering, University of Florida, 1989

Registrations & Certifications

- Engineer Intern, FL, #489ET274, earned 1989
- Certified Professional in Erosion and Sediment Control
- FEMA - Emergency Management Certifications
- FL DOT Certified Maintenance of Traffic-Advanced
- FL DOT CTQP Certified, QC Manager
- FL DOT CTQP Certified, Paving Level II
- FL DOT CTQP Certified, Paving Level I
- Radiation Safety and Use of Nuclear Gauges

Experience

- AMEC: 1991
- Industry: 1989

Eddie Abonce, PE

Senior Engineer

Mr. Eddie Abonce has extensive experience with the FDOT and related projects. His ability to coordinate large FDOT projects is an asset to the team when coordinating between agencies and application of the specification during plan reviews as well as the construction process. Mr. Abonce has more than 19 years of construction engineering inspection experience. He was employed by FDOT District 4 for seven years.

Key Projects

- **FLAMINGO ROAD AND UNIVERSITY DRIVE**
  Florida Department of Transportation
  District 4, Florida
  Office Engineer/Contract Support Specialist: Assigned to the Flamingo Road and University Drive three-project grouping. Assisted SPE/PA in preparation of supplemental agreements, change orders, work orders, time extensions, and claim analysis. Assisted in conducting pre-construction conference, pre-paving conference, and all other job related meetings. Assisted in all aspects of contract administration relating to conflict issues with citizens who were affected by project under Department's jurisdiction. Discussed project with various groups and business representatives.

- **FLORIDA KEYS OVERSEAS HERITAGE TRAIL**
  Florida Department of Environmental Protection, Florida
  Senior Project Engineer/Project Administrator: Assigned to several projects involving the Florida Keys Overseas Heritage Trail that spans 106 miles from Key Largo to Key West in Monroe County, Florida. The Overseas Heritage Trail in the Florida Keys consists of multi-use trails and paths. Managed CEI services for the Grassy Key Trail Segment, Channel 5 to Tollgate Road, and Ramrod to Big Pine Key projects.

- **BROWARD COUNTY PROJECT ADMINISTRATION**
  Florida Department of Transportation
  District 4, Florida
  Project Administrator: Assigned to several projects in Broward County for FDOT District 4. Responsibilities included exercising initiative and independent judgment in the solution of work related problems, directing and assigning specific tasks to inspectors, assisting in all phases of the construction project, and being responsible for the progress and final estimates throughout the construction projects duration.

- **CONSTRUCTION ENGINEERING INSPECTION CONSULTANT**
  Florida Department of Transportation
  District 6, Florida
  Office Engineer: Responsibilities included oversight and documentation of contractor field operations. Provided projects with independent final estimate quality assurance reviews. This included review of plan quantity checks, general ledger maintenance, statistic and control of payments using Site Manager, preparation of weekly and monthly reports, time file, weather letters, monthly and final estimate preparation, and documentation of pay quantities and as-built plans.

Education

- B. S. Civil Engineering, Universidad del Valle, 1992

Registrations & Certifications

- Professional Engineer, Florida No. 68242
- CTQP QC Manager
- CTQP Final Estimates Level 1 & 2
- CTQP Asphalt Paving Technician Levels 1 & 2
- CTQP Concrete Field Technician Levels 1 & 2
- American Concrete Institute Concrete Field Testing Technician
- CTQP TIN No. A15220068

Experience

- AMEC: 2009
- Industry: 1992

Russell Pitts

Senior Inspector

After graduating in 1993 from FSU in Civil Engineering, Mr. Russell Pitts has been gaining experience on Construction Engineering and Inspections projects throughout Florida. Mr. Pitts has served as an Inspector, Senior Inspector and Office Engineer. He has numerous certifications through the Florida Department of Transportation (FDOT). As an office engineer, he has been responsible for providing daily project administration, development of supplemental agreements and work orders, processing monthly estimates, CQR data entry and contract claims analysis. Additionally, he is responsible for the development and submittal of the Final Project Estimates.

Key Projects

CONSTRUCTION ENGINEERING INSPECTIONS - PEDESTRIAN SIGNALS

Florida Department of Transportation
Various Locations, Florida

Senior Inspector: Provided inspection services for the installation of Pedestrian Actuated Signals for twenty-three intersections in Escambia and Santa Rosa Counties. Improvements to the referenced group of intersections included the installation of new Pedestrian Actuated Signals, the construction of ADA compliant curb ramps and the placement of thermoplastic pavement markings. Assisted in the preparation of FDOT roadway plans for several Projects utilizing MicroStation Version 8, GeoPak and Sheet Navigator computer programs. Additionally, was responsible for assisting in the development of Temporary Traffic Control Plans and performing project constructability reviews.

41ST STREET INTERCHANGE - FLORIDA TURNPIKE

Dade County, Florida

Project Inspector: Provided CEI services for improvements to the 41st Street Interchange on the Homestead Extension of Florida's Turnpike in Dade County. Project consisted of utilizing existing lime rock base as material for the construction of new stabilized sub grade and construction of new asphalt base and friction courses.

U.S. 1 RECONSTRUCTION

Florida Department of Transportation,
Dade County, Florida

Senior Inspector: Performed CEI services for the total reconstruction of 3.8 miles of U.S. 1 in Dade County. Project included the installation of 240 drainage structures, 17,000 linear feet of 24-inch french drain and 7,500 linear feet of reinforced concrete pipe. In addition, 172,000 square yards of asphalt base course as well as new curb and gutter and four-inch concrete sidewalk was constructed as part of the project..

BRIDGE RECONSTRUCTION - INTERSTATE 10

Escambia and Santa Rosa Counties, Florida

Quality Control Inspector: Conducted QC inspections for the total reconstruction of the Interstate 10 bridges over Escambia Bay in Escambia and Santa Rosa Counties. The referenced bridges were severely damaged by the effects of Hurricane Ivan. Duties included daily inspection of formwork, placement of reinforcing steel and concrete. Additional duties included daily project documentation as well as construction materials testing.

SR 87 RECONSTRUCTION

Florida Department of Transportation,
Santa Rosa County, Florida

Project Inspector: Responsible for the inspection of the total reconstruction of State Road 87 (Segment One) in Santa Rosa County. The project scope consisted of the construction of additional travel lanes and installation of the stormwater drainage system as well as the construction of a new bridge structure.

ESCAMBIA RIVER BRIDGE RECONSTRUCTION

Florida Department of Transportation,
Escambia and Santa Rosa Counties,
Florida

Senior Project Inspector: Provided CEI services for the reconstruction of the Escambia River Bridges on SR 10 (U.S. Highway 90). The project consisted of the demolition of the existing Eastbound Bridge Structure and construction of a new Eastbound Bridge Structure as well as the replacement of five pans of the existing Westbound Bridge Structure.

Education

- B. S. Civil Engineering, Florida State University, 1993

Registrations & Certifications

- CPN Radiation Safety & Use of Nuclear Density Gauge
- International Municipal Signal Association - Field Safety Technician
- Advanced Maintenance of Traffic
- American Concrete Institute Concrete Field Testing Technician Grade I
- Earthwork Construction Inspection-Levels I & II
- Asphalt Paving-Levels I & II
- Concrete Field Inspector Specification
- Final Estimates-Levels I & II

Experience

- AMEC: 2002
- Industry: 1993

Luis M. Fernandez, Jr.

CEI Bridge/Roadway Inspector

Mr. Fernandez is currently a Senior Roadway Inspector at AMEC with more than nine years of experience working with Florida Department of Transportation (FDOT) projects. Since joining AMEC, he has been responsible for monitoring onsite roadway construction activities, sampling, testing, and inspection of materials entering onto the worksite in accordance with plans, specifications, and special provisions. Mr. Fernandez has worked on numerous FDOT roadway and bridge Construction Engineering Inspection (CEI) projects throughout South Florida, and is known for keeping detailed, accurate records of the Contractor's daily operations. Mr. Fernandez is currently closing out the Flamingo Road and University Drive CEI Grouping District 4, where he supervises several field technicians in ongoing field operations.

Key Projects

- **FDOT FLAMINGO ROAD AND UNIVERSITY DRIVE CEI**
  Florida Department of Transportation, Broward County, Florida
  Senior Inspector: Provided CEI services for widening, milling and resurfacing on urban roadway to accommodate new bike lane striping, signalization improvements, including video detection, ADA ramps, signage, directional bores for signalization, landscape and irrigation.

- **I-595 DESIGN-BUILD, GEOTECHNICAL, CMT AND CEI SERVICES**
  Florida Department of Transportation / Dragados USA , Davie, Florida
  Senior Inspector: Provide geotechnical exploration, quality control, and construction materials inspection and testing services, as a subcontractor, for a five-year FDOT project involving construction of three miles of HOT lanes on a three-lane highway. Generated field density logbooks and graphs for Pre-Construction review. Managed and maintained field density logbooks for IA Field Reviews for all seven major construction segments. Performed Quality Control testing and inspection for roadway and drainage, braided ramps, bridge widening, express lanes, sound walls, retaining walls, and bicycle shared path. Supervised and trained several CTQP field technicians in on going field operations. Designed spreadsheets and field reports for project maintenance and functionality.

- **SOUTH TERMINAL AND CONCOURSE J QUALITY CONTROL TESTING AND INSPECTIONS**
  Miami-Dade Aviation Department, Miami, Florida
  Senior Inspector: Performed Quality Control testing and inspections on roadway and drainage, airside runways, control towers, HVAC duct banks, piles, foundation footings, and building slabs. Coordinated with contractors to form and operate construction schedule accordingly. Supervised and trained qualified field technicians in ongoing field operations.

- **QUALITY CONTROL TESTING**
  Florida Department of Transportation, District 4 and 6, South Florida
  Senior Inspector: Performed Quality Control testing for FDOT roadway and drainage construction:
  - Sample Rd. (SR 834)
  - NW 119th Street (SR 924)
  - NW 37th, 42nd, and 72nd Ave. (SR 836)
  - NW 79th St. (SR 934)
  - Miami Gardens Dr. (SR 860)
  - Okeechobee Rd.
  - Jewfish Creek
  - US-1
  - A-1-A Blvd.
  - Military Trail
  - Atlantic Blvd.
  - I-95
  - I-75
  - US Precast
  - Southern Precast
  - Miami-Dade School Board
  - Turnpike
  - Hurricane Relief for Katrina

Registrations & Certifications

- TIN#: F65553384
- FDOT Certified Intermediate Maintenance of Traffic (MOT)
- FDOT Certified Operator Nuclear Gauge
- FDOT CTQP Certified Earthwork Construction I
- FDOT CTQP Certified Earthwork Construction II
- ACI Concrete Field Technician I
- FDOT CTQP Certified Concrete Field Technician I
- FDOT CTQP Certified Concrete Transportation Inspector II
- FDOT CTQP Certified Asphalt Paving I
- FDOT CTQP Certified Asphalt paving II
- FDOT CTQP Final Estimates I

Experience

- AMEC: 2004
- Industry: 2001

Anthony J. Graves

Construction Inspection - Senior Engineering Technician

Mr. Anthony Graves joined AMEC in May 2010 as an Engineering Technician. Mr. Graves is a highly motivated, reliable, and flexible individual with more than 14 years of progressive experience in the construction industry. Prior to joining AMEC, he was enlisted in the United States Army and served as a small unit leader of an infantry team. His materials testing and inspection experience includes routine inspection of soils, concrete, mortar, grout, reinforcing steel, fire proofing, and floor flatness/levelness testing and inspections. Mr. Graves' Construction Engineering Inspeciton (CEI) experience includes verification of the contractors' construction operations, reviewing plans and specifications, construction permit compliance, and inspecting the quality of materials placed.

Key Projects

- **CONSTRUCTION MATERIALS INSPECTION AND TESTING**
  Ellis and Associates Engineering Inc., Florida
  Senior Inspector: Provided various testing that included routine soils testing in field and lab environments; concrete, mortar, and grout sampling and testing in field and lab environments; and geotechnical exploration, soil analysis and classification. Also provided two years of CEI experience in pile driving inspection for a solid waste treatment facility and drilled shaft inspection for signal and sign structure foundations.

- **SR 9A AND J. TURNER BOULEVARD**
  Superior Construction, Florida
  Construction and Engineering Technician: Responsible for finishing carpentry for concrete form work on S.R. 9A at the J. Turner Butler Blvd. interchange

- **GEOTECHNICAL INVESTIGATIONS**
  Earth Science Engineering, Florida
  Field/Lab Technician: Conducted field geotechnical investigations, prepared soil analysis reports, and completed lab testing of concrete samples.

- **CONSTRUCTION TESTING AND INSPECTION**
  Florida Department of Transportation, Various locations, Florida
  Inspector: Provided concrete and soil testing, asphalt plant testing for various highway construction and roadway widening projects in Northeast Florida. Some of the projects included:
  - SR 9B Extension
  - SR 9A/J.T.B Interchange
  - 9th Street reconstruction
  - Beach Boulevard Widening
  - Doctors Inlet bridge Rehabilitation
  - Collins Rd. Widening
  - Historic Bridge of Lions Reconstruction

- **CONCRETE/SOILS TESTING**
  Various clients and locations, Florida
  Lab/Field Technician: Performed concrete and soil testing for commercial/industrial projects. Example scopes and clients included:
  - Performed Floor Flatness for various warehouse and military facilities
  - Assist with geotechnical drilling and sampling
  - Concrete and soil testing for medical and hospital facilities
  - Airfield concrete pavement testing and inspection

Registrations & Certifications

- TIN#: F65553384
- Asphalt Plant Technician Level I
- ACI Concrete Technologist Level I
- Earthwork Construction Inspector Level I
- Nuclear Density Gauge/ Hazmat certification
- FDOT Asphalt Paving Inspector Level I
- FDOT Asphalt Paving Inspector Level II

Experience

- AMEC: 2010
- Industry: 1997

Stephen J. Hanks, PE, CFM, LEED AP

Utilities Engineering Lead

Mr. Stephen Hanks serves as a Senior Engineer with AMEC. As Senior Engineer, Mr. Hanks is a valuable resource in a range of engineering services, including surface water modeling, water quality assessment, and wetland and stormwater permitting. Mr. Hanks has a portfolio of water resources engineering services for Water Management Districts, county municipalities, and parks departments. As a Senior Engineer, Mr. Hanks' responsibilities include design and analysis, project accounting, technical writing, and field sampling.

Additionally, Mr. Hanks is a valuable resource in a range of environmental services, including remediation, human health risk assessment, and fate and transport modeling. His petroleum site remediation services emphasizes free product recovery, bio-enhancement applications, and natural attenuation modeling. Mr. Hanks' environmental services experience includes petroleum companies, insurance providers, and retail facilities.

Key Projects

JACK CREEK HYDROLOGICAL WETLAND RESTORATION

Southwest Florida Water Management District, Florida

Senior Engineer: Responsible for hydrologic modeling using Visual MODFLOW and SPAW to evaluate the potential benefits from various rehydration alternatives for an impacted wetland community in southwest Florida. The model results were used to select the desired alternative, design the alternative to meet site constraints, and prepare construction documents.

CANAL CONVEYANCE CAPACITY PROGRAM

South Florida Water Management District, Florida

Project Engineer: Responsible for hydraulic modeling using HEC-GeoRAS and HEC-RAS software for more than 90 miles of conveyance canals. The hydraulic models were used to compare existing versus as-built canal geometries and identify conveyance reductions associated with alterations in canal geometry. The scope of services also included field reconnaissance, surveying, digital terrain modeling, and professional recommendations for dredging and bank repair.

BAYFRONT PARK WATER QUALITY AND HYDRAULIC EVALUATION

Miami-Dade Parks Department, Florida

Project Engineer: Responsible for water quality assessment, hydraulic modeling pursuant to the SFWMD recommended method of culvert evaluation, and preparation of the water quality assessment and hydraulic evaluation reports. The scope of services included hydraulic modeling of a three-acre tidal pool and tributary bay in three different operating situations, water quality assessment of the area of study, and professional recommendations for design based on the results of the hydraulic model.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM INDUSTRIAL ACTIVITY STORMWATER PROGRAM

Broward County Aviation Department, Florida

Project Engineer: Responsible for the evaluation of stormwater system BMPs, assistance to airport tenants with FDEP NPDES regulations, and surface water quality assessment to ensure integrity of receiving bodies. Performed trend evaluations and suggestions for program modifications. Further activities include the investigation into available stormwater system technologies, evaluation of stormwater master planning methodologies, and general client services.

ORANGE COUNTY NUTRIENT REDUCTION STUDY

Orange County, Florida

Project Engineer: Responsible for the development of nutrient loading and reduction evaluation for management and protection of waters of the Upper Shingle Creek and Western Boggy Creek Basins. Upper Shingle Creek Basin includes four waterbodies: Lake Mann, Lake Cane, Lake Catherine, and Clear Lake. Evaluation is to identify specific areas within both basins where nutrient load reductions can be achieved. Evaluation will also provide watershed management and plans to achieve water quality improvements.

Education

- B.S. Land and Water Engineering, University of Florida, 2005
- M.S. Hydrologic Sciences, University of Florida, 2011

Registrations & Certifications

- Professional Engineer, Florida No. 72253
- Certified Floodplain Manager
- LEED Accredited Professional
- Certified Professional in Erosion & Sediment Control
- Certified SCUBA Diver
- HAZWOPER 40 Hour

Experience

- AMEC: 2006
- Industry: 2006

Professional Affiliations

- American Water Resources Association
- Association of Environmental Professionals
- Association of State Floodplain Managers

Timothy J. Kelly, PE, CPSWQ, CPESC

Utilities Engineering - Stormwater Management

Mr. Timothy Kelly is a certified Professional Engineer with 25 years of experience spanning the realm of civil engineering design representing city, municipal, private, county and state clients. Mr. Kelly, who previously served as a stormwater regulatory reviewer, has an active advanced Training Certification in Work Zone Traffic Control and Maintenance of Traffic (MOT) and is a Certified Stormwater Management Inspector. Many of the public works projects Mr. Kelly has participated in have required interaction with the public including public meeting participation. Mr. Kelly has been responsible for the preparation of the exhibits and presenting the information to the public at many of these meetings. He has developed an effective way of turning technical jargon to layman's terms.

Throughout his career, he has assisted clients in implementing all aspects of their NPDES programs. His expertise includes BMP design, inspection, maintenance management, illicit discharge programs, training, database development, contract and interlocal agreement preparation and annual report preparation. He has participated in Basin Management Action Plan activities for clients including project documentation and pollutant load reduction credits calculations. Mr. Kelly oversees stormwater retrofit BMP alternatives analyses and has been responsible for ensuring that capital improvement projects help clients to meet Total Maximum Daily Load allocations.

Mr. Kelly is proficient with the following Hydrologic and Hydraulic systems: ICPR, HY-8, TR-20, TR-55, BRN, RNN, Modified Rational Hydrologic Modeling.

Key Projects

■ STATEWIDE STORMWATER MANAGEMENT PLAN

Florida Department of Transportation
Central Office, Florida

Project Engineer: Key project team member responsible for developing a comprehensive stormwater management plan to be used as a boilerplate for all FDOT Districts and the Turnpike Authority. The plan considered all aspects of stormwater management including drainage connections, design considerations, erosion and sediment control, assessment and appropriate use of available structural controls, maintenance and inspection requirements, detection and reporting of spills and illicit connections, and others.

■ AVON PARK STORMWATER MASTER PLAN

Southwest Florida Water Management District, Florida

Project Manager: Oversaw tasks that included developing a Watershed Management Plan that included digital topographic information, watershed evaluation, watershed management plan, BMP Implementation and the Plan updates. AMEC developed conceptual BMPs for the watershed that were geared primarily toward water quality enhancement, since Flood control was not as much of a problem. Concept BMPs were developed with the well-draining soils, the directly connected impervious areas, nutrient/pollutant load removal potential and the limited right-of-way factors taken into account to maximize return of benefits on the associated project costs.

■ NPDES CONSULTANT

Florida Department of Transportation
Districts 1 and 7, Florida

Project Manager: Provides comprehensive management assistance of the NPDES program for the past 16 years in 17 Florida counties. Performed program management of stormwater facility inspections, old stormwater BMP water quality optimization, and database compliance information entry. Provided training and educational workshops to FDOT personnel concerning erosion and sediment control, environmental impacts, stormwater management, and NPDES. Assists with annual report preparation and program compliance.

Education

- B.S. Engineering (Agricultural Engineering), University of Florida, 1984
- Classes taken for M.S.C.E.

Registrations & Certifications

- Professional Engineer, Florida No. 44721
- Certified Professional in Stormwater Quality No. 0338
- Certified Storm Water Management Inspector No. 104
- FDEP Certified Professional in Sediment & Erosion Control
- Advanced Maintenance of Traffic, Florida, 2008
- Confined Space Entry & Rescue

Experience

- AMEC: 1990
- Industry: 1986

Jeffrey D. PeQueen, PE, CFM, CPSWQ, CMS4S

Utilities Engineering - Stormwater Management

Mr. Jeffrey PeQueen is a dedicated professional with 22 years of experience in civil engineering and project management. He has extensive experience with all aspects of storm sewer design, stormwater design and permitting, wetlands permitting, hydrologic and hydraulic modeling, flood studies, and FEMA map revisions. His continued expertise in stormwater issues has allowed him to forge strong long-term relationships not only with his clients but also with the regulatory agencies such as the FDOT, SWFWMD, USACE, FDEP, as well as the various municipalities throughout Polk and Highlands counties.

Mr. PeQueen has developed an extensive history of designing stormwater systems and water resource projects and permitting them through all levels of local (city and county), state (SWFWMD and FDEP), and federal (FEMA CE) regulatory agencies. He is a respected member of the local engineering community and maintains excellent relationships as a result of effective design and projects with many in the regulatory community. Mr. PeQueen has first-hand additional insight into the regulatory process due to his former employment with SWFWMD where he served as a Senior Professional Engineer.

Key Projects

WOODLAND AREA DRAINAGE IMPROVEMENTS

Polk County Parks & Natural Resources, Florida

Project Manager: Provided comprehensive stormwater analysis, flood routing, modeling and design as well as construction administration for retrofit of approximately 340-acre drainage area subject to persistent flooding in the Saddle Creek area. The primary causes of the flooding to be addressed were that the area was built in a historic slough; existing storm sewers and ditches were vastly undersized; and the area receives discharge from 150 acres through double 6-foot by 4-foot box culverts draining from FDOT right-of-way – with inadequate receiving capacity. Designed improved storm sewer system (up to 72 inches equivalent pipes); multiple surge ponds; upgraded box culvert and improved ditches; as well as appropriate wetland mitigation to resolve the flooding concern.

GARDEN GROVE DRAINAGE CARILLON LAKES

Lakeland, Florida

Project Engineer: Designed stormwater system, state and federal wetlands mitigation, stormwater permitting, flood modeling and FEMA Map Revisions for multiple projects within 500-acre multi-year residential development. Designs included analysis of offsite contributing watershed, flood studies of existing and proposed conveyances, and reclamation of three large former borrow pits exceeding 50 acres each. Permitting included coordinating solutions for solving numerous past permit violations by the borrow pit permittee who was under a consent order for groundwater and wetland degradation.

LAKE HOLLINGSWORTH WESTSIDE STORMWATER TREATMENT

City of Lakeland, Florida

Design Engineer: Provided design and construction administration services to retrofit 12 existing storm sewer outfalls to Lake Hollingsworth. The improvements include Nutrient Separating Baffle Box technology to provide water quality treatment in an area with a high public profile, expensive lakeshore property, and concerned citizens. Project minimized disturbed lakeshore and impacted wetland area from that of a previous design proposed by a different consultant. Construction coordination to keep an adjacent high-use pedestrian/bicycle path open at all times was critical as the lake is a centerpiece of civic activity including lakeside events on most weekends.

NPDES PERMIT COMPLIANCE

Polk County, Florida

Project Engineer: Provide on-call service to Polk County addressing NPDES requirements. Currently involved with GIS analysis and database creation of major outfalls within County's NPDES jurisdiction in conjunction with the multiple co-permittees as well.

Education

- M.S. Biomedical Engineering, University of South Florida 2006
- M.E. Environmental Engineering, University of Florida 1991
- B.S. Physics, Furman University, 1987

Registrations & Certifications

- Professional Engineer, Florida No. 47664
- Certified Floodplain Manager
- Certified Professional in Storm Water Quality
- Certified Municipal Separate Storm Sewer System Specialist, CMS4S

Experience

- AMEC: 2011
- Industry: 1989

Software Proficiency

- Modeling: ICPR, HEC-RAS, PONDS, BRN, MODRET
- Hydraflow Storm Sewers

R. Michael Jones, PLS, CFedS

Surveying

Mr. Michael Jones has 36 years of professional experience in surveying and mapping in Florida, including the past 25 years with AMEC. He is extremely proficient in all aspects of survey management, including project planning, estimating, implementation, resource allocation, and quality assurance, and quality control. He has specific expertise in the areas of geodetic control surveys, engineering design surveys, subsurface utility surveys (SUE), right-of-way mapping, and boundary determinations. He has managed surveying and mapping projects for such clients as the SJRWMD, SFWMD, SWFWMD, FDOT, FDEP, and USACE. He is a registered professional land surveyor in six states and is a Bureau of Land Management (BLM) Certified Federal Lands Surveyor (CFedS).

Key Projects

■ **CONTINUING SURVEYING AND MAPPING SERVICES CONTRACT**
Orange County Government, Florida
Contract Manager: Has served as Contract Manager to the County since 1999 under three separate contracts in support of various County departments including Public Works, Parks and Recreation, Real Estate, and Roads and Drainage. Representative assignments have included geodetic control densifications, boundary and topographic surveys, platting, preparation of legal descriptions and GIS inventory mapping.

■ **CONTINUING SURVEYING AND MAPPING SERVICES CONTRACT**
City of Orlando, Florida
Contact Manager: Has served as contract manager since 2007 providing surveying and mapping services on an as-needed task assignment basis to various departments within the City including Utilities, Real Estate, Legal, Public Works, NTC Reuse and Parks and Recreation. Task assignments have involved subsurface utility location, route surveys, platting, utility rehabilitation surveys and boundary surveys for acquisition. Served as signing surveyor for the development of six record plats conforming to Florida Statute Chapter 177, Part I-Platting associated with the redevelopment of the Orlando Naval Training Center.

■ **CONTINUING SURVEYING AND MAPPING SERVICES CONTRACT**
Florida Department Of Transportation, District One, Bartow, Florida
Contract Manager: Served as contract manager from providing surveying services in the completion of 12 assignments at various locations in the District. Typical tasks included designation of utilities utilizing geophysical instrumentation, soft-dig excavation of utilities, preparation of roadway design surveys and field and office survey work associated with the preparation of certified right-of-way control surveys.

■ **CONTINUING SURVEYING AND MAPPING SERVICES CONTRACT**
South Florida Water Management District, Florida
Contract Manager: Served as Contract Manager to the District from 1996 to 1999 and 2002 to 2008 under three contracts in providing surveying and mapping support to projects and missions of various departments within the District. Assignments have included geodetic control surveys, boundary surveys, cross section surveys, topographic surveys, bathymetric surveys, and right-of-way surveys.

■ **STATEWIDE CONTINUING SURVEYING AND MAPPING SERVICES CONTRACT**
Florida Department of Environmental Protection, Florida
Contact Manager: Has served as Contract Manager since 1995 under five successive contracts. Work under these contracts has involved land acquisitions, land management, and land restoration projects associated with the state's land acquisition programs to include Save our Rivers, Rails to Trails, conservation and recreational lands (CARL), P-2000, and Florida Forever.

Registrations & Certifications

- Professional Land Surveyor, Florida No. LS4201, Georgia No. LS2367, Alabama No. LS16447, California No. LS8707, Mississippi No. LS3172, and Texas No. LS6231
- Certified BLM Federal Surveyor, No.1486

Experience

- AMEC: 1986
- Industry: 1976

Professional Affiliations

- American Association for Geodetic Surveying
- National Society of Professional Surveyors
- Florida Surveying and Mapping Society
- Florida GPS Users Group
- American Society of Civil Engineers

Charles B. Gardiner, PLS, CFedS

Surveying

Mr. Charles "Chip" Gardiner has 30 years of Florida experience (including 24 years with AMEC) in a wide range of surveying and mapping activities, including management and execution of projects for both private and public sector clients. His extensive technical background accentuates his ability to manage personnel and projects effectively.

He is currently the Operations Manager of AMEC's Surveying and Mapping Department. In this capacity, he is tasked with the management of personnel and resources and scheduling and quality control of projects within the department. He is proficient with all software utilized in the surveying and mapping industry. Mr. Gardiner is a registered land surveyor in five states and a Bureau of Land Management (BLM) Certified Federal Lands Surveyor (CFedS).

Key Projects

- **CONTINUING SURVEYING AND MAPPING SERVICES CONTRACT**
  City of Ocoee, Florida
  Project Surveyor: Has served as Project Surveyor on this contract to the City from 1999 to present. Assignments have been completed for the Public Works, Utilities, Parks and Recreation and Legal departments and have included boundary surveys, specific purpose surveys, topographic surveys, preparation of legal descriptions and platting. Mr. Gardiner serves as the City's Surveyor of Record in the review, approval and recordation of record plats conforming to Florida Statute Chapter 177, Part I-Platting.

- **CONTINUING SURVEYING AND MAPPING SERVICES CONTRACT**
  Seminole County Government, Florida
  Project Surveyor: Responsible for providing miscellaneous surveying and mapping services on an as-needed basis to various departments within county government including Stormwater, Environmental Services and Public Works. Services provided included boundary and topographic surveys, photo control and planimetric mapping, storm water inventory and GIS Mapping.

- **SOUTHWEST FLORIDA FEASIBILITY STUDY, GEODETIC CONTROL SURVEY OF MONITOR WELLS AND STAFF GAGES**
  South Florida Water Management District, Florida
  Project Surveyor: Responsible for establishing NGVD 29 and NAVD 88 elevations on 32 existing wells and staff gauges located in remote areas of the Big Cypress Basin in Collier County. More than 100 miles of levels were run with a Zeiss DiNi 21 with digital barcode rods and adjusted with Star*Net software. Extremely remote locations required the application of GPS height modernization techniques and use of helicopter to establish the required vertical control.

- **FLY'N R RANCH LAND ACQUISITION SURVEY**
  St. Johns River Water Management District, Florida
  Project Surveyor: A 3,500-acre acquisition survey for the SJRWMD in Lake County. This "less-than-fee" acquisition survey involved the innovative use of both static and RTK GPS survey methods to locate land corners in a timely manner to meet a fast paced schedule. Project tasks also included extensive retracement of PLSS section corners, review and interpretation of title work, and creation of ESRI GIS shape file of multiple boundaries for SJRWMD use.

- **KISSIMMEE RIVER WELL SITES**
  South Florida Water Management District, Florida
  Project Surveyor: Responsible for establishing NGVD 29 and NAVD 88 elevations on 21 monitor wells and staff gauges located in remote areas of the Kissimmee River Restoration Area in Highlands and Okeechobee Counties. Through close coordination with SFWMD and NGS a height modernization plan of survey was developed and implemented for those sites where differential leveling was not practical. For upland sites vertical control was established by 29 miles of differential leveling using a bar-code leveling system and following modified second order, class II specifications.

Education

- B.S. Surveying & Mapping, University of Florida, 1987

Registrations & Certifications

- Professional Land Surveyor, Florida No. LS5046, North Carolina No. LS 4598, South Carolina No. LS27735, Missouri No. LS 7289, and Louisiana No. LS 5077
- Certified BLM Federal Surveyor, No. 1475

Experience

- AMEC: 1988
- Industry: 1982

Professional Affiliations

- American Congress of Surveying & Mapping
- National Society of Professional Surveyors
- Florida Surveying & Mapping Society
- Florida GPS Users Group

Wendy C. Leonard, PG

Environmental Engineering Lead - Principal Geologist

Ms. Wendy Leonard is a Principal Geologist with 27 years of experience in environmental consulting with expertise in contamination assessments and remediation, drinking water quality evaluations, and all types of environment permitting. Ms. Leonard has experience in both management and technical areas.

As a senior project manager, she is responsible for work scope development and costing, implementation of work scopes, budget tracking, customer communication, and regulatory negotiations. As a professional geologist she has experience in surface water and groundwater hydrology, water quality sampling and characterization, and wetland and stormwater management system permitting. She has expertise in identifying potential source areas and areas of environmental concern; designing sampling plans; delineating contaminant plumes; determining pathways of migration; and designing and installing surface water, groundwater, and soil remediation systems. Ms. Leonard has extensive experience in evaluating risks relating to environmental impacts and in cost/benefit analysis of options.

Key Projects

- **RESIDENTIAL CANAL INVENTORY AND WATER QUALITY ASSESSMENT**
  Monroe County Marine Resources Department, Florida
  Project Manager/Project Hydrogeologist: The project involved compilation of all existing surface water quality data from multiple agencies and sources, evaluation of the usefulness of the data in regards to quality and format, and setup of a GIS of the entire canal system (480 canals) and metadata file of the available information. The physical attributes of the canals were correlated to the influence on water quality. The objective of the project was to determine current water quality conditions in the canals and to evaluate treatment options for the different canal types.

- **MONITORING WELL RETROFIT FOR AQUIFER STORAGE AND RECOVERY SYSTEM TESTING**
  U.S. Army Corps of Engineers, Florida
  Project Manager/Professional Geologist: The scope of work for this project was to convert an existing test well M-37 to a dual-zone monitoring well by removing the existing packer and installing 4-inch diameter steel casing from the surface to approximately 1,490 feet below land surface to create upper and middle Florida Aquifer System discrete zones. Drilling included downhole video survey, geophysical logging, water quality sampling at varying intervals, and field oversight of casing installation and grouting.

- **KISSIMMEE RIVER AQUIFER STORAGE AND RECOVERY WELL PILOT TEST SITE**
  U.S. Army Corps of Engineers, Florida
  Project Manager/Project Hydrogeologist: The scope of services included development of all sampling and analysis plans (field sampling plan, QA project plan, and ADaPT library); weekly sample collection from the ASR well, surfacewater, and groundwater monitoring well network; laboratory analysis of a broad range of geochemical parameters and ecotoxicity testing; and ADaPT data review and reporting. The data will be evaluated to determine the geochemical and microbiological changes during the different cycles of recharge, storage, and recovery and will be utilized to determine the feasibility of ASR as part of the Comprehensive Everglades Restoration Project.

- **HILLSBORO CANAL AQUIFER STORAGE AND RECOVERY PILOT TEST SITE**
  U.S. Army Corps of Engineers, Florida
  Project Manager/Project Hydrogeologist: The scope of services included weekly sample collection from the ASR well, surface water, and groundwater monitoring well network; laboratory analysis of a broad range of geochemical parameters; and ADaPT data review and reporting. This is the second active ASR pilot test site to determine the feasibility of ASR as part of the Comprehensive Everglades Restoration Project.

Education

- M.S. Geology/ Hydrogeology, University of Massachusetts at Amherst, 1984
- B.S. Soil Science, University of Maine at Orono, 1979

Registrations & Certifications

- Professional Geologist, Florida No. PG1888
- FDEP Qualified Stormwater Management Inspector
- HAZWOPER 40 Hour
- HAZWOPER 8 Hour Refresher

Experience

- AMEC: 2002
- Industry:1984

Professional Affiliations

- American Water Resources Association
- Florida Association of Environmental Professionals

Paul Thornbury

Environmental Engineering - Senior Environmental Scientist

Mr. Paul Thornbury is an experienced Senior Environmental Scientist, having conducted numerous hydrogeologic assessments, developed remedial action plans, supervised soil and groundwater remediation system installations and tank removals, prepared real estate transfer audits, and completed regulatory compliance studies. His role as a Project Manager includes development of work scopes and preparing cost estimates, implementation of assessment and remedial action plans, budget tracking, client communication, and regulatory negotiations. His experience includes conducting site assessments to delineate contaminant plumes, environmental property transfer audits, asbestos surveys, supervising underground storage tank removals and site remediation projects including large excavations, performing hazardous waste cleanups, and sampling and profiling hazardous waste. He has extensive experience with petrochemical industry clients.

During his tenure at AMEC, Mr. Thornbury has managed the Hertz Corporation national account, which has included approximately thirty projects located throughout the U.S. These projects included supervising tank removals, excavation of contaminated soils, environmental site assessments and soil/groundwater remediation systems for Hertz car rental and Hertz equipment rental facilities.

Mr. Thornbury has managed more than one hundred fifty Chevron Texaco projects located in the Caribbean and in Central America. Scopes of work have included environmental site assessments for divestiture purposes and soil/groundwater remediation projects. Since 2009, he has managed Chartis Insurance site assessment and remediation projects and is currently supervising five active soil and groundwater remediation projects.

Key Projects

■ SITE REMEDIATION

Chevron, Grand Cayman

Project Manager: Environmental services for site remediation involving recovery of free-phase petroleum product by both active (draw down) and passive (in-well skimming) techniques and treatment of pumped groundwater. Site includes three office buildings and 16 large, bulk storage tanks on approximately 5 acres. Developed and operated multiple free-product recovery systems in bulk storage terminal facility. Remedial action design reused existing, client-owned remedial equipment, reducing installation costs. Product recovery enhanced by active water table depression along with passive free product skimming in independent wells implemented to address free-floating petroleum product plume. Approximately 6,000 gallons of free product have been recovered. Responsible for coordination and supervision of subcontractors.

■ SITE REMEDIATION

Chevron, St. Thomas

Project Manager: Site remediation involving removal of dissolved petroleum hydrocarbons by SVE/DPE and air sparging techniques and treatment of extracted vapors by catalytic oxidation at a half-acre retail building site. Performed TPDES permitting and monthly well gauging and reporting, quarterly groundwater sampling / reporting; and site closure negotiations with EPA and local regulators. Responsible for soil disposal stabilization.

■ CONTAMINATION ASSESSMENT

Port Everglades, Fort Lauderdale Florida

Project Manager: Supervised one of the largest contamination assessment projects ever completed in Florida. Field activities included the installation and sampling of more than 850 soil borings and 575 monitoring wells. Other related activities included performance of an enhanced soil gas survey, aquifer analysis, tidal study, and salt water intrusion study.

Education

- B.S. Biology, State University of New York, College at Geneseo, 1986

Registrations & Certifications

- Hygiene, Safety, and Training School, Pittsburgh, Pennsylvania (1986)
- OSHA 29 CFR 1910.120 8-Hour Supervisor Training (1988)
- National Spill Control School, Corpus Christi, TX (1988)
- Accredited AHERA Inspector, Gainesville, FL (April 1989)
- Asbestos Abatement: Facility survey and building systems course, (1989)
- OSHA Confined Space Entry Training (1995)
- OSHA Excavation and Trenching Safety Regulations (1996)
- OSHA Electrical Safety Training - Level I (1996)
- DDC-4 Defensive Driving Course, National Safety Council (1997)

Experience

- AMEC: 2002
- Industry: 1987

Ashok K. Aitharaju, EI

Environmental Engineering

Mr. Ashok Aitharaju has more than 11 years of experience in environmental engineering representing city, county, state, and private clients in contamination assessment, remediation, environmental permitting, drinking water systems testing, and surface water testing. He has performed Phase I and II ESAs, UST removals, remediation and site closures involving hydrocarbon releases, solvent contamination, and other contamination generated from varying industrial processes. He has performed remedial action monitoring and hydrogeologic assessments for petroleum-contaminated and non-petroleum sites.

His consulting engineering experience includes project scope development, proposal preparation, planning, interpretation of field and laboratory data, project management, project health and safety, efficient resource and time management, client interaction, communications with regulatory agencies, and report preparations.

Key Projects

BUILDING 2129 PUMP TEST

Miami International Airport, Florida

Project Manager: Oversaw the delineation of deep solvent plume, aquifer testing, groundwater sampling and pilot test. The scope included review of the reports prepared by others, and scope development and proposal preparation for aquifer pump test. Prepared pump test addendum report, coordinated, scheduled and staffed well installations, pre pump test sampling and aquifer testing. Coordinating staff, equipment and subcontractor for pump test and post pump test sampling and data analysis.

FORMER RED TOP SEDAN SITE SOIL REMEDIATION

Miami International Airport, Florida

Project Manager: The site is a 20-acre property utilized for the storage and maintenance of airport shuttle buses. Several USTs containing diesel fuel, oil water separator, waste oil tank, and several hydraulic lifts were removed from the site. As a result of the UST leak, a large area of the property had free floating product and the soil and groundwater was contaminated. Remediation system was installed and several million gallons of petroleum impacted groundwater was treated.

SEAPORT DRAINAGE WELL REDEVELOPMENT AND TESTING

Miami-Dade County, Florida

Project Manager: Provided cleanout, redevelopment, and testing of 47, 24-inch diameter storm sewer deep-drainage wells, each approximately 110 feet deep. Work also included cleanout of baffle structures, drainage inlets, drainage pipes (13,000 linear feet total), and trench drains. Work also included removal and disposal of sediments. Responsible for preparing bid package for submittal and negotiating with subcontractors; executing performance bond; managing project personnel and subcontractors; and conducting weekly meetings with client representatives and preparing weekly updated schedules, including safety/security procedures and client-specific invoicing. Also prepared and submitted several interim progress reports and final report.

ENVIRONMENTAL SERVICES

Miami North Western Senior High School, Florida

Project Manager: Provided environmental services during a ten year period including rapid response risk assessment of soil contamination from underground structures associated with a vocational dry-cleaning facility, contamination assessment report, remedial action plan for soils and groundwater contaminated with chlorinated solvents, regulatory negotiation, and performed concurrently with active construction at the site. Responsible for several phases of monitoring and site assessments to delineate and remediate solvent plume. This site was under natural attenuation monitoring program for several years. Subsequent shallow and deep monitoring well installations delineated the plume. Soil excavation and removals were completed. Pump test to determine the conductivity was completed. It is under quarterly groundwater monitoring with conditions closure.

Education

- M.S. Environmental Engineering, Lamar University, 1993
- M.B.A. Marketing/Business Development, Pune University, 1990
- B.S. Mechanical Engineering, Kakatiya University, 1987

Registrations & Certifications

- Engineer Intern, Florida No. 1094ET005
- HAZWOPER 40-Hour
- HAZWOPER 8-Hour Refresher

Experience

- AMEC: 2002
- Industry: 2001

Marcelo A. Pichardo

Environmental Engineering - Staff Engineer

Mr. Marcelo Pichardo is a Staff Engineer with two years of experience working for the Environment & Infrastructure sector of AMEC. His responsibilities include technical writing, research and review of regulatory reports, site visits, environmental assessments, and field sampling.

Throughout his career, he has performed assessments of contamination at petroleum and non-petroleum sites. These studies included soil and groundwater sampling, soil screening, interpretation of chemical analyses, determination of pollutants and their extent in the soil and groundwater, geological description, client and regulatory correspondence and report compilation. Mr. Pichardo has participated in the sampling and analytical interpretation of groundwater contamination at various sites. He has taken part in the sampling and interpretation of groundwater contamination of volatile and semi-volatile components, metals, as well as chlorinated hydrocarbons as part of contamination assessments under the UST and hazardous waste programs. Mr. Pichardo has been involved in the supervision of soil and groundwater remediation system installations and tank removals in both the U.S. and abroad in the Caribbean.

Key Projects

- **PHASE I ENVIRONMENTAL SITE ASSESSMENT**
  Beckman Coulter, Miami, Florida.
  Field Coordinator: Provided field oversight for source removal and backfill activities related to the release of 300 to 500 gallons of diesel fuel at the site from June 16, 2010 through August 9, 2010. Responsible for supervision of subcontractors, performing field sampling and analysis, oversight of well installation and gathering field data during all filed activities.

- **GROUNDWATER SAMPLING AND SITE REMEDIATION**
  Chevron Corporation, George Town, Grand Cayman
  Field Coordinator: Environmental services for site remediation involving recovery of free-phase petroleum product by both active (drawdown) and passive (in-well skimming) techniques and treatment of pumped groundwater. Site includes three office buildings and 16 large, bulk storage tanks on approximately 5 acres. Developed and operated multiple free-product recovery systems in bulk storage terminal facility. Remedial action design reused existing, client-owned remedial equipment, reducing installation costs. Product recovery enhanced by active water table depression along with passive free product skimming in independent wells implemented to address free-floating petroleum product plume. Approximately 6,000 gallons of free product have been recovered (as of 2004).

- **ENVIRONMENTAL SITE ASSESSMENTS,**
  Chevron Corporation Texaco Service Stations, St. Thomas, Virgin Islands.
  Field Coordinator: Environmental site assessments at four gasoline service stations in the U.S. Virgin Islands. Responsible for conducting groundwater sampling and free product recovery events, gathering field data during all filed activities. Assisting in remedial system setup along with performing and following all Chevron safety procedures and guidelines.

- **SITE REMEDIATION**
  Chevron Corporation, Tutu, St. Thomas, Virgin Islands.
  Field Coordinator: Site remediation involving removal and destruction of dissolved petroleum hydrocarbons by SVE/DPE and air sparging techniques and treatment of extracted vapors by catalytic oxidation at a half-acre retail building site. Performed TPDES permitting and monthly well gauging and reporting, quarterly groundwater sampling/reporting; and site closure negotiations with EPA and local regulators. Responsible for conducting groundwater sampling and free product recovery events, gathering field data during all filed activities. Assisting in remedial system setup along with performing and following all Chevron safety procedures and guidelines.

Education

- B.S. Land and Water Resources Engineering, University of Florida, 2009

Registrations & Certifications

- MIA Badge
- Port of Everglades – TWIC
- Fort Lauderdale/Hollywood International Airport Badge
- OSHA 8-Hour HAZMAT/ Health and Safety
- CPR and First Aid Training

Experience

- AMEC: 2010
- Industry: 2010

Mikhal Moberg, PE

Environmental Engineering - Water Quality Modeling

Mr. Mikhal Moberg joined AMEC in 2008 as a Staff Engineer. His attention to detail and commitment to excellence supports AMEC's Water Resources team in maintaining high standards and work quality. Mr. Moberg has worked with watershed management plans, dam breach analysis, pollutant loading calculations and GIS. Mr. Moberg's project experience includes sub basin delineation, Environmental Resource Permit (ERP) review, flood map generation, nutrient/pollutant load calculation and hydraulic modeling. Notably, Mr. Moberg has been recognized by AMEC as an exceptional client service award winner in 2011.

Key Projects

- **OUTFALL PRIORITIZATION FOR TMDL PLANNING EFFORTS FOR MS4 PERMIT**
  Florida Department of Transportation - District 7, Florida
  Staff Engineer: Responsible for identification, delineation and pollutant load quantification for FDOT's Hillsborough County Municipal Separate Storm Sewer System (MS4) outfalls in the Delaney Creek, Spartman Branch, and Blackwater Creek waterbody ID (WBID) basins.

- **OUTFALL DRAINAGE BASIN CHARACTERIZATION FOR PHASE I MS4 PERMITS**
  Florida Department of Transportation - District 1, Florida
  Staff Engineer: Responsible for identification and delineation of major outfalls for FDOT's Lee, Manatee, Polk, and Sarasota Counties MS4 permit.

- **POLK CITY WATERSHED MANAGEMENT PLAN**
  Southwest Florida Water Management District, Florida
  Staff Engineer: Worked with the project engineer to complete all aspects of the Water Management Plan (WMP). This includes completion of the watershed evaluation, hydrographic and hydraulic modeling, and floodplain generation and analysis.

- **SARASOTA COUNTY WATERSHED MANAGEMENT PLANS**
  Southwest Florida Water Management District, Florida
  Staff Engineer: Responsible for reviewing and updating sub basins and junction/reach network and drawing transition zones. The specifics for the Sarasota County Model Updates included modernizing the Flood Insurance Rate Maps for all of unincorporated Sarasota County. Detailed flood maps were provided so that new Digital Flood Insurance Rate Maps and Flood Insurance Study reports could be developed in a countywide format.

- **AVON PARK WATERSHED MANAGEMENT PLAN**
  Southwest Florida Water Management District, Florida
  Staff Engineer: Responsible for reviewing ERPs and updating existing GIS data such as sub basin delineations and junction/reach network based on the ERP evaluation.

- **SEBRING WATERSHED MANAGEMENT PLAN**
  Southwest Florida Water Management District, Florida
  Staff Engineer: The plan was developed by AMEC's Water Resources team based on SWFWMD's guidelines and specifications for conducting Watershed Management Plans (WMP). These guidelines require rigorous quality control and a high degree of correspondence between the GIS database/mapping element and the associated hydrologic model parameterization and connectivity. Responsible for QA/QC of all aspects of GIS for this plan.

Education

- M.S. Environmental Engineering , University of Central Florida, 2008
- B.S. Environmental Engineering, University of Central Florida, 2006

Registrations & Certifications

- Professional Engineer, Florida No. 74764
- ICPR Training Seminar

Experience

- AMEC: 2008
- Industry: 2008

Professional Affiliations

- American Society of Civil Engineering - Ridge Branch, Former President, Secretary & Treasurer

Software Proficiency

- ArcGIS
- ICPR
- MIKE 11
- FLO-2D
- ICPR PercPack

Section 3
Relevant Experience

Monroe County canal management master plan

Scope

This project involves Phase I of creating a canal management master plan throughout the Florida Keys for prioritizing canals that need water quality improvement and selecting appropriate cleanup options. A prioritization process was developed which included identifying plan objectives, goals, priority issues, screening criteria and ranking formulas.

The Water Quality Protection Committee Canal Subcommittee provided guidance on the development of the plan. A multi-disciplinary team was involved with the prioritization ranking process, canal field surveys including water quality evaluations, and remedial alternative selections for each canal. More than 500 canal systems are being screened and ranked based on multiple Geographical Information System (GIS), physical, and water quality attributes.

For Phase I the process was applied to a select group of previously identified canals with water quality problems. Conceptual remedial project designs for improving canal water quality and the engineering cost estimates are being developed for the top-ranked canals and submitted for cooperative funding.

Client
- Monroe County

Rhonda Haag
Sustainability Program Manager
1100 Simonton Street
Suite 2-283
Key West, Florida
USA 33040
305.292.4482 (p)

Location
- Monroe County, Florida

Key Staff
- Ricardo Fraxedas, PE
- Wendy Leonard, PG
- Gerold Morrison, PhD
- Lance Lumbard, CLP
- Stephen Hanks, PE, CFM, LEED AP

Project Cost
- $200,000
- Construction: N/A

Start Date
- 2011

Completion Date
- Ongoing

Garrison Bight Marina

Scope

AMEC was contracted by Garrison Bight Marina to perform environmental engineering services as follows:

- Performed soil and groundwater assessment required by the FDEP in the vicinity of the former UST
- Prepared a Remedial Action Plan (RAP) to address petroleum hydrocarbon impact
- Installed a soil and groundwater remediation system including air sparge and soil vapor extraction wells
- Operation and maintenance of the remediation system for six months
- Performed quarterly groundwater sampling to monitor the site cleanup progress

Client
- Garrison Bight Marina

Frank Bervaldi
711 Eisenhower Drive
Key West, Florida
USA 33040
305.294.3093 (p)

Location
- Key West, Florida

Key Staff
- Stephen Hanks, PE, CFM
- Paul Thornbury
- Marcelo Pichardo

Project Cost
- $150,000
- Construction: N/A

Start Date
- 2011

Completion Date
- Ongoing

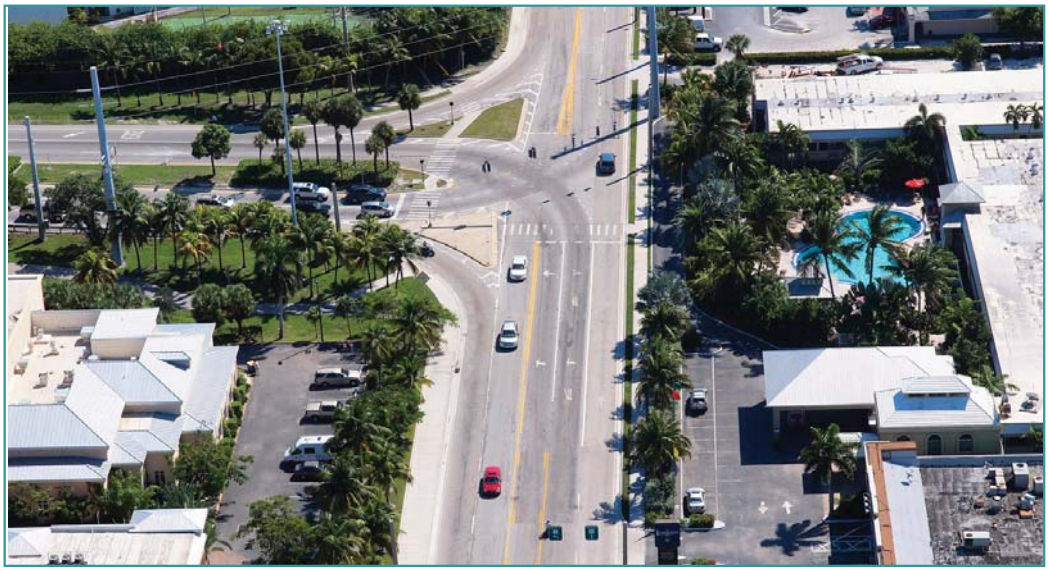
FDOT District VI North Roosevelt Boulevard construction engineering inspection

Scope

AMEC was contracted to provide Construction Engineering and Inspection (CEI) services for the reconstruction of North Roosevelt Blvd.

The reconstruction work included:

- New seawalls & sidewalks
- Curb & Gutters
- Drainage
- Geotextile
- Base, Asphalt, Milling & Resurfacing
- Lighting
- Traffic Signals
- Signing & Striping
- Landscaping
- Water & Sewer Lines



Client
- Florida Department of Transportation

Charlie Phinizy
Project Manager
3100 Overseas Highway
Marathon, Florida
USA 33050
305.289.6107 (p)
305.289.2357 (f)

Location
- Key West, Florida

Key Staff
- David C. Romano, PE
- Jacqueline Hart, EI

Project Cost
- CEI: $3.4 million
- Construction: $41.2 million

Start Date
- 2011

Completion Date
- Ongoing

FDOT District VI continuing subsurface utility location survey services

Scope

AMEC provided complete subsurface utility location services to include designation with geophysical instrumentation, excavation with soft-dig equipment and survey location/mapping with electronic data collection and GPS covering 65 individual task assignments. A typical assignment was the Port of Miami Tunnel project which required us to identify, excavate and locate subsurface utilities at 31 potential conflict locations.

The work effort consisted of coordination with One-Call and the local utility companies, geophysical exploration with GPR, soft dig excavation, GPS locations of utilities, and preparation of utility information reports for each conflict site.

From 2004-2009 our firm provided subsurface utility survey services to District Six. This involved the designation, verification (pot-holing), location and mapping of underground utilities on an as-needed basis. The work was typically associated with intersection improvements, road widening and the installation of mast arms and bridge pilings. Representative projects include SR A1A bridge widening in Marathon, improvements to 14 miles of SR 826 in Miami-Dade County, improvements to 6 miles of SR A1A in Monroe County and improvements to the intersection of I-95 and US 1 in downtown Miami. In all 64 assignments were undertaken in this contract.

Client
- Florida Department of Transportation - District VI

Tony Soto
District Utilities Administrator
1000 NW 111th Avenue,
Miami, Florida
USA 33172
305.470.5232 (p)
305.470.5380 (f)

Location
- Monroe County, Florida

Key Staff
- Mike Jones, PLS
- Richard Towne, PLS
- Chip Gardiner, PLS
- Richard Emig
- Charles Heise

Project Cost
- $950,000
- Construction: N/A

Start Date
- 2005

Completion Date
- 2010

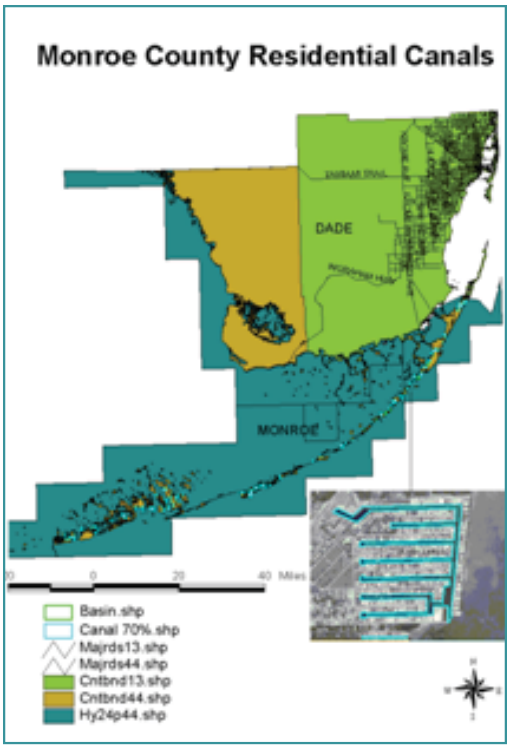
Monroe County residential canals inventory and water quality assessment GIS services

Scope

The Monroe County Water Resources Department sought an inventory of physical characteristics of the water canals located throughout residential areas of this coastal county in South Florida, an assessment of water quality in the canals, and a determination of which characteristics of the canals could potentially affect water quality.

AMEC was contracted to provide these inventory and assessment services. The project involved compilation of all existing surface water quality data from multiple agencies and sources; evaluation of the usefulness of the data in regards to quality and format; and setup of a GIS database of the entire canal system and a metadata file of the available information. The objective of the project was to determine current water quality conditions in the canals and water quality data gaps (to assist in future sampling needs); to develop a classification model of the canals based on the physical characteristics; and to evaluate treatment options (both effectiveness and cost) for the different canal types.

The AMEC team collected data through select field verifications, interviews with local owner associations, and distribution of water body layer to local agencies for comments. The GIS analysis of physical attributes allowed the county to evaluate potential impacts to canal water quality without the cost of large-scale field sampling.



Client
- Monroe County Office of Marine Resources

Richard Jones
Senior Administrator
2798 Overseas Highway,
Suite #420
Marathon, Florida
USA 33050
305.289.2805 (p)
305.289.2536 (f)

Location
- Monroe County, Florida

Key Staff
- Ricardo Fraxedas, PE
- Wendy Leonard, PG
- Stephen Hanks, PE, CFM, LEED AP

Project Cost
- $210,000
- Construction: N/A

Completion Date
- 2003

Port of Miami drainage well cleaning and redevelopment

Scope

The Port of Miami is cruise capital of the world and currently, eight cruise lines sail from the Port of Miami. During the 2005 hurricane season, the drainage wells and structures at Port of Miami were flooded by the storm surge, and sediment, debris and other material entered into the drainage system and required a major clean up.

Within the Port of Miami the storm sewer structures, pipes and wells are located in four project areas. The project scope includes cleanup and redevelopment of 47- 24" diameter sewer deep drainage wells approximately 90-110 feet deep and the cleanout and removal of sediment and debris from about 47 baffle drainage structures. The project also included the cleanout and removal of more than 2000 linear feet of corrugated pipes, trench drain, and >12,500 feet of drainage pipes of various sizes. The removal of sediment and proper disposal at an approved landfill is also part of the scope. This includes obtaining the necessary badges for site access, organizing weekly project update meetings with several parties, and submittal of work plan schedules. Documentation includes preparation of daily, weekly and monthly reports, updated schedules and coordination with tenants.

We have also performed well capacity tests to achieve the minimum 1500 gallon per minute (GPM) required as per the Florida Department of Environmental Protection (FDEP) permit. Well rehabilitation and well capacity test results were submitted to FDEP and were approved. The field activities conducted to achieve our objective for this project were the following:

- Coordination with several tenants and their boat arrival and departures to schedule the drilling operations, movement of containers for access to some of the well locations.
- Four drilling crews worked simultaneously on redevelopment of the deep drainage wells. We also had one additional crew performing the cleanout out the drainage pipes and some of the work was performed during the weekends and at night due to the heavy cargo traffic interfering with the operation during normal working hours.
- All 47 deep drainage wells were capacity tested to meet FDEP requirements.
- One crew operated the vacuum truck removing the sediment and debris from the cleanout of the wells.

This project was completed within the budget and ahead of schedule.

Client
- Port of Miami (Miami Dade County Department of Environmental Resources Management- DERM01)

Becky Hope
Environmental Manager
1015 N. America Way
Miami, Florida
USA 33132
305.347.4972 (p)

Location
- Miami, Florida

Key Staff
- Ricardo Fraxedas, PE
- Ashok Aitharaju, EI

Project Cost
- $840,000
- Construction: N/A

Completion Date
- 2007

Florida Keys Aqueduct Authority general engineering services

Scope

AMEC has been selected by the Florida Keys Aqueduct Authority (FKAA) to provide general engineering services including Civil engineering, geotechnical, surveying and mapping services.

The scope for this five-year full service contract includes the following services:

- Water and Wastewater Systems Studies, Evaluation, and Assessments
- Water Audits, Water Loss Reports and Metering Evaluation
- General Civil Projects
- On-site Wastewater Treatment System Design, Review, and Evaluations
- Transmission, Distribution and Collection System Design and Modeling
- Distribution Pump Station Hydraulics
- Value Engineering
- Geotechnical Evaluations
- Land Surveying and GIS Mapping

Client
- Florida Keys Aqueduct Authority

David Jackson
1100 Kennedy Drive
Key West, Florida
USA 33040
305.295.2244 (p)

Location
- Key West, Florida

Key Staff
- Mark Battista
- Wendy Leonard, PG
- Michael Phelps, PE

Project Cost
- Varies

Start Date
- 2012

Hillsborough County stormwater and environmental engineering services

Scope

AMEC was secured by Hillsborough County to assist in the planning, design, and implementation of various neighborhood drainage improvement projects.

Projects conducted to date include:

- West Johnson Road and Sapp Road South Intersection Drainage Improvements
- Wilder Road-Lawrence Road Drainage Improvements
- Charlie Griffin Road near Mud Lake Road Drainage Improvements
- 126th Avenue Drainage Improvements

AMEC is performing a variety of stormwater and environmental engineering services in coordination with Hillsborough County's Public Works Department for various capital improvement projects. AMEC's primary role is to perform Project Development and Evaluation (PD&E) studies and final designs for capital improvement projects and retrofit stormwater projects. These projects require application of the County's transportation, stormwater, and Florida Greenbook standards, utility relocation and coordination for project design and construction, and preparing design plans.

AMEC also provides other services including:

- Coordinating utilities relocation
- Preparing and submitting permit applications to applicable regulatory agencies
- Environmental science services
- Preparing meeting materials and assisting the County during public informational meetings
- Project reports and cost estimates
- Bidding tabulation, recommendation for award, and as-built drawings for submittal to the regulatory agencies

- Surface water and groundwater quality monitoring, data collection plans, data interpretation, and database management
- Lake or receiving body management plans

Future projects may also include providing TMDL and/or BMAP support services and watershed management plan and modeling services.

Client
- Hillsborough County

Robert Wisemen, PE
Senior Professional Engineer
601 E. Kennedy Blvd.
Tampa, Florida
USA 33602
813.307.1747 (p)
813.272.5811 (f)

Location
- Hillsborough County, Florida

Key Staff
- Walter Reigner, PE, CPESC
- David Butcher, PE, LEED AP
- Timothy Kelly, PE, CPSWQ, CPESC
- Stephen Kuhn, PE, CPESC
- Carl Christmann, PE
- Jie Gao, PE, CFM
- Aziza Baan
- Eric Brown
- Timothy Howard
- James Bailey

Project Cost
- Varies per project

Start Date
- 2008

Completion Date
- Ongoing

City of Plant City master engineering services

Scope

Evers Street Streetscape Project:
Project included reconstruction of two blocks of Evers Street to provide for reconstructed sidewalks with brick pavement accents. Design included accommodating ADA requirements and permitting through the FDOT. Completed November 2007. Costs: $23,000 (engineering & permitting); $130,000 (construction)

Softball Complex Stormwater Management System Retrofit Project:
Project requires converting a high maintenance underdrain filtration system to a permanent pool wet detention system to help the City eliminate the operating funds that would have been required for reconstruction and future operation of the underdrain system. Project includes gathering bathymetric data and permitting through the SWFWMD. Ongoing. Costs: $5,300 (engineering and permitting); $2,000 (maintenance construction)

Midtown Stormwater Master Plan/Hunter Grant Pond Retrofit:
AMEC developed the stormwater master plan to assist the City as it redevelops the midtown area. A key component was developing a "water quality bank" for Total Phosphorus (TP) that the City could draw down from as it redeveloped this area of downtown that drains to a waterbody impaired for TP. The City is able to utilize the Hunter Grant pond retrofit TP credits and does not have to build individual stormwater facilities on each redeveloped parcel.

East Side Canal Stabilization Project:
Project entailed resurfacing a section of the canal slopes with stabilized surfaces for erosion protection, aesthetics, and long-term hydraulic performance. Tasks included data collection, geotechnical engineering, modeling, plan preparation permitting through HCEPC, SWFWMD and the City of Plant City. Ongoing. Costs: $65,000 (engineering); $250,000 (construction)

Ellis-Methvin Park Project:
Project includes design, permitting and construction management assistance for the park improvements that include eight athletic fields, a two-acre stormwater facility/lake, parking and associated amenities. Costs: $30,000 (engineering); $2.1 million (construction)

Client
- City of Plant City

Brett Gocka, PE
City Engineer
302 W. Reynolds St.
Plant City, Florida
USA 33563
813.659.4200 (p)
813.659.4206 (f)

Frank Coughenour
Utilities Director
1802 Spooner Dr.
Plant City, Florida
USA 33563
813.757.9288 (p)
813.757.9049 (f)

Location
- Plant City, Florida

Key AMEC Staff
- Walter Reigner, PE, CPESC
- David Butcher, PE, LEED AP
- Timothy Kelly, PE, CPSWQ, CPESC
- Stephen Kuhn, PE
- Eric Brown
- Kyle Compton
- Timothy Howard
- Mark Jones

Project Cost
- Varies by Project

Start Date
- 2006

Completion Date
- Ongoing

Polk County master engineering consulting services

Scope

AMEC was retained by Polk County as a Master Consultant for miscellaneous civil engineering and drainage services. AMEC has successfully completed more than 30 task assignments for projects throughout Polk County. This experience has given the AMEC team a unique understanding of the conditions throughout the County and the process required completing multiple projects on time and within budget. Projects completed included surveying, engineering, permitting, and construction administration services.

Parks and Recreational Facilities

AMEC provided various planning, surveying, civil engineering, and construction administration services for multiple projects which included the expansion of recreational facilities, group pavilion additions, playgrounds, and parking areas. The projects involved working in conjunction with several regional and local regulatory agencies including the Florida Department of Environmental Protection, Polk County Health Department, Florida Department of Transportation, City of Lakeland, Polk County, and the Southwest Florida Water Management District. The services AMEC provided for these facilities include surveying, overall site development design and permitting, preparation of contract documents, and construction administration.

Transportation Projects

AMEC provided professional services to assist the Polk County Transportation Engineering Department with miscellaneous, on-call drainage projects. The projects included preliminary design of roadway and drainage improvements, preparation of construction plans and documents, permitting, and construction phase services to multiple roadways throughout Polk County.

Utilities

AMEC has completed several projects including water main extensions, force main improvements, and utility relocations for roadway projects.

Client

- Polk County

Robert Kollinger, PE
Water Resources Manager
4177 Ben Durrance Rd.
Bartow, Florida
USA 33830
863.534.7377 (p)

Doug Gable, PE
Capital Projects Manager
3000 Sheffield Rd.
Winter Haven, Florida
USA 33880
863.535.2285 (p)

Bob Wiedrich
Senior Park Planner
515 E. Boulevard St.
Bartow, Florida
USA 33830
863.534.4340 (p)

Gary Fries, PE
Utilities Division Director
1011 Jim Keene Blvd.
Winter Haven, Florida
USA 33830
863.298.4235 (p)

Location

- Polk County, Florida

Key Staff

- Michael Phelps, PE
- Jeff PeQueen, PE, CFM, CPSWQ, CMS4S
- Kevin Welch
- Nirjhar Shah, PhD, CFM
- Allan Biddlecomb, PG
- Jie Gao, PE, CFM
- Mark Frederick, PE, CFM
- Vineela Griddaluru, EI, CFM
- Kevin Shelton
- Aziza Baan
- Mark Jones

Project Cost

- Engineering: $850,000
- Construction: $2.6 million

Start Date

- 2006

Completion Date

- Ongoing

Sumter County general engineering services

Scope

AMEC provided engineering design and plans for resurfacing and widening one mile of a two-lane, two-way roadway including modification of existing superelevation to FDOT standards for two curves. Permits were obtained from FDOT for a connection to U.S. 301, and an exemption from permitting was obtained from SWFWMD.

AMEC provided engineering design and plans for reconstruction of two miles of a two-lane, two-way roadway. Design included full reclamation, widening, and re-design of four hill crest to comply with FDOT standards for vertical curvature. An exemption from permitting was obtained from SWFWMD.

AMEC also prepared a stormwater summary identifying typical elements of a rural county stormwater management program, collating all current elements that would become the County's stormwater management program, making recommendations for next steps, and cost estimates for discrete steps toward the County's stormwater management program.

To complete Task II of the stormwater summary, AMEC identified all basin studies pertinent to Sumter County. This involved mapping the limits and documenting the elements included within each study, updating, and expanding the existing GIS database with all stormwater related structures and features within the county, researching the County's legal access for maintenance of canals, preparing a canal maintenance plan, and identification of parcels and structures impacted by changes to the FEMA FIRMs using the 2012 draft DFIRM. This allowed staff to evaluate the County's growth trends relative to stormwater management, designate short-term priority projects for the County, and prepare a cooperative funding application to SWFWMD for the Jumper Creek Watershed management Plan. Deliverables included a final report and a comprehensive database for stormwater management.

AMEC performed structural inspections of dozens of bridges providing public access across County maintained canals. The inspections included recommendations for repair or replacement.

Client
- Sumter County

Scott B. Cottrell, PE
Public Works Director
319 E. Anderson Avenue
Bushnell, Florida
USA 33513
352.569.6700 (p)
352.569.6701 (f)

Location
- Sumter County, Florida

Key Staff
- Walter Reigner, PE, CPESC
- Terry Dykehouse, PE
- Mark Frederick, PE, CFM
- Timothy Kelly, PE, CPSWQ, CPESC
- Aziza Baan
- Steve Mickelson, PE, SE, LEED AP
- James Moore, EI
- Eric Brown
- Jie Gao, PE, CFM
- Derek Kenney
- Jessica Taft
- Kyle Compton
- R. Michael Jones, PLS, CFedS
- Justin Graham
- Daniel Hearn

Project Cost
- $300,000

Start Date
- 2011

Completion Date
- Ongoing

Fort Meade utilities and oversight

Scope

AMEC provided construction engineering services for the rehabilitation of approximately 1,438 linear feet of sewer main for the City of Fort Meade. The extent of the project included 1st Street from the Packing House to U.S. 17; Cleveland Avenue from 1st Street to Lime Street; and U.S. 17 from 1st Street. Services included the bid evaluation, review of shop drawings, review of test results and review of as-built plans.

Services required review of bid document and bid plans, as well as contractor bids for completeness. Our firm also developed a question list for the City to ask contractors for clarification of their bids and also provided the City with a contractor award recommendation based on satisfactory clarification of bid questions.

Add-on bid requirements for the contractor to complete the project were also required. These tasks included coordination and attending pre-construction meetings with the City and the contractor; identifying areas requiring an existing condition survey with utility locates to be provided by the contractor prior to beginning construction; requiring the contractor to acquire an FDOT right of way use permit for work within U.S. 17; discussing contractor means and methods of sanitary sewer replacement in areas of potential conflicts with utilities and trees; determining inspection procedures with the contractor for satisfactory clearance for payment; and, reviewing contractor provided shop drawings.

AMEC provided construction oversight, which included: attending weekly meetings with the City and the contractor for project status updates; assisting the City in determining appropriate methods of resolving potential conflicts; reviewing contractor Maintenance Of Traffic (MOT) plans for each section of construction; reviewing contractors bypass pumping plans for each section of construction;

reviewing contractor's approved geotechnical sub-consultant test results for all required testing of material and densities; reviewing surveyor's as-built survey for satisfactory completion of the utility replacements, relocations, and roadway reconstruction; reviewing of contractor supplied TV inspection of new sanitary sewer system; reviewing all contractor payment applications for completion accuracy with payment recommendations; reviewing contractor's permit closure for the FDOT permit; and final certification that all work was completed to meet the requirements of the grant as depicted on the as-built survey supplied by others.

Client
- City of Fort Meade

Fred Hilliard
City Manager
8 W. Broadway Street
Fort Meade, Florida
USA 33841
863.285.1100, ext. 232 (p)

Location
- Fort Meade, Florida

Key Staff
- Walter Reigner, PE, CPESC
- David Butcher, PE, LEED AP
- Timothy Kelly, PE, CPSWQ, CPESC
- Mark Jones

Project Cost
- Engineering: $34,000
- Construction: $650,000

Start Date
- 2008

Completion Date
- 2009

Lake Wales Ridge Stormwater BMP Evaluation and Implementation - Lake Wailes

Scope

SWFWMD contracted AMEC to develop a Stormwater BMP plan to improve water quality within the Lake Wales Ridge system. Lake Wailes was one of the included lakes on this list.

AMEC's tasks included developing pollutant load estimates for sub-basins/stormwater outfalls that the District had previously noted as being of concern. AMEC prioritized the outfalls based on pollutant loads to the lake, and developed alternative BMPs to remove stormwater load to Lake Wailes.

Land-use-based Event Mean Concentration pollutant loadings were used to fairly and cost-effectively prioritize the critical outfalls. Directly connected imperviousness was reviewed carefully due to the preponderance of Type A hydrologic soil group soils and the associated pollutant mass load that is generated from these areas. Historical rainfall data has been used to develop incremental rainfall event probabilities and the use of this data with directly connected impervious area provides rainfall runoff volumes of much higher accuracy than from other methods.

Concept BMPs developed for Lake Wailes varied depending on which priority outfall was under consideration. The BMPs were designed to remove as much nutrient load as possible and were drawn schematically in GIS and included such measures as small ponds as well as underground dry retention systems. Key factors in developing the BMPs considered for Lake Wailes included the relatively steep topography as well as the required maintenance of aesthetics for the Lake.

Much of the proposed BMP construction activity was sited in existing governmental lands to help eliminate land procurement costs and to facilitate local municipality and FDOT participation in the project. There were some alternatives that could not be placed in existing rights-of-way and would require drainage easements from the landowners. In these circumstances, recommendations for underground retention systems with low-maintenance pre-treatment systems were made.

Client
- Southwest Florida Water Management District

Keith Kolasa
Senior Environmental Scientist
Ecologic Evaluation Department
2379 Broad Street
Brooksville, Florida
USA 34604
352.796.7211 (p)
352.797.5806 (f)

Location
- Polk County, Florida

Key Staff
- Walter Reigner, PE, CPESC
- Timothy Kelly, PE, CPSWQ, CPESC
- Jie Gao, PE, CFM
- Stephen Kuhn, PE
- Timothy Howard
- Mark Jones

Project Cost
- Engineering: $215,000

Start Date
- 2007

Completion Date
- Ongoing

Polk County Transportation drainage projects

Scope

AMEC provided professional services to assist the Polk County Transportation Engineering Department with miscellaneous, on-call drainage projects. The projects included preliminary drainage analyses, preparation of construction plans and documents, permitting, stormwater master planning, and construction phase services to reduce flooding impacts and erosion for projects throughout Polk County.

River Ranch Boulevard Flood Study

AMEC was retained by the Polk County Transportation Engineering Department to complete an evaluation of the River Ranch Boulevard culvert. The 72-inch diameter, corrugated metal pipe (CMP) culvert is located on River Ranch Boulevard immediately south of SR 60. The area immediately upstream (west) of the crossing experienced flooding most recently during October 2005. The flooding affected homes in the vicinity of the crossing and remained inundated for several weeks.

Additional projects included:

- Experiment Station Road Drainage Improvements
- Crystal Lake Drive Drainage Improvements

Client
- Polk County Board of County Commissioners

Doug Gable, PE
Capital Projects Manager
Transportation Division
3000 Sheffield Road
Winter Haven, Florida
USA 33880
863.535.2285 (p)
863.534.6721 (f)

Location
- Polk County, Florida

Key Staff
- Michael Phelps, PE
- Jeffrey PeQueen, PE, CFM, CPSWQ, CMS4S
- Jie Gao, PE, CFM
- Mark Frederick, PE, CFM
- Kevin Welch
- Vinela Griddaluru, EI, CFM

Project Cost
- Engineering: $1 million
- Construction: $1.8 million

Start Date
- 2006

Completion Date
- Ongoing

City of Dade City stormwater master plan

Scope

The City of Dade City commissioned AMEC to develop an update of the City's 1965 Stormwater Master Plan (SMP) so that problem drainage areas can be assessed for flooding extent and conceptual capital improvement (CIP) projects could be developed with projected effectiveness and cost of those CIPs. Through a cooperative agreement with SWFWMD, sufficient funding was secured to allow AMEC to create a flood routing drainage model for improved estimation of flooding within the City's problem areas. AMEC additionally helped to incorporate today's regulations into the new plan with consideration for local, regional and federal regulations. This was important since the City is a regulated municipal separate storm sewer system (MS4) under the Clean Water Act's NPDES program. AMEC's vast knowledge of the wide federal program along with our knowledge of local requirements allowed for the production of a very effective and implementable SMP.

AMEC developed a Level of Service for the City which can be used as a rating system to compare the extent of flooding problems at different locations within the City from both a peak rate and flood stage perspective. AMEC developed a flood routing model encompassing the key problem flooding areas of the City. The problem areas were analyzed under a large number of storm events from the 2.33 year/24 hour storm up to the 100 year/24 hour storm. Additionally, intense storm events of shorter duration were also considered for the downtown portion of the drainage model. This was because downtown Dade City, with appreciable topographic relief, has flooding conditions caused by urbanization and the lack of a stormwater conveyance system. Flows flood the streets in an uncontrolled manner during intense rainfall events.

Conceptual improvements to the flood-prone areas were developed and included storm water lift station upgrades, additional storm sewer construction, stormwater pond construction,

and excavation and enhancement of impaired wetlands. Since the City of Dade City is regulated by NPDES MS4 requirements, AMEC also considered the inclusion of stormwater quality projects to help the City document efforts to reduce stormwater pollution to the maximum extent practicable for MS4 permit compliance. Cost estimates were developed and potential funding sources were discussed in the report.

Client
- City of Dade City

Gordon Onderdonk
Public Works Director
38020 Meridian Ave.
Dade City, Florida
USA 33526
352.521.1461 ext. 306 (p)
352.521.1422 (f)

Location
- Dade City, Florida

Key Staff
- Walter Reigner, PE, CPESC
- David Butcher, PE, LEED AP
- Timothy Kelly, PE, CPSWQ, CPESC
- Jeffrey PeQueen, PE, CFM, CPSWQ, CMS4S

Start Date
- 2011

Completion Date
- Ongoing

Section 4
Project Management & QA/QC

Project Management - Budget & Schedule Adherence

We recognize that this project is critical for the City and the scheduled adherence to schedule is of the essence. We further understand that technical, operational, and budgetary issues have to be addressed concurrently. Most importantly, however, we recognize that all of these issues must be addressed, coordinated, and resolved in a timely manner without interrupting the project schedules.

To address this challenge, we will adhere to proven management approaches to assure quality and on-time performance within budget. AMEC's project management approach is based on our core belief in providing the highest level of service and product quality to our clients. AMEC's project management procedure and strategy for each component of a project is designed to maximize the efficient execution of each task and to ensure the City's satisfaction. **Our management process is proven to be one of the most efficient for controlling numerous activities in a timely and cost-effective manner.** These processes are tailored to meet the individual needs of each of our clients.

We believe that the fundamental aspects of client service are communication, responsiveness, technical expertise, and most importantly developing a client's-perspective understanding of the project's objectives, constraints, and potential challenges. A practical understanding of both the technical and non-technical aspects are essential to the efficient execution of this project. In summary, the key elements of our project management plan are:

- Effective client interface & communication
- Assignment of a senior project manager & experienced key personnel
- Preparation of a comprehensive technical approach based on a sound understanding of the project
- Development of a fair & complete budget to accomplish the work
- Use of proven, computerized systems for monitoring & control of project cost & schedule
- Commitment to the schedule & budget from all team members
- Frequent team interaction on project tasks, deliverables & challenges
- Continuity of staff on project tasks & development of "project teams"

To accomplish this level of service standard, the AMEC team will strive to work closely with City staff and stakeholders as extensions of our project team.

This will be facilitated through regular status reports, conversations, and meetings.

As a matter of corporate policy a project execution plan (PEP) will be prepared at the initiation of the project based on the contractual scope, schedule, and budget. The PEP serves as a blueprint for internal assessment and management of project delivery performance. **The plan specifically requires identification of factors which have the potential to affect the project schedule or budget along with mechanisms to measure performance and corrective action plans.** The AMEC PEP is a living document that requires continual update throughout the course of the project along with independent internal project reviews.

At a task execution level, AMEC employs several effective project management tools to monitor the project budget and schedule. We track work efforts and progress for each element of the work plan on a weekly basis and employ aspects of Earned Value Management to monitor our performance. Weekly goals are set for our staff based on our work plan and we hold them accountable for attaining those goals within the allotted hours.

Quality & Cost Controls

Controlling quality and costs on a project require the consultant to have an inherent philosophy of using qualified staff, scoping the project properly, implementing routine procedures to ensure quality control is instituted throughout the contractual engagement, and finally implementing routine procedures to ensure project costs are paced with deliverable status.

We understand the challenges facing government agencies today with an ever increasing demand for services while operating under budget constraints and shortfalls. As such, we know that diligent project management that focuses on maintaining project schedules and budgets - while providing the City of Key West with high quality products and services - will be the tool that measures the success of this contract.

As Project Manager, Mr. Fraxedas' responsibilities will include applying diligent project management and continuous QA/QC throughout the life of the contract. It is equally important that the project manager has a comprehensive understanding of all tasks at hand and the necessary skills and level of experience to allow for timely performance. Mr. Fraxedas' has succeeded in that regard for many years on similar stormwater, street rehabilitation, and general civil engineering projects.

AMEC staff members also have significant experience with securing and working on cooperative funding applications and grants and are prepared to assist the City in securing funds that may facilitate the City's capital improvement project progression, as well as for achieving regulatory permit compliance.

AMEC utilizes only the most qualified staff for all our jobs since they will know the technical requirements and what is required, when, to what degree, etc. These staff will be able to implement the project in the most cost-effective way with the most efficient means of getting to the desired end result.

One great way to control costs on a project is for the consultant and client to properly define the scope. AMEC's staff has the expertise to know exactly what is required for stormwater services contracts as well as the list of services listed in the RFQ. We are highly confident we are the most cost-effective firm because of this knowledge base.

It is AMEC's philosophy that maintaining weekly reviews on project staff's hours to a project are critical to completing the project within the budget and making the project successful for the client and the consultant. Weekly charges (hours) are compared to the project deliverables' status (percent complete) to see if there is a match. If there is not a match, the project manager immediately meets with staff to obtain details on specific task standing, etc. and to resolve any questions on the issue. AMEC has had a tremendous success rate with this approach and extremely rare change orders are required only when the original project scope has to be adjusted due to changes occurring beyond control of AMEC.

"I have contracted services from [AMEC] for more than 10 years, related to water resources and NPDES MS4 compliance issues. Their work has consistently been exceptional, within budget, and on schedule. They are responsive to client needs and creative to their approach to projects. I would not hesitate to recommend their services."

Seminole County
Kim Ornberg
Principal Engineer - Water Quality Section

Project Staff

Perhaps more so than any other factor, the project staff assigned to the project is a key to maintaining the project budget and schedule. Possession of a pragmatic understanding of the scope of services ensures that the final result is consistent with the intended final end-uses. Equally important is a team-wide functional knowledge and understanding of the project guidelines.

AMEC has a very effective mix of engineers and scientists who understand the big picture of Clean Water Act initiatives such as TMDLs, NNCs, and NPDES Municipal Separate Stormwater Sewer System (MS4) permit requirements. But just as important, our staff also has the knowledge of local Environmental Resource Permit (ERP) and design conditions which allows our staff to provide the most cost-effective solutions from a short- and long-term standpoint. AMEC staff routinely use the most progressive and technologically advanced pollutant load reduction analyses (as mentioned in the draft Statewide Stormwater Handbook of March 2010) to evaluate projects for cost effectiveness early on during the preliminary engineering phase.

The AMEC Project Team was carefully assembled and organized to provide superior expertise, resources, and service to the City. Along with the team's management, highly experienced and uniquely qualified individuals have been chosen to fulfill key team roles. AMEC's team will be led by senior project managers with

overlapping and complementary skills. By serving both small city and large state government clients, we have gained a broad experience base that enhances our ability to know current regulations and probable future regulatory requirements.

In summary, we are fully committed to conducting our work within the specified project terms and conditions and are fully confident that our team's exceptional level of expertise, experience, and commitment coupled with our strong team structure and project management plan will service the City throughout the course of the Contract.

Engineering and Management QA/QC

AMEC's QA/QC process is a comprehensive tool that establishes protocols and procedures for activities at AMEC, including the following key components:

- Budget & Schedule Tracking
- Project Documentation
- Document Development & Review
- Communication Protocol
- Invoicing
- Plan Preparation Standards

AMEC believes in the value of Quality Assurance (QA) and Quality Control (QC) measures and has developed a QA/QC plan specific for use in our projects. The project team will follow a rigorous protocol that requires QA/QC reviews at critical steps throughout the project process. Qualified staff will be utilized for review and comment on all project deliverables before progressing to the next defined phase of work.

We have found that continuous senior level review is essential to meeting project goals and objectives within allocated schedules and budgets. Our specific goal is to identify and correct potential issues during the process to avoid costly and time consuming backtracking in subsequent elements of the work plan. For similar reasons, we believe in maintaining staff consistency throughout our projects. Assuring and controlling the quality of our work is a never ending process. A comprehensive QA/QC plan is necessary to minimize errors and omissions and to increase efficiency and effectiveness.

Budget and schedule are only part of the equation, work quality is essential. AMEC recognizes our staff dedication and professional pride that our project team members possess as an integral component in

a project's success. Our project team is focused on maintaining a common sense approach throughout our projects and avoiding over-complication and over-engineering. Basically, our experience with similar projects and services allows us to know what to expect, what to do, and how to do it.

Generally, QA/QC steps are interlaced within each step of the project. QC review of actual work products will be performed continuously throughout the project. QA activities include a planned system of review procedures conducted by personnel not directly involved in the project, to produce and evaluate data in accordance with predefined quality objectives. Quality Control is a system of routine administrative and technical activities to measure, manage and control the work product to ensure integrity of data, identify and address errors and omissions, to document and archive data, and to record all QA/QC activities. The QA/QC reviewers document their review of work products and any recommendations to support staff, task leader(s) or client through memorandum or notes to the file.

AMEC has found through practical experience with previous projects that it is essential to have qualified professionals other than the main project engineer review the project technical approach as well as the details incorporated into the work product. Such reviews provide an unbiased test of whether the product appears to meet the expectations of the client.

A good QA/QC review will often challenge the designer's work but the end result and goal will be to provide a work product that serves the client in the fullest way possible.

AMEC's Corporate QA/QC Plan

We recognize that consistently providing quality

services and products in a timely manner is the only way to achieve consistent exceptional client satisfaction. The assembled project team will be required to follow AMEC's Quality Management Program, as well as any additional QA/QC protocols that may be required by the City during this continuing services contract.

QA/QC activities, including schedule and budget adherence, are directed by AMEC's Corporate Plan, with oversight by senior level managers. AMEC's QA/QC Plan is a comprehensive document that establishes protocols and procedures for activities at AMEC. The following sections outline the main components of our Corporate plan that will be used in conjunction with independent QA/QC reviews, to provide the highest level of quality in our work products.

Job Set-up and Administration

Job setup and project kickoff are considered high priorities for AMEC Project Managers (PM). Before a task or assignment is initiated, PMs must be absolutely sure that the intent and objectives of the client are fully understood. AMEC also employs numerous administrative support personnel who assist PMs in day-to-day organization, filing, word processing and document review activities.

Budget and Schedule Tracking

AMEC uses BST Enterprise software to track schedule progress and evaluate resource allocations and needs. In addition, this software allows our PMs to track all hours and expenses posted to the project on a weekly basis by labor type, activity and phase/task.

Project Documentation

Submission of regular updates, on an agreed upon schedule, regarding the status of the project will be given to the client as well as report cards soliciting input pertaining to the services provided.

Document Development and Review

All documents leaving AMEC are required to undergo a QA/QC review prior to transmittal. Reviews are generally conducted by peers, senior management and/or administrative staff. The Quality Assurance Review Checklist is signed and dated by all reviewers.

Communication Protocol

AMEC believes that frequent communication with our clients is one key to success. Our PM's are accessible via e-mail, fax, cellular and office phones, and voice mail.

Invoicing

Our accounting department is responsible for managing and coordinating all billing related activities including PM billing reviews and client follow-up.

Plan Preparation Standards

Our technical support staff (CAD and GIS) follows comprehensive standards regarding the layout and style of plans and specifications.

Exceptional Customer Service

We are committed to providing exceptional client service and quality work. Client service is at the core of AMEC's business model. Our corporate mission statement and number one priority is to provide exceptional client service.

To keep us continually focused on our service, we solicit customer satisfaction feedback through our report card program, which measures satisfaction ratings, so that we can incorporate exceptional service into our everyday project management routine. This process of continued improvement means you get what you need when you need it. The evaluation allows us to determine precisely our client's requirements and to gain a better understanding of their priorities. Our clients provide feedback on how we can better meet their business needs and expectations.

The process is designed to foster an additional level of communication. It helps us identify what adjustments are needed to improve our service for current and future clients. Our goal is to gather and take action on information that will drive continuous performance improvement.

Section 5
Forms & Additional Information

State of Florida

Florida Board of Professional Engineers

Attests

AMEC ENVIRONMENT & INFRASTRUCTURE INC.

Has satisfied the requirements of Section 471.023, Florida Statutes. In recognition thereof, the Board of Professional Engineers hereby authorizes this firm to offer engineering services in the State of Florida in accordance with Chapter 471, Florida Statutes, and the rules of the Board.

Witness the Seal of the Board and the Signature of the Board's duly authorized Chair this 17 day of JUL, 1989.

Certificate of Authorization No. 5392

Chair

THIS DOCUMENT HAS A COLORED BACKGROUND • MICROPRINTING • LINEMARK™ PATENTED PAPER

AC#5905296

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS

SEQ# L11120501120

DATE	BATCH NUMBER	LICENSE NBR
12/05/2011	110205936	GB514

The GEOLOGY BUSINESS
Named below IS CERTIFIED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2012

AMEC ENVIRONMENT & INFRASTRUCTURE, INC.
1105 LAKEWOOD PKWY STE 300
ALPHARETTA GA 30009

RICK SCOTT
GOVERNOR

DISPLAY AS REQUIRED BY LAW

KEN LAWSON
SECRETARY

Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500

License No.: LB7932
Expiration Date: February 28, 2013

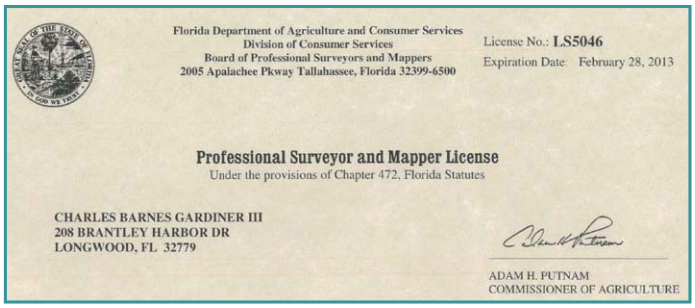
Professional Surveyor and Mapper Business License
Under the provisions of Chapter 472, Florida Statutes

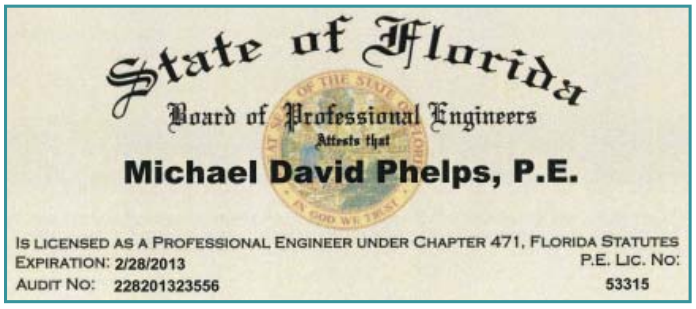
AMEC ENVIRONMENT & INFRASTRUCTURE, INC.
1105 LAKEWOOD PKWY STE 300
ALPHARETTA, GA 30009-7625

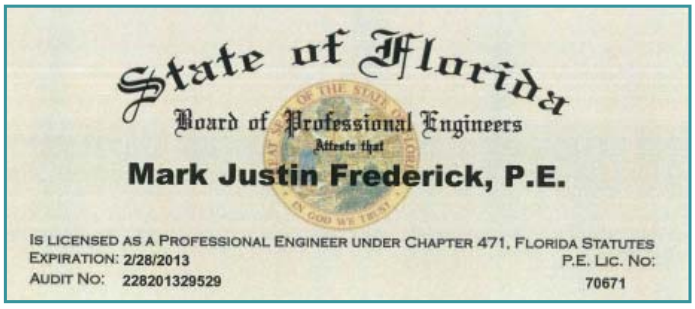
ADAM H. PUTNAM
COMMISSIONER OF AGRICULTURE

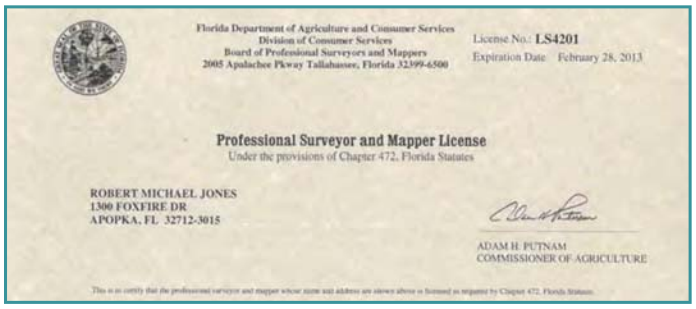
This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.


State of Florida
Board of Professional Engineers
Attests that
Walter Robert Reigner, P.E.
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2013 P.E. Lic. No: 44118
Audit No: 228201301238

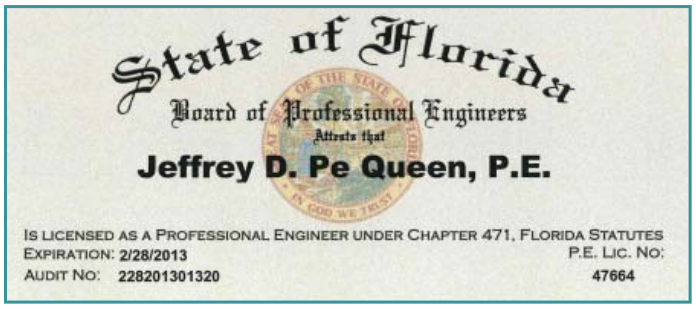

Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500
License No.: LS5046
Expiration Date: February 28, 2013
Professional Surveyor and Mapper License
Under the provisions of Chapter 472, Florida Statutes
CHARLES BARNES GARDINER III
208 BRANTLEY HARBOR DR
LONGWOOD, FL 32779
ADAM H. PUTNAM
COMMISSIONER OF AGRICULTURE

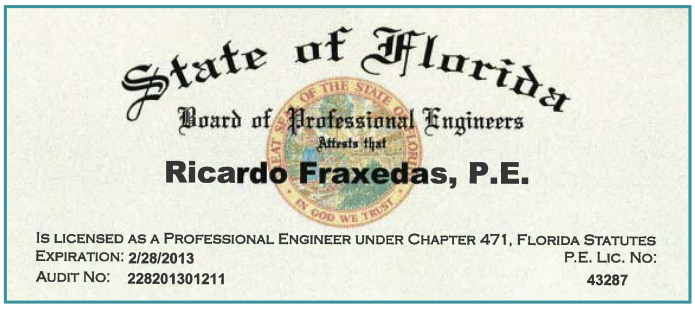

State of Florida
Board of Professional Engineers
Attests that
Michael David Phelps, P.E.
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2013 P.E. Lic. No: 53315
Audit No: 228201323556


State of Florida
Board of Professional Engineers
Attests that
Mark Justin Frederick, P.E.
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2013 P.E. Lic. No: 70671
Audit No: 228201329529

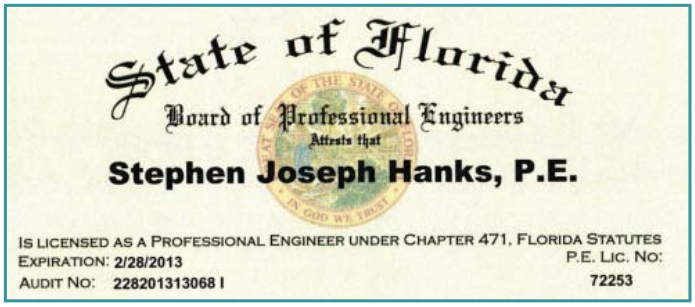

Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500
License No.: LS4201
Expiration Date: February 28, 2013
Professional Surveyor and Mapper License
Under the provisions of Chapter 472, Florida Statutes
ROBERT MICHAEL JONES
1300 FOXFIRE DR
APOPKA, FL 32712-3015
ADAM H. PUTNAM
COMMISSIONER OF AGRICULTURE


State of Florida
Board of Professional Engineers
Attests that
Timothy Joseph Kelly, P.E.
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2013 P.E. Lic. No: 44721
Audit No: 228201322597


State of Florida
Board of Professional Engineers
Attests that
Jeffrey D. Pe Queen, P.E.
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2013 P.E. Lic. No: 47664
Audit No: 228201301320


State of Florida
Board of Professional Engineers
Attests that
Ricardo Fraxedas, P.E.
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2013 P.E. Lic. No: 43287
Audit No: 228201301211


State of Florida
Board of Professional Engineers
Attests that
Edilberto Abonce, P.E.
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2013 P.E. Lic. No: 68242
Audit No: 228201312753


State of Florida
Board of Professional Engineers
Attests that
Stephen Joseph Hanks, P.E.
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2013 P.E. Lic. No: 72253
Audit No: 228201313068 I

CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 05/15/2012

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 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 Northeast, Inc. Parsippany NJ Office 10 Lanidex Center West P.O. Box 608 Parsippany NJ 07054-0608 USA	CONTACT NAME: PHONE (A/C. No. Ext): (866) 283-7122 FAX (A/C. No.): (847) 953-5390 E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	American Zurich Ins Co	40142
INSURER B:	Zurich American Ins Co	16535
INSURER C:	American Guarantee & Liability Ins Co	26247
INSURER D:		
INSURER E:		
INSURER F:		

INSURED
AMEC Environment & Infrastructure, Inc.
fka AMEC E&I, Inc., fka MACTEC Inc.,
1105 Lakewood Pkwy, Suite 300
Alpharetta GA 30009 USA

COVERAGES **CERTIFICATE NUMBER:** 570046205185 **REVISION NUMBER:**

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

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT X LOC			GL0337359911	05/01/2012	05/01/2013	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$1,000,000 $100,000 $5,000 $1,000,000 $2,000,000 $2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO X ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS X Comp Ded $1000 X Coll. Ded $1000			BAP9483148-01	05/01/2012	05/01/2013	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$1,000,000
C	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $10,000			UMB948536601 SIR applies per policy terms & conditions	05/01/2012	05/01/2013	EACH OCCURRENCE AGGREGATE	$2,000,000 $2,000,000
A A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N N/A If yes, describe under DESCRIPTION OF OPERATIONS below			WC350486611 All Other States WC386713305 MA & WI	05/01/2012 05/01/2012	05/01/2013 05/01/2013	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE-EA EMPLOYEE E.L. DISEASE-POLICY LIMIT	$1,000,000 $1,000,000 $1,000,000
B	Archit&Eng Prof			EOC938357804 Professional Liability SIR applies per policy terms & conditions	05/01/2012	05/01/2013	Each Claim Aggregate	$1,000,000 $1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Evidence of Insurance.

Holder Identifier :

Certificate No : 570046205185

CERTIFICATE HOLDER

AMEC Environment & Infrastructure, Inc.
1105 Lakewood Pkwy, Suite 300
Alpharetta GA Alpharetta 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 Northeast Inc.

ACORD 25 (2010/05) The ACORD name and logo are registered marks of ACORD

Two-Year Client Satisfaction Ratings

Client service is at the core of AMEC's business model. We solicit client feedback so that we can incorporate **exceptional service** into our everyday project management routine. This process of continued improvement means you get what you need when you need it.

Satisfaction Level

Based on two-year client satisfaction ratings

"With the help of (AMEC), the City was able to secure a grant … to design and construct french drains to treat stormwater from the roads surrounding 8-acre Lake Audrey … This grant comes at a time when funds are tight for local governments."

Citrus County
Walt Eastmond
Transportation Project Manager

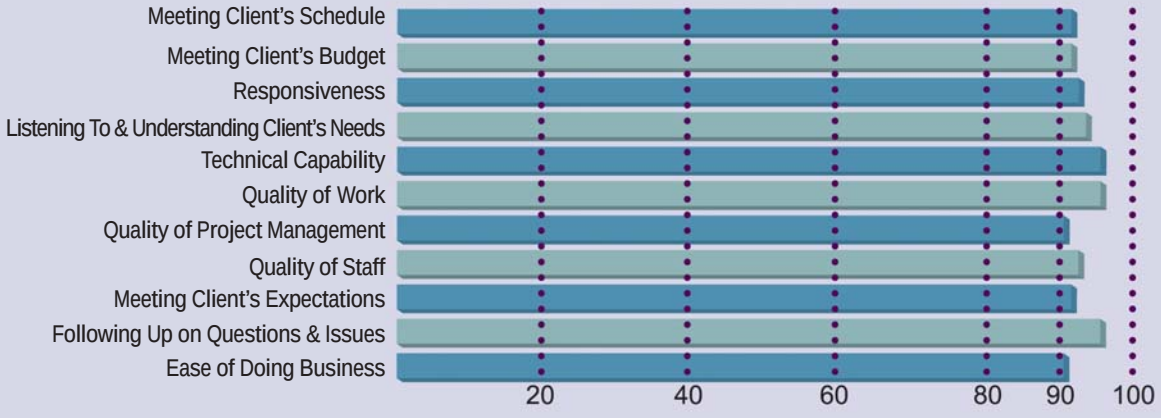
"(AMEC) has provided exceptional service under the existing District Wide NPDES Contract. They give honest advice related to project management issues such as cost, best methods for accomplishing goals, and innovative solutions to stormwater maintenance problems. I have been very satisfied with their efforts for the past 10 years."

Florida Department of Transportation
Susan Moore
Maintenance Environmental Coordinator

"You [AMEC] are to be commended for the manner in which you assisted in the completion of the STORET upload to the Florida Department of Environmental Protection. The project team was able to meet the project objectives on schedule and within budget. Successful completion of this project would not have been possible without the dedication and hard work of the project team and supporting staff."

St. Johns River Water Management District
Kirby B. Green III
Executive Director

Percentage of Satisfaction



ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA)
: SS
COUNTY OF _____)

I, the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

By: Walter Reigner, PE, CPESC

Sworn and subscribed before me this

_____ day of _____, 20___.

_____
NOTARY PUBLIC, State of Florida at Large

My Commission Expires: _____

Hard copy submittals contain notarized signatures*

SWORN STATEMENT UNDER SECTION 287.133(3)(a)
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICE AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid, Bid or Contract No. 12-0005 for _____

2. This sworn statement is submitted by AMEC Environment & Infrastructure
(Name of entity submitting sworn statement)

whose business address is 3142 Boog Powell Court, Key West, Florida 33040 _____ and (if applicable) its Federal Employer Identification Number (FEIN) is 91-1641772 (If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement.)

3. My name is Walter Reigner, PE, CPESC and my relationship to
(Please print name of individual signing)

the entity named above is Principal/Central Florida Area Manager.

4. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any Bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.

5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(l)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means

    1. A predecessor or successor of a person convicted of a public entity crime: or

    2. An entity under the control of any natural person who is active in the management of t entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

7. I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural

person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which Bids or applies to Bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)

_X_ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

___ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)

___ There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

___ The person or affiliate was placed on the convicted vendor list. Them has been a subsequent proceeding before a hearing officer of the Sate of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

___ The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

*****Hard copy submittals contain notarized signatures*****

_____
(Signature)

_____
(Date)

STATE OF_____

COUNTY OF_____

_____

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

_____ who, after first being sworn by me, affixed his/her signature in the
(Name of individual signing)

space provided above on this_____ day of _____, 20___.

My commission expires: _____
NOTARY PUBLIC

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF FLORIDA)
: SS
COUNTY OF _____)

I, the undersigned hereby duly sworn, depose and say that the firm of _____ provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses per City of Key West Ordinance Sec. 2-799.

By: Walter Reigner, PE, CPESC

Sworn and subscribed before me this

_____ day of _____, 20___.

_____
NOTARY PUBLIC, State of Florida at Large

My Commission Expires: _____

Hard copy submittals contain notarized signatures*

THE CITY OF KEY WEST

3140 Flagler Ave
Key West, FL 33040

ADDENDUM NO. 1
RFQ NO. 12-005: GENERAL ENGINEERING SERVICES
July 19, 2012

This addendum is issued as supplemental information to the RFQ package for clarification of certain matters of both a general and a technical nature. The referenced RFQ package is hereby addended in accordance with the following items:

1. Page 4 lists that a firm may submit for 1 or more of 5 the categories. Please confirm that we can submit for all 5 categories in one submittal package (2 copies + cds, etc), and we do not need to submit one package for each category (ie 5 sets of packages).

   Only one proposal package is to be submitted which identifies any one of, or all of the various disciplines listed in the RFQ that the Proposer is proposing services for.

2. Is submittal of an SF330 sufficient?

   Use of SF330 form is not required. Proposer shall submit a complete qualifications package in a format that contains all required elements.

3. Does the city have an MBE goal?

   No.

4. Are we to include subcontractors in our RFQ or can we add them based on the particular task order?

   Proposers shall identify each subconsultant that they are proposing using as part of this contract. City approval would be required if Proposer wishes to make changes or adds to the list of subconsultants once contract is issued. The qualifications of all members of a Proposer's team will be considered in the selection process.

5. On page 6 of the RFQ, License Requirements, it states that the winning respondent will also be required to obtain and maintain a City of Key West Business Tax Receipt. Could you please clarify if this means that the winning firm must have an office location in Key West?

Firms selected as part of this contract are not required to maintain an office in Key West.

6. Public Entity Crimes Certification was identified as being three (3) pages in length.

   Public Entity Crimes Certification is two (2) pages in length

7. Under the Submission Details section on page 5 reference is made to "Architect firms should submit a complete qualifications package that includes:"

   This should read "Engineering firms should submit a complete qualifications package that includes:"

8. Is a page limit for the submission information listed on page 5?

   No. However firms should limit their proposals to a reasonable number of pages.

9. Who are the current contract holders?

   The City does not track this information. Proposer can contact DemandStar by Onvia at www.demandstar.com/supplier or call toll-free 1-800-711-1712.

10. How much was spent under the current contract, and on what kind of projects?

    This information is unavailable. Proposers are reminded that no minimum amount of service or compensation will be assured to the retained firm(s).

11. The existing language under Qualifications Criteria:

    "Other certifications including LEED and LAP (Federal DOT) certified staff professionals"

    Shall be modified to read:

    "Other certifications including LEED and FDOT certified staff professionals"

12. Please clarify the submittal requirements for "Past five (5) years of specific relevant experience" under the Submission Detail section.

    The existing language

    Past five (5) years of specific relevant experience. The examples should include the name of client, client's representative, client's address and telephone number, key personnel involved in design phase services, design services fee, estimate of construction cost, name of contractor awarded project contract award amount, contractor's representative, contractor's address and telephone number.

Shall be modified to read:

Past five (5) years of specific relevant experience. The examples should include the project description, name of client, client's contact and telephone number, design services fee, identify if project was constructed or not and project cost, name of contractor awarded project, and contractor's representative and telephone number.

All Proposers shall acknowledge receipt and acceptance of this Addendum No. 1 by submitting the addendum with their proposal. Proposals submitted without acknowledgement or without this Addendum may be considered non-responsive.

Walter Reigner, PE, CPESC	AMEC Environment & Infrastructure, Inc.
Signature	Name of Business

AMEC
3142 Boog Powell Court
Key West, Florida 33040
305.294.9059