

Request for Qualifications No. 14-004

# Environmental Engineering Services

City of Key West, Florida

July 9, 2014

ATKINS



July 9, 2014

City Clerk and Selection Committee Members  
City of Key West, Florida  
3126 Flagler Avenue  
Key West, Florida 33040

**RE: Request for Qualifications (RFQ) No. 14-004: Environmental Engineering Services**

Dear Selection Committee Members:

The City of Key West (City) needs a firm with environmental and engineering professionals who are able to focus on—and be extremely responsive to—its beach management and contamination assessment needs, while being cost effective in delivering the requested services on time and within the agreed-upon budget. **Atkins is that firm.**

We have provided effective and efficient technical services to the City since 2000, beginning with the initial successful seagrass transplantation for the Smathers Beach restoration project. Between 2000 and 2009, we assisted with the seagrass mitigation project at Cow Key Channel and with environmental construction compliance monitoring to support the mitigation flow improvement project. Since 2009, Atkins has assisted the City with various marine resource evaluations supporting environmental permitting, coastal engineering, and contamination assessment/remediation projects including the ferry terminal, Sunrise Canal, City Hall, Rest Beach, and Smathers Beach. Our team has shown accuracy in and commitment to our cost estimates; as a result, we have never sought a change order due to cost overruns.

The City will have continued direct access to our team's depth of resources. Atkins has assembled an experienced and professional team that will be responsive to the City from engineering design through permit preparation, contract development, and construction oversight and monitoring. Using our streamlined approach to supporting the City, we will deliver quality technical work and focus on managing and reducing costs.

We offer the City continuity. The Atkins team will be led by **W. Mark Henry**, who has served the City for the past 5 years including on such projects as Smathers Beach and Rest Beach renourishment, City Hall/annex environmental assessment services, Federal Emergency Management Agency appeal, and Sunrise Canal benthic resource survey. Mr. Henry understands the City's needs and has a proven record of improving overall management of task orders and reducing the time spent by City staff on these task orders. His goal has been to serve as an extension of City staff, predicting needs and concerns.

Mr. Henry will be dedicated to the City and provide assistance on an as-needed basis. He has 20 years of experience in environmental fieldwork, permitting, and project management. Mr. Henry's core technical background includes providing guidance on regulatory compliance issues related to marine resources as well as environmental contamination. He also maintains a technical working knowledge of other required services including engineering and surveying. In addition, Mr. Henry has been involved in supporting marine facilities permitting, construction, and monitoring on such projects as the \$70 million PortMiami wharf strengthening and City of Miami Beach South Point Park Pier pile installation.

In addition to Atkins' in-house staff, we have included team members with specialized certifications as required for this contract. **Florida Keys Land Surveying, LLC**, will provide local surveying support; **Ecotech Environmental Services, Inc.**, will provide underground storage tank removal and remediation construction services; **Earth Tech Drilling, Inc.**, will provide geotechnical support; and **EE&G Environmental Services, LLC**, will provide industrial hygiene services.

We remain dedicated to our professional relationship with the City and commit to maintaining our level of service. If you have any questions or require additional information, please feel free to contact me, Adam Gelber, at [adam.gelber@atkinsglobal.com](mailto:adam.gelber@atkinsglobal.com) or 305.514.3387. We acknowledge receipt of Addendum No. 1.

Sincerely,

  
Adam Gelber  
Principal-in-Charge

## How the Atkins team can benefit the City

- **Knowledgeable project manager.** Our proposed project manager understands the City's needs and has served the City for the past 5 years.
- **Trusted advisor.** Atkins has provided effective and efficient technical services to the City for more than a decade.
- **Local resources and expertise.** Because Atkins has worked on multiple task orders for the City, we understand the challenge to use more local resources and reduce costs to the City while providing technical quality and project compliance. Our team includes Florida Keys Land Surveying, LLC, located in the lower Florida Keys.
- **Service continuity.** Atkins team members have worked together for many years and have institutional knowledge from Key West projects.



Charlotte Maddox, PE, DWRE, CFM, PMP, F.NSPE  
Senior Vice President

**Atkins North America, Inc.**  
4030 West Boy Scout Boulevard, Suite 700  
Tampa, Florida 33607

**Telephone: +1.813.282.7275**

**[www.atkinsglobal.com/northamerica](http://www.atkinsglobal.com/northamerica)**

June 17, 2014

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

RE: Request for Qualifications No. 14-004: Environmental Engineering Services

To whom it may concern:

I am the General Counsel and Secretary of Atkins North America, Inc. As requested, this letter confirms that Charlotte A. Maddox is Senior Vice President of Atkins North America, Inc. (the Company) and is authorized to sign documents related to the RFQ No. 14-004 for Environmental Engineering Services and is empowered with the right to bind the company to the RFQ.

Should you need additional information, please do not hesitate to contact me directly.

Sincerely,

  
C. Ernest Edgar, IV  
General Counsel

cc: Charlotte A. Maddox

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Please note that we have included in the table below each of the selection criteria listed on pages 5–6 of the request for qualifications, along with the corresponding proposal section that describes the Atkins team's qualifications.

Selection criteria	Proposal section
Specialized experience and technical competence of the firm in the listed disciplines	Sections A and C
Professional qualifications and certifications of staff personnel	Section B and Appendix
Capacity of assigned and identified staff to accomplish work	Sections B and E and Appendix
Past work experience	Section C
Ability to perform the services expeditiously at the request of the City	Section E
Location and availability of technical support people and assigned project manager to the City	Section E
Other certifications	Appendix

# A. Company Profile



## A. Company Profile

Having provided professional consulting services in Florida since 1960, Atkins is intimately familiar with regulatory agencies, associated requirements, and unique conditions relevant to south Florida and Florida Keys projects.

### Firm overview

Atkins is a leading provider of architecture-engineering (A-E) consulting services including environmental, coastal, water, engineering, planning, transportation, energy, structural design, and construction support services. Our worldwide resources offer a diverse set of skills and solutions—Atkins is the world's 14<sup>th</sup> largest global design firm (*Engineering News-Record* 2013). In the United States, Atkins has 70 offices and approximately 2,500 employees. Having provided professional consulting services in Florida since 1960, we are intimately familiar with regulatory agencies, associated requirements, and unique conditions relevant to south Florida and Florida Keys projects.

With more than 54 years in south Florida, Atkins understands the vital importance of being local and having deep roots in the communities in which we live and work. Our experience and office network span the nation, and our understanding of local requirements, practices, and cultures enables us to be true partners with clients. We believe in our corporate focus of thinking globally, working locally. Atkins' Florida offices provide a resource pool of more than 900 personnel should the need arise. Atkins offers the requisite experience, skills, capacity, and financial strength to fully support this contract.



**Atkins offers a scientific dive team to support natural resource services for various engineering, archeological, and ecological projects.**

Preserving and enhancing coastal infrastructure requires a strong background in marine science, engineering, and permitting. Atkins provides clients with a multidisciplinary team approach to problem solving, assigning experts in specific fields relevant to the needs of a multifaceted program. Through our use of this holistic approach, Atkins offers solutions that meet the complex criteria associated with projects in the coastal and marine environment.

Since our inception, Atkins has pursued core values of integrity, hard work, loyalty, quality performance, technical excellence, honesty, open and respectful

**Atkins serves as general engineering consultant (GEC) for several private and public marine terminals and has completed marine structures, site assessments, civil/marine engineering, port master plans, and terminal designs for numerous clients in North America and the Caribbean.**

communication, innovation, and professionalism in our daily work. The most significant indicator of Atkins' success is our high volume of repeat business—nearly 90 percent—which reflects our sincere commitment to client service.

### Key West experience

Because Atkins has worked on multiple task orders for the City and on other projects in Monroe County, we have an intimate understanding of the ecologically sensitive environment the City is in, being located within the Florida Keys National Marine Sanctuary (FKNMS). We have provided services to the City since 2000 and have assisted with various marine resource evaluations supporting environmental permitting, coastal engineering, and contamination assessment/remediation projects. Projects include Smathers Beach nourishment, Rest Beach Joint Coastal Permitting (JCP) support services, Key West Bight Ferry Terminal benthic assessment, Key West Bight Ferry Terminal floating dock benthic assessment, Sunrise Canal benthic habitat assessment, City Hall/annex environmental site assessment (ESA) services, City Hall site assessment report addendum, and Federal Emergency Management Agency (FEMA) appeal.

### Coastal engineering

Atkins' coastal engineers, scientists, and planners offer a full complement of relevant expertise to support the City. Supported by discipline-specific professionals in the areas of surveying, bidding, and construction, as well as the depth of our firm's nationwide employees, our team is well equipped to provide timely, responsive services.

Atkins' coastal services encompass the disciplines of coastal engineering, ocean engineering, coastal ecology, coastal zone management, coastal oceanography, geology, and structural engineering. Our coastal professionals are also able to leverage the resources of our firm's international science and engineering expertise to provide clients with unparalleled levels of service.

Our coastal engineering services include:

- Beach nourishment.
- Coastal processes investigations.
- Sediment transport studies, budgets, and characterizations.
- Wave, tide, and current data acquisition, analysis, and modeling.
- Seismic, side-scan sonar, light detection and ranging (LiDAR), and bathymetric surveying and mapping.
- Planning, permitting, design, and construction oversight for:
  - Ocean and bayfront fishing piers, jetties, and groins.
  - Dredging and dredge materials disposal for navigation channels, ports, and marinas.
  - Rock revetments and steel and concrete sheet pile seawalls and bulkheads.
  - Port structures—fendering systems, dolphins, and mooring piles.
  - Marinas—fixed and floating.
  - Breakwaters and sills.
- Dune restoration and enhancement.
- Coastal ecosystem management and restoration.
- Tidal and nontidal wetlands.
- Coral reefs.
- Hardbottom habitat.
- Submerged aquatic vegetation.
- Maritime forests.
- Water quality investigation and remedial measures design and implementation.
- Threatened and endangered species habitat.
- Storm-related services including coastal storm response and planning; hurricane evacuation planning and design; pre-storm response planning; in-event support and assistance; post-storm recovery and operational assistance; terrestrial and marine debris removal and management; damage assessments—structures, infrastructure, and natural resources; and FEMA damage documentation for federal funding.

Atkins serves as GEC for several private and public marine terminals and has completed marine structures, site assessments, civil/marine engineering, port master plans, and terminal designs for numerous clients in North America and the Caribbean.

## Environmental engineering

Atkins has experience performing Phases I and II ESAs, soil and groundwater investigations, underground storage tank (UST) closures, risk-based corrective action evaluations, corrective action plans for impacted sites, and design and implementation of remedial actions. We are the environmental response contractors for Florida Power and Light (FPL) at all of their power plants and fuel oil terminals. We have trained for FPL oil spills statewide and responded to them at Port Manatee. We are also their on-call rapid environmental assessment contractor for submerged power line repairs.



**Atkins technical professionals understand the ecology and biology of significant Florida habitats.**

Our staff also has experience working with federal Superfund sites including compliance reporting, investigations, and remediation. Our team includes personnel with Occupational Safety and Health Administration (OSHA) HAZWOPER

training, certification, and yearly refreshers. In addition, our professional geologists and engineers are registered throughout the United States. Our capabilities include due diligence property assessments (Phases I and II ESAs), UST management, remediation investigations, systems design, and implementation, Brownsfields site assessments, environmental management system services, solid waste compliance and assessment monitoring, and risk assessment and computer modeling.

Atkins' scientists are well-versed in U.S. Environmental Protection Agency (EPA) and Florida Department of Environmental Protection (FDEP) regulations for field sampling for all matrixes including sample storage, containment, documentation, and parameter requirements. We have extensive experience in the collection of grab and composite samples from piezometers, monitoring wells, marine, estuarine, and freshwater sediments as well as the collection of field parameters such as turbidity, conductivity, flow measurements, temperature, and dissolved oxygen vs. depth and light penetration measurements. Water quality and sediment samples are collected pursuant to the requirements set forth in the FDEP Standard Operating Procedures (SOP). Atkins scientists also analyze sampling data for compliance and trends, and make recommendations to clients about project sites.

Atkins' scientists use state-of-the-art equipment from optical water quality sensors to differential geographic positioning system (DGPS) units for data collection in the field and geographic information system (GIS) programming for post-processing. Further, we support a diverse assemblage of vehicles, boats, and other field equipment designed and field tested specifically for professionals in botany; hydrogeology; aquatic and upland; freshwater, estuarine, or marine ecology; fire ecology; fisheries; benthos; vegetative communities; forestry; zoology; and limnology.

Atkins staff understands the environmental permitting process. We have taken the lessons learned from this understanding to build a sciences staff that provides permitting process support efficiently and effectively. Atkins technical professionals understand the ecology and biology of significant Florida habitats. Atkins is a leader in permitting work in the freshwater, marine, and estuarine environment.

Atkins' sciences services encompass complete project efforts involving wetland and wildlife impacts and mitigation including studies, design manual development, conceptual plans, final designs, regulatory compliance and permitting, and construction and performance monitoring. Atkins' staff helps to formulate regulatory policy and rulemaking through our participation in agency peer review committees, direct contracts with FDEP and other agencies, presentations at professional conferences, and by maintaining an extensive network of contacts built from our long-time service to public agencies. Our services include wetland delineation, functional assessment, state and federal permitting, mitigation, and permit compliance; gopher tortoise permitting and relocation through the Florida Fish and Wildlife Conservation Commission (FWC); and wildlife surveys.

## Permitting

Atkins' permitting approach begins by establishing a clear understanding of the project and its goals through early detailed discussions with the client. This, combined with expert science and a respectful working relationship with regulatory agencies' personnel, contribute to permitting effectiveness and success.

Compensatory mitigation is of primary importance in the permitting process and post-permit compliance—mitigation in advance is the best mitigation. Environmental impacts can often be avoided or minimized if considered early in the project development process. Early identification and reduction or avoidance of impacts can shorten the permitting process timeline and lessen its complexity as well as reduce compensatory mitigation costs. When mitigation is a permit requirement, Atkins has the experience to provide innovative solutions and mitigation plans, which can reduce costs associated with design, implementation, monitoring, and long-term maintenance.

## Scientific dive program

Atkins offers a scientific dive team to support natural resource services for various engineering, archeological, and ecological projects. The team is comprised of more than 30 marine scientists, ecologists, geologists, coastal engineers, and archeologists across the United States.

Atkins scientific divers are trained in the firm's Standards for Scientific Diving and Operations of the Scientific Diving Program. Our dive safety manual follows the protocol set forth by the American Academy of Underwater Sciences and fulfills the scientific diving criteria required by OSHA.

Members of the scientific dive team regularly participate in various classroom and field training exercises. Topics covered include but are not limited to the following:

- Identification of flora and fauna
- Underwater photography and videography
- Data collection techniques

**Atkins has the experience to provide innovative solutions and mitigation plans, which can reduce costs.**

- Installation of scientific instrumentation
- Archeology
- Debris assessment
- Scientific dive planning
- Small boat operations

Atkins divers are trained in dive safety, first aid, CPR, and oxygen administration. Team members have logged thousands of scientific dives for a range of projects including long-term ecological monitoring, coral reef and seagrass studies, marina sitings, mitigation and restoration projects, underwater archeological assessments, habitat restoration, assessment of ship grounding impacts, expert witness testimony, submarine fiber-optic telecommunication and power cable installation, and support and environmental compliance.

## Additional information

Additional information on some of our services is included at the end of this section.

## Subconsultants

Atkins offers the City immediate access to specialized subconsultant expertise to meet specific project requirements. Table 1 below lists the services requested and who will be providing each.

**Table 1. Requested services**

Service	Team member
Environmental engineering services	
• Contaminated site investigation and remediation services	Atkins; Earth Tech Drilling
• Industrial hygiene services	Atkins; EE&G
• UST site services	Atkins; Earth Tech Drilling; Ecotech
• Real estate development support services	Atkins
Coastal engineering services including surveying	Atkins; Florida Keys Land Surveying

## Earth Tech Drilling



**Earth Tech Drilling will provide geotechnical services on this contract.** The firm is a Florida small business corporation founded in 2002. Earth Tech Drilling provides environmental and geotechnical drilling services for the installation of monitoring

wells, remediation wells (sparge and vapor), injection wells, recovery wells, and standard penetration test (SPT) soil borings to private clients for state and federal agencies. Earth Tech Drilling maintains in-house two Mobile® B-57s, a B-59, a Cat® 248 Skid Steer with low clearance drill rig, and two Geoprobe® direct push rigs (track and truck mounted).

Earth Tech Drilling has worked in Monroe County on a range of environmental sites requiring direct push technology (DPT)/ Geoprobe and hollow stem auger drilling. Recent sites include 3495 S. Roosevelt Boulevard and 726 Catherine Street in Key West. Atkins has worked with Earth Tech Drilling for more than a decade on various projects including the UST removal, tank closure assessment report, and groundwater monitoring project at Ireland's Inn in Fort Lauderdale, Florida.

Earth Tech Drilling specializes in environmental drilling projects. The firm's personnel understand the importance of decontamination procedures and have performed them under strict oversight of the FDEP and EPA. Earth Tech Drilling personnel have experience drilling on a variety of contaminated sites including Superfund, Resource Conservation and Recovery Act, and petroleum sites. The firm also performs geotechnical services such as SPT soil borings, auger borings, and infiltration/perc tests.

Earth Tech Drilling has extensive experience in auger and rotary drilling projects, as well as rock coring, SPTs, and various methods of aquifer testing. Earth Tech Drilling's capabilities range from half-inch- to 8-inch-diameter wells up to 200 feet deep. The types of wells include UST compliance wells, groundwater contamination assessment monitoring wells, groundwater remediation wells (recovery, sparge, and vapor), and saltwater intrusion monitoring wells. In addition, Earth Tech Drilling also has capabilities of drilling under canopies, inside buildings, and other miscellaneous low-clearance obstacles as low as 9 feet 6 inches (114 inches).

Earth Tech Drilling field personnel are 40-hour OSHA trained and abide by the site-specific health and safety plans in effect. The firm's staff includes licensed water well contractors, drilling supervisors, health/safety supervisors, and commercial driver's licensed drivers.

## Ecotech



**Ecotech will provide UST removal and remediation construction services on this contract.** Ecotech is a Florida professional geology firm specializing in assessment and cleanup of petroleum-contaminated sites. Ecotech's professional

staff has more than 70 years of combined experience in environmental consulting and site restoration.

Ecotech has performed contamination assessment and remediation projects on more than 120 petroleum service station sites and has been named as the contractor of choice on more than 50 contractor designation forms for projects eligible for FDEP funding. Ecotech's staff has experience in all field work aspects required for assessment, remediation, tank/source removals, and transactional ESAs. In addition, Ecotech has been involved in more than 75 projects in Florida's various pre-approval programs in the last year. Ecotech personnel have been involved in numerous source removal projects including some where soil or limestone was removed below the water table.

In addition, Ecotech has been awarded agency term contractor contracts with the FDEP in all three Florida regions for assessment and remediation work in the petroleum restoration program. The firm is negotiating assessment and remediation projects with the FDEP on 14 sites.

Notable projects include North Broward Preparatory School UST clean-out; Boca Raton Water Treatment Plant UST closure assessment; and site assessment and remediation in Jacksonville.

## EE&G



**EE&G will provide industrial hygiene services on this contract.** EE&G staff has been providing environmental consulting

and engineering services in Florida since 1986. Although EE&G was established in 2004, EE&G management and staff provided environmental consulting, engineering, contracting, and indoor air quality (IAQ) services since 1986 under Evans Environmental & Geological Science & Management, LLC.

A full-service environmental engineering consulting firm, EE&G's multidisciplinary team of professionals consists of geologists, environmental scientists, engineers, industrial hygienists, general and electrical contractors, hazardous materials managers, safety professionals, and asbestos analysts. EE&G is licensed and/or certified in Florida to provide services in geology, engineering, asbestos management and abatement, IAQ services and remediation, lead consulting, radon testing, and general contracting services.

The firm's asbestos management, consulting, testing, and laboratory services include building inspections; preparation of plans and specifications; contractor performance/compliance monitoring; air quality testing and operations and maintenance programs; transmission electron microscopy; polarized light microscopy; and phase contrast microscopy.

EE&G's lead-based paint services include building inspections; hazard assessment; abatement project design; abatement project supervision; air monitoring services; and operations and maintenance plans.

Notable projects include consulting/testing for asbestos and lead-containing materials prior to renovation upgrades of the Key West Waster Transfer Station; consulting/testing and oversight of removal of asbestos-containing materials from the former Key West City Hall and annex buildings prior to their demolition and eventual site redevelopment into a new fire station—as an Atkins subconsultant; and consulting, testing, and oversight of removal of asbestos/mold-impacted/lead-containing materials from the former Glynn Archer Elementary School prior to the conversion into the new Key West City Hall.

In addition, EE&G staff was contracted by the City of Key West to clean Smathers Beach and Rest Beach on a daily schedule. Since 2005, EE&G staff has been contracted by Monroe County to provide maintenance and beautification of Higgs Beach.

## Florida Keys Land Surveying)



**Florida Keys Land Surveying will provide surveying services on this contract.** Located in the lower Florida Keys, Florida Keys Land Surveying is a

land surveying firm serving Key West and the Florida Keys. The firm employs a team of land surveying professionals with more than 50 years of combined land surveying experience. Florida Keys Land Surveying is contracted with the City of Key West to provide ongoing surveying solutions. The firm has been providing land surveying solutions at the federal, state, county, city, and private level in the Florida Keys since 2010.

Notable projects include staking, topographic surveys, and as-built surveys for the current mitigation and airfield conversion projects at Naval Air Station Key West on Boca Chica Key; staking and as-built surveys for new sidewalk improvements in Key West including Atlantic Boulevard, Duck Avenue, Leon Street, Virginia Street, and College Road; staking and as-built survey for reconstruction of Flagler Avenue in Key West; design survey of existing sexton's office at the City of Key West Cemetery; and mapping of wetlands and environmentally sensitive areas in the lower Keys.

Florida Keys Land Surveying uses the latest in Trimble field surveying equipment technology including RTK GNSS systems, digital levels, robotic total stations, mechanical total stations, rotating laser levels, and total station DR technology.

# Ecology and regulatory permitting



Atkins has a long history of assisting clients through the maze of environmental regulations concerning waters of the U.S., including wetlands, threatened and endangered species, and water quality.

With technical experts in natural and life sciences including hydrology, botany, zoology, limnology and aquatic biology, terrestrial ecology, estuarine and marine science, and resource management, Atkins can support all your environmental needs. Our project experience includes natural systems in wetland, upland, riparian, marine, estuarine, and lake environments.

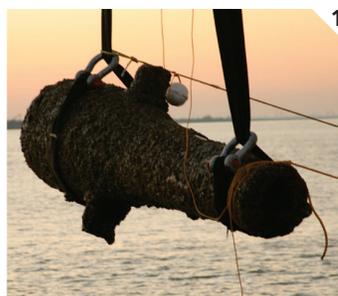
The firm is recognized for its ability to develop and implement comprehensive ecological restoration for a wide variety of natural resources including lakes, rivers, streams, estuaries, and wetlands. We incorporate a wide range of innovative strategies such as fish and wildlife management, pollution abatement using wetland

treatment, mitigation banking, monitoring, and adaptive management. In addition, we are frequently called upon to provide specialized expertise in such challenging areas as natural resource damage assessment, and expert witness services.

Atkins has an excellent reputation for developing efficient and innovative solutions to complex regulatory problems. We have extensive experience conducting research and investigations, and preparing studies and documents that comply with requirements of the Clean Water Act, Rivers and Harbors Act, Endangered Species Act (ESA), Clean Air Act, NEPA, National Historic Preservation Act, and numerous other federal, state, and local regulations.

## Areas of expertise

- Adaptive management
- Agency consultation
- Baseline and impact evaluation
- Biological and construction monitoring
- Cultural resource management
- Diving-related studies
- Ecosystem and habitat restoration
- ESA consultations
- Federal (Clean Water Act, Section 404) and state wetland delineation, permitting, and mitigation
- Information solutions and GIS
- Instream flow and other aquatic studies
- Mitigation bank design and permitting
- Mitigation planning and implementation
- NEPA compliance
- Single and multispecies habitat conservation plans
- Site constraints and due diligence studies
- Species surveys and habitat assessments
- Toxicology/bioassay studies
- Water quality monitoring



**1. Archeological recovery of the Civil War flagship USS Westfield,**  
Galveston Bay, TX

**2. Carabonton Dam Removal,**  
Johnston County, NC

Plan Design Enable

[www.atkinsglobal.com/northamerica](http://www.atkinsglobal.com/northamerica)

**For more information, contact:**  
Miami, FL: 800.597.7275

# Environmental hazards services

Atkins' EHG professionals work to develop programs to satisfy regulatory requirements in the most cost-effective and efficient manner possible.

The Atkins environmental hazards group (EHG) has extensive experience performing Phase I and II environmental site assessments (ESA), soil and groundwater investigations, underground storage tank (UST) closures, risk-based corrective action evaluations, corrective action plans for impacted sites, and design and implementation of remedial actions.

Our EHG staff also has vast experience working with state Superfund sites which includes compliance reporting, investigations, and remediation.

All EHG personnel are OSHA HAZWOPER trained and medically monitored. In addition to certified hazardous materials managers (CHMM) on staff, our professional geologists

and engineers are registered throughout the United States.

## Capabilities

- Due diligence property assessments (Phase I and II ESAs)
- UST management
- Remediation investigations, systems design, and implementation
- Brownfields site assessments
- Environmental management system (EMS) services
- Solid waste compliance and assessment monitoring
- Risk assessment and computer modeling
- Solid waste compliance and assessment monitoring

## Due diligence property assessments

Atkins' environmental professionals have performed thousands of Phase I ESAs across the country. Our experience includes undeveloped land, residential and retail properties, commercial developments, industrial facilities, and institutions.

As due diligence professionals, we strive to gain a full understanding of the client's needs and requirements during the acquisition or sale of their property, and are fully familiar with the American Society for Testing Materials (ASTM) Standard E 1527-05, Standard Practice for Environmental Site Assessment: Phase I ESA process, and the All Appropriate Inquiry (AAI)



# Environmental hazards services (continued)

rule. Atkins works with each client to better understand the purpose for the due diligence work, the client's tolerance for risk, and any specific needs or lender requirements.

## UST management

Throughout the southern and eastern United States, our professional experience includes closure of USTs (both in-place and removal), preparation of corrective action plans (CAP) as well as preparation of trust fund paperwork for reimbursement in various states, soil and groundwater investigations and required monitoring, and design and implementation of active remediation systems.

## Remediation investigations, systems design, and implementation

Atkins has provided services at a variety of sites involving hazardous materials impacts. Our experience includes facilities with releases of heavy metals, volatile organic compounds (VOC), pesticides and herbicides, polychlorinated biphenyls (PCB), and petroleum hydrocarbons, among others. Atkins' technical expertise, coupled with an intimate understanding of state and federal regulations, allows us to successfully navigate the regulatory maze for our clients.

## Brownfields site assessments

Atkins has a long and successful history of providing quality environmental assessment services to private and public-sector clients, particularly in the areas of hazardous/petroleum products assessment, environmental engineering, public involvement, and infrastructure planning and community redevelopment. Our reputation and our broad base of technical experience have made us a major player in the new and growing area of brownfields redevelopment.

## EMS services

Atkins' environmental management system services include the identification and analysis of workplace aspects/impacts, development of policies and procedures, and development and assessment of agency environmental objectives and targets.

In addition to our work with EMS program development, improvement, and assessment, our professionals perform environmental compliance assessments as well as aspect and impact identification. Our EMS services also include the preparation of hazardous waste stream and chemical inventory summaries.

## Solid waste compliance and assessment monitoring

Atkins provides a variety of services related to the operation and maintenance of industrial and municipal solid waste facilities. Services have involved the installation of deep monitoring wells and performance of Assessment of Corrective Measures reporting. Our staff is well versed in U.S. Environmental Protection Agency and Georgia Environmental Protection Division sampling and monitoring protocols.

Atkins understands that long-term monitoring plans represent a significant cost liability to our clients. We work to develop programs that satisfy regulatory requirements in the most cost-effective and efficient manner possible. We also apply our understanding of the complex regulatory environment to quickly identify potential problems and address these issues before they become long-term headaches.

### 1. Underground storage tank removal

### 2. Depth to water level monitoring



For more information, contact:

Miami, FL: 800.597.7275

# Seagrass services

# ATKINS

Atkins restores seagrass, estuarine, coastal, and marine habitats by incorporating environmentally responsible features that promote sustainability.

Seagrasses are flowering plants that are found from the mid-intertidal region down to depths of 50 to 60 meters in extremely clear water. Seagrass beds are complex systems whose physical structure is dominated by the leaves, roots, and detritus of the seagrasses themselves. They provide living space for large populations of invertebrates

and fishes as well as protection from predation.

Today the economic and environmental significance of seagrass is widely recognized. Many commercially and ecologically significant species within mangrove, coral reef, and continental shelf communities are linked with seagrass beds, which:

- Are a source of food and primary productivity.
- Decrease turbidity.
- Help stabilize the substrate.
- Improve water quality.
- Increase surface area for sessile plant and animal attachment.
- Provide a nursery for juvenile fish and crustaceans.



Plan Design Enable

Atkins has distinguished itself as a leader in the environmental community by providing responsible solutions to today's coastal management challenges. Our goal—based on our experience and expertise in coastal ecosystems as well as the mitigation and restoration of those systems—is to offer services that effectively address our clients' concerns and needs.

## Habitat restoration and mitigation

Dredging and filling activities, hull and prop damage by boating, water quality degradation, and other factors have caused large-scale declines in vital seagrass coverage. To prevent net habitat loss of seagrasses, habitat restoration and compensatory mitigation are essential steps for projects that result in seagrass impacts. Activities may include:

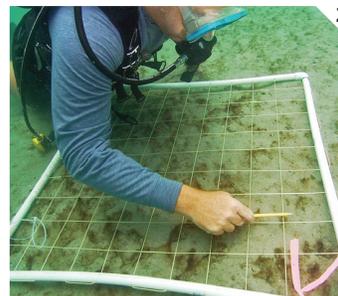
- Development of persistent cover.
- Generation of equivalent or increased acreage.
- Replacement with the same seagrass species.
- Restoration of secondary (faunal) production.

## Seagrass solutions

Atkins offers specialized expertise in seagrass analysis, protection, and restoration through our in-house team of qualified marine scientists, ecologists, geologists, archeologists, engineers, surveyors, and GIS specialists. Comprehensive seagrass services include the following:

- Baseline community studies
- Emergency response
- Environmental impact studies and assessments
- GIS mapping and data analysis
- Functional analysis and modeling
- Johnson's seagrass consultations
- Mitigation for unavoidable impacts
- Natural resource damage assessments
- Oil spill planning and management
- Regulatory assistance
- Restoration planning, design, and implementation
- Seagrass injury analyses
- Seagrass transplantation studies
- Ship-grounding and prop-scar evaluations
- Underwater corridor studies
- Water quality studies
- Watershed management

1. Sea turtle eating seagrass
2. Counting occupied cells in a quadrat to assess percent coverage
3. Transplantation in shallow water using a hookah
4. Ship grounded in shallow water



For more information, contact:

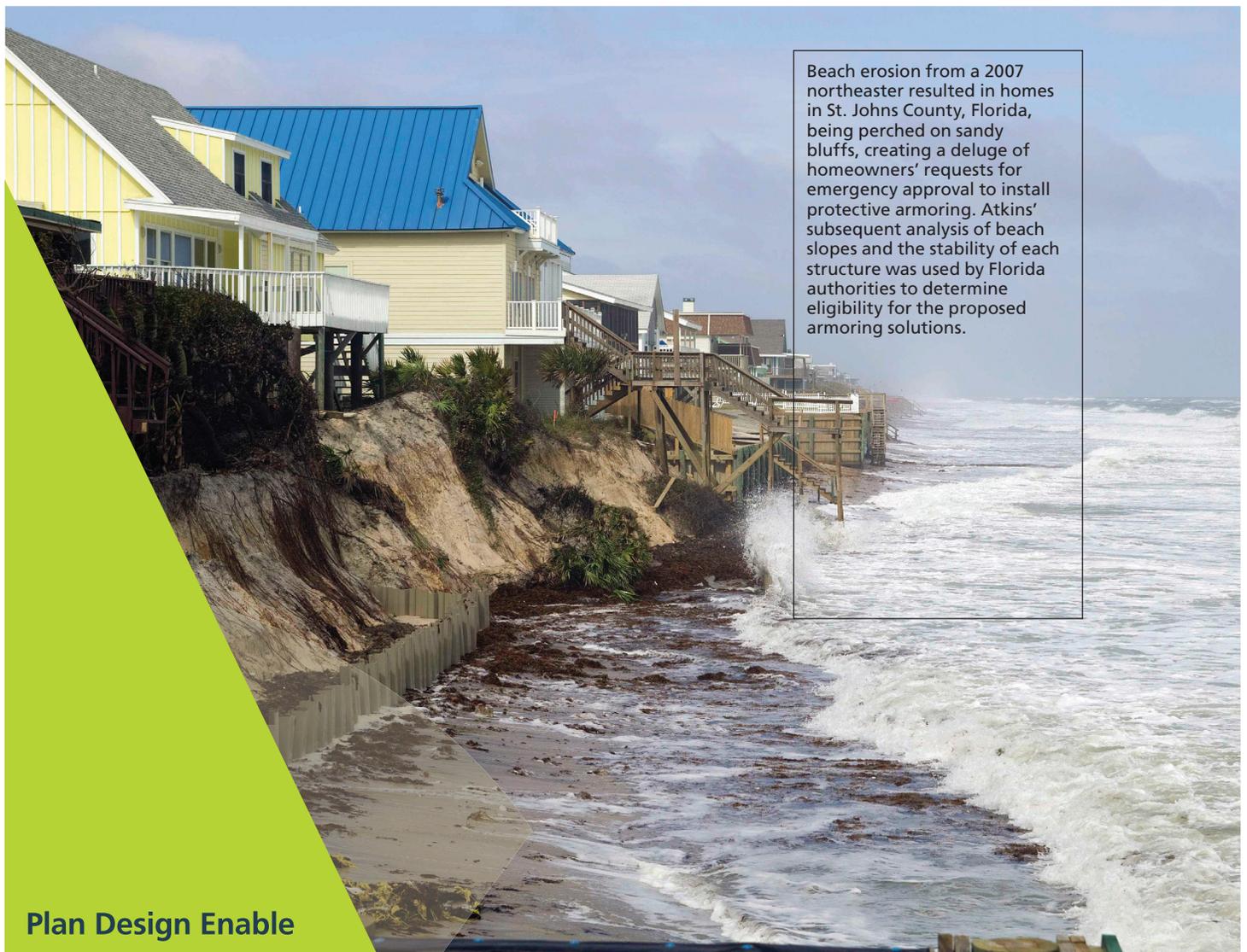
Miami, FL: 800.597.7275

# Post-storm coastal engineering services



Atkins' coastal and estuarine professionals are skilled in coastal zone policy, marine ecological sciences, resource assessment and permitting, hydrodynamic modeling, sediment transport, inlet dynamics, beach nourishment, mixing zone analyses, marine structures, ports, marinas, dredging, coral ecology, and mitigation.

Atkins utilizes multidisciplinary teams to solve problems, assigning experts in specific fields relevant to the needs of a multi-faceted program. By using this holistic approach, Atkins offers solutions that meet the complex criteria associated with projects in the coastal and marine environment. The coastal services group supports the disciplines of ocean engineering, coastal ecology, coastal zone management, coastal engineering, coastal oceanography, geology, marine structural engineering, and waterfront planning.



Beach erosion from a 2007 northeaster resulted in homes in St. Johns County, Florida, being perched on sandy bluffs, creating a deluge of homeowners' requests for emergency approval to install protective armoring. Atkins' subsequent analysis of beach slopes and the stability of each structure was used by Florida authorities to determine eligibility for the proposed armoring solutions.

# Post-storm coastal engineering services (continued)

## Damage assessments

Atkins prepares emergency response plans and deploys experts during emergencies to assess levels of damage, potential replacement costs, and matters requiring policy decisions.

## Structural inspections

Atkins conducts conditions surveys of damaged facilities and prepares detailed documentation for later use. Atkins makes recommendations for emergency actions, engineering evaluations, further inspections, and repair plans.

## Shore protection measures

Atkins conducts stability analysis of storm-impacted coastal areas and designs emergency stabilization and protection measures. Atkins offers design services to restore dunes, beaches, groins, breakwaters, stormwater outfalls, and revetments.

## Debris removal

Atkins performs environmental assessments, develops alternatives, assists with permitting, and provides design-build services for the emergency removal of storm debris.

## Federal Emergency Management Agency assistance

Atkins assists local governments with obtaining federal reimbursements by providing engineering and policy guidance, structural assessments, design, technical writing, planning, and environmental science.

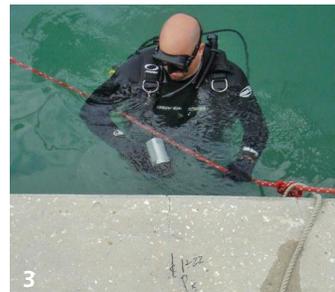
## Video/aerial assessments

Atkins conducts aerial videography and photographic surveys in support of damage assessments by air and land.

## Mitigation planning

Atkins assesses potential environmental impacts that could be caused by repairs to damaged marine structures. Atkins deploys scientific divers and field teams, develops alternatives, and prepares mitigation plans and permit applications.

1. **Anastasia Beach Restoration**, St. Augustine, Florida
2. **Shoreline Stabilization**, Naval Air Station PAX, Maryland
3. **Structural Evaluation**, Crandon Marina, Florida
4. **Post-Hurricane Aerial Videography**
5. **Titusville Pier Marine Structural Assessment**, Broward County, Florida
6. **Sea Oats Replanting**, St. Andrews State Park, Florida



# Piers and marine structural engineering

By applying an integrated approach during planning and design, Atkins' coastal specialists help to ensure the sustainable use and protection of piers and marine structures.

>

Atkins' engineers, planners, scientists, and policy experts are skilled in the areas of ocean fishing piers, coastal structures, and beaches and coastal programs. Our experience in the design, permitting, and construction of piers and other coastal structures includes Federal Emergency Management Agency (FEMA) public assistance programs—particularly in the performance of coastal structure damage assessments and assistance with grant identification, application, and management.

Atkins' waterfront improvement services are comprehensive and include the preparation of forensic structural assessments, repair plans, master plans, permitting, bathymetric and hydrographic surveying, computer modeling, and construction documents. This experience is backed by five decades of professional engineering, planning, scientific, and architectural accomplishments.



Atkins designed Navarre Beach Fishing Pier, the longest pier in the Gulf of Mexico, standing tall against Hurricane Isaac on August 28, 2012. Atkins' design replaced the original pier, which sustained significant damage during Hurricanes Ivan and Dennis.

# Piers and marine structural engineering (continued)

## Core services

### Structural conditions assessment

Atkins conducts topside and underwater surveys to rate structural conditions, either as a total unit or component by component. Extensive documentation is prepared for future reference and use.

### Structural evaluations

Atkins prepares and recommends action options for emergency actions, engineering evaluations, further inspections, and repair plans.

### Remedial repair and replacement plans

Atkins determines the need for repairs based upon the remaining service life of the structural elements. When the expected service life of a repair program is less than 5 years, a replacement program may be recommended.

### Coastal engineering analysis

Atkins conducts coastal engineering analyses to determine the wave heights and forces affecting marine structures.

### Permitting

Atkins works closely with state and federal agencies to anticipate permit review issues and questions, addressing these items up front to expedite the permitting process.

### FEMA damage assessments

Atkins helps to facilitate the application for FEMA funds by preparing detailed damage assessments.

### Coordination of design with marine contractors

Atkins coordinates early in projects with marine contractors on design elements, construction techniques, and specifications to make sure plans are cost-effective and constructable.

### Detailed construction plans and bid documents

Atkins prepares detailed construction plans, specifications, and bid documents, with appropriate forms, to facilitate quality contractor selection.

### Construction services

Atkins provides full-time construction management services for the duration of construction.

## Representative projects

- Crystal Pier, City of San Diego, California
- Cruise and Cargo Piers, Port Canaveral, Florida
- Okaloosa Island Fishing Pier, Fort Walton Beach, Florida
- Windmark Fishing Piers, Gulf County, Florida
- South Pointe Park Pier, City of Miami Beach, Florida
- St. Augustine Beach Fishing Pier, St. Johns County, Florida
- Jacksonville Beach Fishing Pier, Jacksonville, Florida
- Mega Yacht Pier, Peter Island, British Virgin Islands
- Torpedo Factory Pier, Alexandria, Virginia
- Berthing Pier, Hess Oil, St. Croix, U.S. Virgin Islands
- Cruise Ship Pier, Newport News, Virginia
- Berthing Facilities, Premier Cruise Lines, Bahamas
- Cruise Ship Pier, St. Croix, U.S. Virgin Islands
- Cruise Ship Pier Improvements, St. Thomas, U.S. Virgin Islands
- Tender Pier, Royal Caribbean Cruise Lines, Haiti
- U.S. Navy Pier D Improvements, Key West, Florida
- Pier Three, Umm Qasr, U.S. Navy, Iraq
- Naval Air Station Patuxent River Pier, U.S. Navy, Maryland

1. **Crystal Pier**  
San Diego, California
2. **Jacksonville Fishing Pier**  
Jacksonville, Florida
3. **Okaloosa Island Fishing Pier**  
Fort Walton Beach, Florida



## B. Project Team



## B. Project Team

Atkins provides clients with a multidisciplinary team approach to problem solving, assigning experts in specific fields relevant to the needs of a multifaceted program.

Paramount to achieving project success is assembling a strong project team that can efficiently and effectively support the City. We have accomplished this with team members who have the qualifications and experience to perform all anticipated work. Each brings a proven track record and the capacity to maintain aggressive schedules and produce excellent results. Our team members have been chosen so that one or more experts are available to respond to every project and ensure that the City receives the full array of expertise required by the scope of work. In addition, Atkins' proposed team members are technical professionals with proven capabilities, providing solutions for the many diverse challenges faced by clients today.

Atkins' staff is large, diverse, and able to expand and contract, as needed, for cost-effective support. We commit to the City that this contract will receive the necessary resources, personnel, and equipment to effectively execute the work required.

Atkins has assembled an experienced project team that will provide the City with exceptional services. These professionals are highly qualified in their respective work areas and have worked together on similar projects over the past several years. A graphical representation of our proposed team members, roles, and reporting structure is provided in the organizational chart (Figure 1) on page 23.

Our coastal planners, engineers, scientists, surveyors, and construction services personnel understand the intricacies associated with environmental engineering and coastal engineering projects, as well as the critical need to work together seamlessly to achieve timely execution.

### Organizational chart

The success of any project depends largely upon the degree of expertise held by the project team and the team's ability to manage and execute the work at hand within a logical and functional organizational structure. The Atkins team's structure and delineation of responsibilities are illustrated in our organizational chart.

The organizational structure focuses on project control and technical excellence, incorporating clean and simple lines of communication. The structure also allows for:

- A unified team operating under the overall direction of a well-defined management team.
- Distinct divisions among various disciplines to prevent duplication of effort.

**We commit to the City that this contract will receive the necessary resources, personnel, and equipment to effectively execute the work required.**

- Assignment of technically skilled specialists and senior managers for strong direction and project oversight.
- A structure that allows flexibility in the project team's responses to project demands without losing sight of the City's overall goals.

Key team member highlights are provided in the following paragraphs. Full resumes are provided in the appendix.

### Atkins

#### Adam Gelber

##### Principal-in-charge and biological/permitting



Adam Gelber has 20 years of experience and has been involved in all forms of environmental consulting, assisting clients with scientific investigation, planning, permitting, compliance, advocacy, public involvement, and public policy. His core focus is to guide clients

through the maze of various local, state, and federal permits including wetlands, hardbottom, coral, and seagrass planning, design, and construction compliance monitoring as well as long-term monitoring. Mr. Gelber has logged more than 3,000 scientific and recreational dives. His project experience includes projects in Florida—including Key West, Texas, Grand Cayman, Bahamas, and Dominican Republic. Key West projects include Smathers Beach JCP renewal, Smathers Beach seagrass transplantation, and Cow Key Channel seagrass restoration. Mr. Gelber served as a biological technician for 5 years with the National Park Service (NPS) at Biscayne National Park.

#### W. Mark Henry

##### Project manager, biological/permitting, and environmental engineering



W. Mark Henry has 20 years of experience in environmental fieldwork, permitting, and project management. This experience involves hazardous waste and ecological sciences work performed for federal, state, and county agencies as well as private-

sector clients. His hazardous waste projects have included contamination assessment and remediation, Phases I and II ESAs, and groundwater and soil remediation systems. He has also performed permanent and temporary groundwater monitoring well installations, soil and groundwater sampling, UST removals, contaminated soil/sludge excavations and removal, and servicing and repairing air stripping towers, soil vapor extraction units, and thermal catalytic oxidizers. Mr. Henry has written and submitted tank closure assessment reports, contamination assessment plans, contamination site assessment reports, and remedial action plans.

Mr. Henry's ecological sciences projects have included seagrass surveys; hardbottom benthic habitat assessments; coral and seagrass transplantations; beach renourishment and monitoring; wetland delineations; compensatory mitigation analysis and design for marine, coastal, and freshwater systems; upland habitat evaluations; and gopher tortoise surveys. Along with fieldwork, construction oversight, and document preparation, his involvement has included obtaining permits from county, state, and federal agencies including Class I and Class IV wetland permits and environmental licenses with Miami-Dade and Broward counties, JCPs with FDEP, and Department of the Army permits with the U.S. Army Corps of Engineers (USACE).

Mr. Henry has managed hazardous waste and ecological sciences projects for the private sector, government agencies, and municipalities, including the City of Key West, with a focus on project performance, cost management, and client satisfaction. For the past 5 years, Mr. Henry has served as project manager for all environmental and coastal projects Atkins has conducted under Contract No. 11-051 for environmental consulting services, working closely with City project managers. As project manager, he has been responsible for coordinating and preparing scopes and budgets, allocating staff resources, communicating with agencies, permitting, implementing projects, performing project controls, and invoicing.

In addition, as Atkins' environmental project manager to the City of Miami, his responsibilities included providing technical and project management assistance to the City's Capital Improvements Program (CIP). He reviewed documents prepared by subconsultants to be submitted on behalf of the City, attended/chaired meetings with the City and subconsultants, attended meetings with other stakeholders and the public, and reviewed and approved subcontractor invoices.

### **Ken Jones, PE** **Engineering quality assurance/quality control (QA/QC)**



Ken Jones provides technical and management supervision of ports and coastal engineering, environmental permitting, and planning projects for Atkins. He also provides technical guidance throughout the firm in the field of physical/coastal oceanography. As a chief technical expert in this area, he is responsible for the design and direction of complex efforts in the coastal zone. Mr. Jones

has 30 years of experience in consulting and government positions, performing project development, design, permitting, construction management, water resources analyses in river and estuarine systems, and multidisciplinary studies in coastal and estuarine systems.

### **Donald Deis, CEP** **Biological QA/QC**



Donald Deis is a certified environmental professional with more than 36 years of experience in the environmental science field. His areas of interest include environmental evaluation, assessment, and monitoring of marine, estuarine, and coastal projects; restoration of estuarine and marine ecosystems; and environmental rules and regulation. Mr. Deis has experience in evaluation (modeling) and assessment (monitoring) of restoration projects. He has a keen understanding of mitigation program development through impact and mitigation scaling. Mr. Deis has extensive experience in the restoration of estuarine, coastal, and marine habitats and unique experience in seagrass and coral reef restoration. He assisted with development of the biological monitoring plan and participated in data collection for the Smathers Beach renourishment project. Mr. Deis is a member of the Estuarine Research Federation (ERF) and National Association of Environmental Professionals (NAEP), and serves as board president of the Academy of Board of Certified Environmental Professionals (ABCEP).

### **Stacey Roberts, EI** **Biological/permitting**



Stacey Roberts offers more than 13 years of experience with coastal/marine projects. Her experience has focused on many aspects of coastal construction such as beach nourishment, inlet maintenance, construction and maintenance of coastal structures, and innovative coastal erosion technologies. Ms. Roberts is a member of Atkins' scientific dive team. She is well-versed in coastal zone management, policy, water quality, and assessment and monitoring of submerged marine resources. Ms. Roberts played a lead role in development of the best management practices manual for coastal construction in sensitive marine environments in southeast Florida.

### **Leslie Manzello** **Biological/permitting**



Leslie Manzello has been working as an environmental scientist in south Florida for 8 years. Her areas of expertise include seagrass restoration/mapping, coral reef monitoring and mitigation, and water quality monitoring programs. Ms. Manzello has logged more than 500 scientific and recreational dives, and the majority of her work efforts have been concentrated throughout Florida. She has been supporting our services for the City of Key West for Smathers Beach and Rest Beach current assignments.

**Beth Zimmer****Biological/permitting**

Beth Zimmer has been working as a staff scientist in the environmental field for more than 13 years in the private sector. Her work experience covers an array of services from National Environmental Policy Act (NEPA) documentation to seagrass and coral

mitigation and monitoring. Ms. Zimmer has been involved in several Key West projects including Smathers Beach renourishment monitoring, Key West Bight Ferry Terminal benthic assessment, Key West Bight Ferry Terminal floating dock benthic assessment, and Rest Beach baseline biological assessment.

**Bryan Flynn, PE****Coastal engineering**

Bryan Flynn has 11 years of experience in coastal engineering, project management, hydrographic surveying, computer-aided design (CAD), permitting, engineering drawings, construction administration, and staff supervision on projects involving beach

nourishment, coastal monitoring, dredging and navigation, permitting, and shoreline protection and restoration. Mr. Flynn served as a coastal engineer responsible for analyzing beach survey data and calculating beach change characteristics for engineering monitoring reports of the beach nourishment project along the Smathers Beach shoreline.

**Todd DeMunda, PE****Coastal engineering**

Todd DeMunda is a coastal engineer with 8 years of experience in research and applied engineering, serving private and public clients across the United States in the fields of coastal engineering, hydrodynamic and morphological numerical modeling, beach and

shoreline protection, and hydrodynamic data collection and analysis. This specialized skill set has allowed Mr. DeMunda to support projects such as marshland restoration, beach management plans, wave and circulation modeling, and shore protection design and optimization. Accomplished in Matlab programming for engineering, modeling, and data analysis, he has extensive experience developing two- and three-dimensional hydrodynamic, wave, and sediment transport models using several modeling suites including ADCIRC, SWAN, Delft3D, STWAVE, WAM, PTM, and EFDC.

**William Pitcher, PE****Marine structural engineering**

William Pitcher has 39 years of experience in civil and marine structural engineering including planning, design, permitting, construction engineering and inspection (CEI), construction management, contract administration, value engineering, construction

QA, and construction claims avoidance and claims mitigation. Mr. Pitcher is also responsible for implementing and monitoring Atkins' structural QC program for seaports, marine, coastal, and waterfront projects. During his career, Mr. Pitcher has been involved with the preparation of bid documents for construction of steel sheet pile bulkheads and pile-supported open-wharf structures, ocean fishing piers, shoreline protection systems, waterfront parks, marinas, boat ramps and seawalls, jetties and groin construction, channel deepening, and spoil disposal. He also is a well-recognized expert witness in cases involving marine structures.

**Samuel Smith, PE****Marine structural engineering**

Samuel Smith's experience includes performing design and analysis calculations; preparing condition evaluation reports; performing structural inspections; and developing details, plans, and cost estimates for various structural marine and environmental engineering

projects. Specific structures include seawalls, wharves, docks, piers, bridges, pump stations, and water treatment plants.

**Bradley Bayne, PG****Environmental engineering**

Bradley Bayne has 24 years of experience in scientific and technical analyses, program development, environmental consulting, and project management including more than 22 years of experience working on environmental projects. He has successfully completed tasks

involving contamination assessment, remedial action design, hydrogeologic site characterization, regulatory compliance, risk assessment/management, waste management and characterization, wastewater permitting, asbestos consulting, and field work. Mr. Bayne assists Mr. Henry with review and technical support for groundwater monitoring and remediation at the City of Key West's former City Hall site. He has provided report reviews and cost estimates for site remediation.

**Roberto Mantecon, PSM****Surveying**

Roberto Mantecon has 36 years of experience in conducting and managing projects for transportation facilities and infrastructure, performing beach profiles and boundary, GIS, construction layout, geodetic control, hydrographic, right-of-way, route, sectional,

cadastral, and topographic surveys in the Florida Keys, Caribbean, and throughout Florida. He also has in-depth knowledge of CAD and global positioning system (GPS) surveys. Mr. Mantecon directed the survey engagement for the continuous renourishment of Smathers, Rest, and Dog Beaches in Key West.

**Michael Ryan, PE, PMP****Bidding and construction administration**

Michael Ryan has 14 years of construction oversight, program and project management, and facility operations management experience. His duties with Atkins include managing conventional engineering projects involving various elements such as right-of-

way surveys; regulatory approvals and permits; mitigation plans; cost estimating; scheduling; and construction phase services. Mr. Ryan organizes field observation and monitoring of contractors' substantial compliance with contracts so that project quality, cost control, and established completion schedule are met by the contractor.

**Matthew Starr****Bidding and construction administration**

Matthew Starr has 8 years of coastal engineering experience involving construction oversight, hydrographic surveys, data collection, vibracoring, water quality monitoring, ground-penetrating radar, and side scan sonar. Mr. Starr's duties include GIS

mapping (ArcMap 10.1), AutoCAD Civil 3D, construction and restoration plans, design calculations, data collection and analysis, construction bidding and contractor procurement, and field operations including all vessel operations. For a Collier County truck haul beach renourishment project, Mr. Starr's responsibilities included construction oversight, permit compliance, sediment analysis review, turbidity oversight, and as-built profile review.

**Janet Luce****Bidding and construction administration**

A senior technical coordinator with more than 26 years of experience, Janet Luce's experience includes beach renourishment, coastal flood studies, waterway management, disaster response operations, derelict and at-risk vessels, waterway markers, vessel

traffic studies, regulatory permitting, public outreach, and

environmental impact analyses. Ms. Luce is involved in programs for community resiliency and climate adaptation. She is proficient in GIS and developing mobile-GIS applications for geospatial data field collection. Ms. Luce is also a member of the Atkins scientific dive team. For the Smathers Beach renourishment project, Ms. Luce provided construction monitoring of beach renourishment construction activities.

**Subconsultants****Robert Orlando****Environmental engineering – geotechnical**

Robert Orlando co-founded Earth Tech Drilling in 2002. His focus is building and maintaining client relationships and overall management of the company. His duties include contracts, permitting, staffing, and safety procedures.

**Michael Orlando****Environmental engineering – geotechnical**

Michael Orlando co-founded Earth Tech Drilling in 2002 and has 16 years of experience in the environmental/geotechnical drilling field as well as multiple types of drilling projects, services, field supervision, and QA. He is responsible for equipment maintenance, safety

management, and crew supervision. Mr. Orlando has a Florida water well contractor license.

**Timothy Dehen, PG****Environmental engineering – UST removal and remediation construction**

Timothy Dehen, a Florida professional geologist and pollutant storage systems specialty contractor, has 26 years of experience including 22 years of Florida petroleum cleanup experience and 24 years of active environmental remediation experience.

Prior to forming Ecotech, Mr. Dehen worked for three large environmental consulting/contracting firms and two environmental drilling companies in Florida. His experience at these companies included site assessments, transactional audits, tank/source removals, dewatering projects, fate and transport analysis, various drilling technologies, remedial construction management, and negotiations with regulatory agencies. Clients for which Mr. Dehen directly performed environmental services included FDEP, Florida Department of Transportation, Department of Defense, Mobil Oil Company, Phillips Petroleum, Amoco, BP Oil Company, El Paso Energy, General Development Company, and GE Capital.

**Hiram Aguiar****Environmental engineering – industrial hygiene**

Hiram Aguiar has 20 years of experience as project manager for several large environmental projects including government and military facilities, public and private educational facilities, hospitals and medical facilities, private construction, and commercial

development. He has inspected hundreds of facilities for asbestos-containing materials and lead-based paint. These facilities ranged from a few hundred square feet to hundreds of thousands of square feet in area. Mr. Aguiar has been directly involved with coordination and management of hazardous waste emergency response actions.

**Mark Skweres****Environmental engineering – industrial hygiene**

Mark Skweres has more than 15 years of experience managing environmental projects. He has been responsible for overseeing emergency response projects involving third-party liability reduction and environmental health and safety. Mr. Skweres has conducted

hundreds of IAQ assessments involving occupant complaints; physical water-related and humidity-driven concerns related to mold; and building pressurization issues.

**Jay Sall, CIH, LAC****Environmental engineering – industrial hygiene**

Jay Sall has more than 27 years of experience in the recognition, evaluation, and control of hazards in the workplace. He is a recognized expert in industrial hygiene including exposure to various physical and chemical agents with emphasis on IAQ and microbial remediation.

Mr. Sall has served as an expert witness in several legal cases involving chemical and biological exposures. He has conducted more than 1,000 asbestos assessments dating from 1987. Mr. Sall has designed and conducted asbestos training classes as mandated by U.S. EPA regulations as well as required by OSHA. He has developed and conducted various assessments for the presence of lead and other heavy metals in paint and other applied coatings. Mr. Sall has served as project manager for more than 500 IAQ investigations for public and private clients.

**Matthew Blomberg****Surveying**

With 18 years of land surveying and construction project management experience, Matthew Blomberg has an extensive background in all aspects of land surveying. He has a thorough knowledge of boundary surveys, topographic surveys, construction

layouts, house stakeouts, subdivision stakeouts, ALTA surveys, and general construction practices. Mr. Blomberg has experience with AutoCAD, Land Desktop, Carlson Survey, and AutoCAD 2012 Civil 3D. Projects include staking, layout, and as-built survey of the Key West Courthouse complex; mapping of wetlands and environmentally sensitive areas in the lower Keys; and 5<sup>th</sup> Street topographic survey for City of Key West Engineering Services.

**Eric Isaacs, PSM****Surveying**

Eric Isaacs has been involved in the land surveying industry for 22 years. He has a thorough knowledge of all aspects of the land surveying industry including boundary surveys, topographic surveys, construction layouts, house stakeouts, subdivision

stakeouts, ALTA surveys, and general construction practices. Mr. Isaacs is certified by Trimble for advanced RTK procedures and has extensive experience with robotic total stations, GPS/GNSS, AutoCAD Civil 3D, Trimble Geomatics Office, Trimble Access, and Tripod Data Systems – Survey Pro. Projects include Indigenous Park topographic survey including wetlands mapping, Key West; as-built surveys of beach restoration projects, Key West (Rest Beach, Dog Beach, and South Beach); and mapping of wetlands and environmentally sensitive areas in the lower Keys.

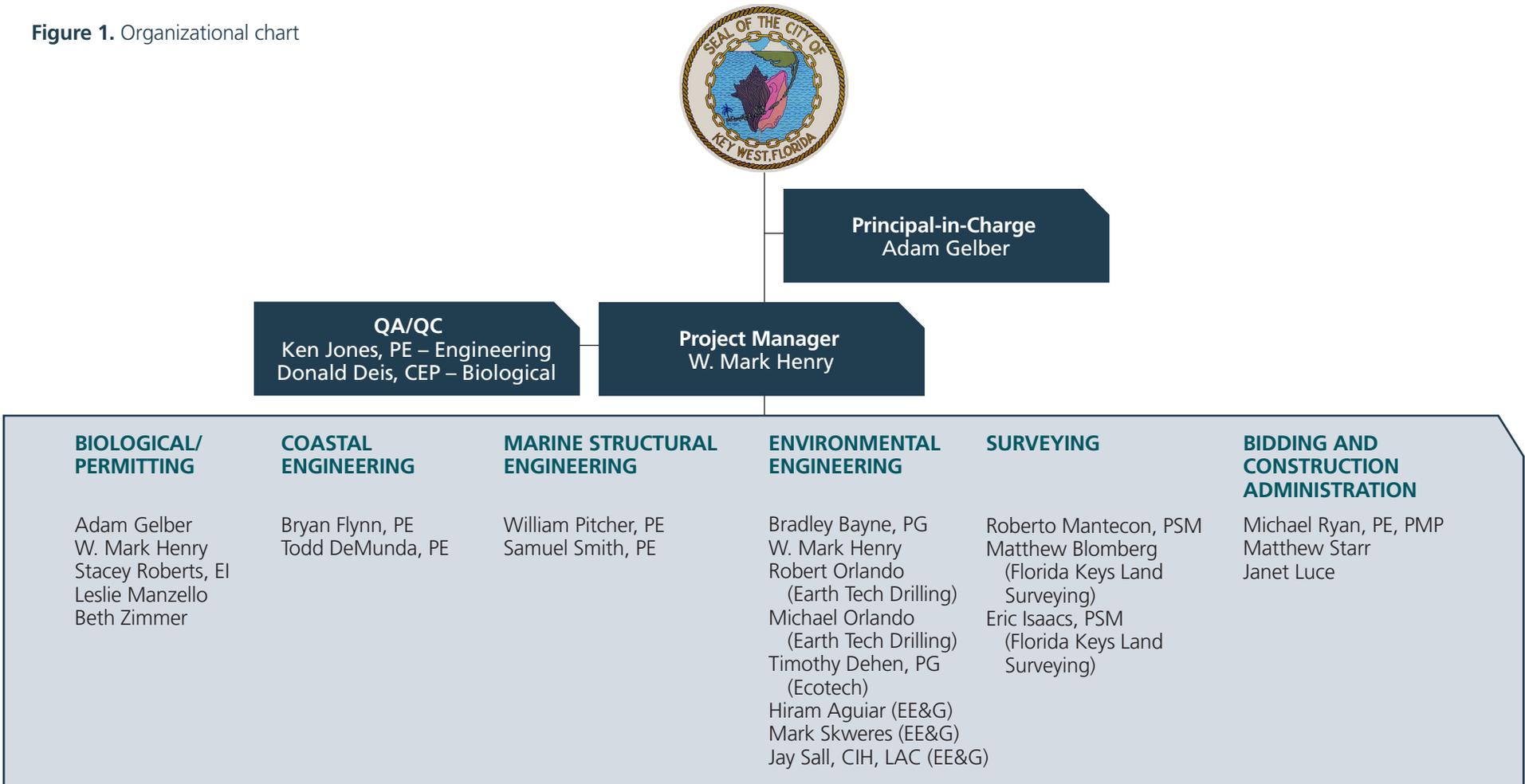
**Demonstration of key personnel expertise in listed disciplines**

Table 2 on page 24 demonstrates our key personnel's expertise in the listed disciplines.

**Names, job classifications, and qualifications of engineering personnel who will be assigned to perform services of this contract**

Table 2 includes our team members' names and job classifications, including those of our engineering personnel. Our team members' resumes, which include their qualifications, are included in the appendix.

Figure 1. Organizational chart



Unless otherwise noted, team members are Atkins employees.

Table 2. Demonstration of key personnel expertise in listed disciplines  Team member – project role(s) Job classification	Environmental engineering services				Coastal engineering services								
	Contaminated site investigation and remediation services	Industrial hygiene services	UST site services	Real estate development support services	Planning	Surveying	Engineering/design	Permitting	Construction administration/owner project representation	Coastal facilities	Bid assistance	Environmental assessments	Maintenance of beaches
Adam Gelber – principal-in-charge and biological/permitting Senior Manager/Senior Scientist	•			•	•		•	•	•			•	•
W. Mark Henry – project manager, biological/permitting, and environmental engineering Project Manager/Senior Scientist	•	•	•	•	•			•	•		•	•	•
Ken Jones, PE – engineering QA/QC Sector Manager					•		•	•	•	•	•	•	•
Donald Deis, CEP – biological QA/QC Principal Technical Professional	•		•	•	•		•	•	•		•	•	•
Stacey Roberts, EI – biological/permitting Senior Manager					•		•	•	•	•	•	•	•
Leslie Manzello – biological/permitting Senior Scientist					•			•	•			•	•
Beth Zimmer – biological/permitting Senior Scientist	•				•			•				•	•
Bryan Flynn, PE – coastal engineering Senior Manager	•				•	•	•	•	•	•	•		•
Todd DeMunda, PE – coastal engineering Senior Engineer					•		•	•	•	•	•		
William Pitcher, PE – marine structural engineering Project Director					•		•		•	•	•		
Samuel Smith, PE – marine structural engineering Senior Engineer					•		•	•	•	•	•		
Bradley Bayne, PG – environmental engineering Senior Scientist	•	•	•	•									
Roberto Mantecon, PSM – surveying Principal Technical Professional						•							
Michael Ryan, PE, PMP – bidding and construction administration Senior Technical Manager									•		•		
Matthew Starr – bidding and construction administration Scientist					•		•	•	•		•		
Janet Luce – bidding and construction administration Senior Technical Coordinator					•			•	•		•	•	•
Robert Orlando – environmental engineering – geotechnical Geotechnical	•		•										
Michael Orlando – environmental engineering – geotechnical Geotechnical	•		•										
Timothy Dehen, PG – environmental engineering – UST removal and remediation construction Contamination specialist			•										
Hiram Aguiar – environmental engineering – industrial hygiene Contamination specialist		•											
Mark Skweres – environmental engineering – industrial hygiene Contamination specialist		•											
Jay Sall, CIH, LAC – environmental engineering – industrial hygiene Contamination specialist		•											
Matthew Blomberg – surveying Surveyor						•							
Eric Isaacs, PSM – surveying Surveyor						•							

## Resumes

Our team members' resumes are included in the appendix. Table 3 below provides the page number for each resume.

**Table 3.** Team members' resumes

Team member	Role(s)	Page number
Adam Gelber	Principal-in-charge and biological/permitting	77
W. Mark Henry	Project manager, biological/permitting, and environmental engineering	80
Ken Jones, PE	Engineering QA/QC	83
Donald Deis, CEP	Biological QA/QC	85
Stacey Roberts, EI	Biological/permitting	87
Leslie Manzello	Biological/permitting	89
Beth Zimmer	Biological/permitting	91
Bryan Flynn, PE	Coastal engineering	93
Todd DeMunda, PE	Coastal engineering	95
William Pitcher, PE	Marine structural engineering	97
Samuel Smith, PE	Marine structural engineering	99
Bradley Bayne, PG	Environmental engineering	100
Roberto Mantecon, PSM	Surveying	102
Michael Ryan, PE, PMP	Bidding and construction administration	104
Matthew Starr	Bidding and construction administration	106
Janet Luce	Bidding and construction administration	108
Robert Orlando	Environmental engineering – geotechnical	110
Michael Orlando	Environmental engineering – geotechnical	111
Timothy Dehen, PG	Environmental engineering – UST removal and remediation construction	112
Hiram Aguiar	Environmental engineering – industrial hygiene	113
Mark Skweres	Environmental engineering – industrial hygiene	114
Jay Sall, CIH, LAC	Environmental engineering – industrial hygiene	116
Matthew Blomberg	Surveying	118
Eric Isaacs, PSM	Surveying	119

## C. Similar Project Experience



C. Similar Project Experience

## C. Similar Project Experience

The Atkins team has the requisite experience and technical skills to fully support this contract.

### Specialized experience and technical competence in listed disciplines and relevant experience in the past 5 years

Atkins and our proposed team offer a tremendous range and extent of environmental and coastal engineering experience to support a variety of projects.

Atkins has significant experience coordinating certification of specialty items for environmental permitting such as JCPs, Coastal Construction Control Line permits, and environmental resource permits (ERP). Much of this expertise was achieved

during our 12 years of service to the FDEP Bureau of Beaches and Coastal Systems (BBCS) under a general engineering services contract. That contract, along with several other relevant projects, is described in this section.

Tables 4a and 4b on the following pages demonstrate our team's specialized experience and technical competence in the listed disciplines. The projects listed in the tables also demonstrate our team's relevant experience over the past 5 years. Highlights of these projects are provided on the pages following Table 4b.



Atkins served as the FDEP BBCS general coastal engineering consultant from 1997 to 2009.

**Table 4a.** Our team's specialized experience and technical competence in environmental engineering services

Relevant projects	Page number	Environmental engineering services			
		Contaminated site investigation and remediation services	Industrial hygiene services	UST site services	Real estate development support services
City of Key West Phase I ESAs for Angela Street City Hall and City Hall Annex Buildings, Key West, FL	36		●		●
City of Key West City Hall Site Assessment Report Addendum, Key West, FL	37	●		●	
Florida Gas Transmission Phase VIII Expansion Permit Support, Mitigation, and Compliance Services, Various Counties, FL and AL	51	●			●
Two Walgreens Site Assessments, Vero Beach and Miami Shores, FL	52	●			●
UST Removal, Tank Closure Assessment Report, and Groundwater Monitoring, Ireland's Inn, Fort Lauderdale, FL	53	●		●	●
City of Miami Springs Groundwater Sampling, Golf and Country Club, Miami Springs, FL	54	●			●
Seminole Tribe of Florida Phase I ESA, Davie, FL	55	●	●		●
City of Palmetto Police Department Assessment and Monitoring, Palmetto, FL	56	●		●	●
436 Cleaners Site Assessment, Remediation, and Monitoring, Casselberry, FL	57	●			●
City of Miami Beach Maurice Gibb Memorial Park Soil Investigation, Miami Beach, FL	58	●		●	
Key West Waste Transfer Station, Stock Island, Key West, FL	59		●		
Former Glynn Archer Elementary School/Future Key West City Hall Site, Key West, FL	60		●		

**Table 4b.** Our team's specialized experience and technical competence in coastal engineering services

Relevant projects	Page number	Coastal engineering services								
		Planning	Surveying	Engineering/design	Permitting	Construction administration/ owner project representation	Coastal facilities	Bid assistance	Environmental assessments	Maintenance of beaches
FDEP GEC (1997–2009), Statewide, FL	30	●		●	●	●			●	●
City of Key West Smathers Beach Nourishment Project Permitting, Construction Management, Restoration, Bathymetry, and Biological Monitoring, Key West, FL	31	●	●	●	●	●		●	●	●
Collier County 2013 Truck Haul Beach Nourishment CEI and Third-Party QA/QC, Collier County, FL	32		●	●		●		●		●
City of Key West Rest Beach JCP, Key West, FL	33	●	●	●	●				●	●
City of Key West Bight Ferry Terminal, Key West, FL	34								●	
City of Key West Sunrise Canal Benthic Resource Survey, Key West, FL	35								●	
City of Key West FEMA Appeal, Key West, FL	38	●								●
FDEP Fort Zachary Taylor Historic State Park Permitting and Coral and Seagrass Mapping, Key West, FL	39	●	●	●	●				●	●
NPS Seagrass Habitat Restoration Management Plan and NEPA Compliance Document, Florida Bay, Everglades National Park, FL	40				●				●	
Martin County St. Lucie Inlet Federal Navigation Project/Hardbottom Long-Term Monitoring (Program Support and Reef Monitoring), Martin County, FL	41	●	●	●	●	●		●	●	●
City of Miami Beach South Pointe Park Pier Coral Relocation, Artificial Reef, Planning, and Permitting, Miami Beach, FL	42	●	●	●	●	●	●	●	●	
Miami-Dade County Coastal Engineering Services, Miami-Dade County, FL	43	●		●						●
Sarasota County Bird Colony Island Shoreline Protection and Coastal Engineering Services, Roberts Bay, Sarasota, FL	45	●	●	●	●	●				

**Table 4b.** Our team's specialized experience and technical competence in coastal engineering services

Relevant projects	Page number	Coastal engineering services								
		Planning	Surveying	Engineering/design	Permitting	Construction administration/ owner project representation	Coastal facilities	Bid assistance	Environmental assessments	Maintenance of beaches
Miami-Dade County Seaport Department Wharves I–VII Underwater Inspections, PortMiami, FL	46			●		●	●			
City of Miami Bicentennial Park Seawall Investigation – Study Area 1, Miami, FL	47		●	●		●	●	●	●	
Miami-Dade County American Airlines Arena Shoreline Stabilization, Parcel B, Miami-Dade County, FL	48		●	●		●	●	●	●	
Canaveral Port Authority Northside Cargo Pier Evaluations, Port Canaveral, FL	49		●	●		●	●	●	●	
FEMA Coastal Flood Hazard Analyses, Strategic Alliance for Risk Reduction (STARR) Joint Venture (JV), FEMA Regions I, V, and X	50	●		●		●				
Florida Gas Transmission Phase VIII Expansion Permit Support, Mitigation, and Compliance Services, Various Counties, FL and AL	51	●			●				●	
City of Key West Smathers and Rest Beaches, Key West, FL	61	●								●
City of Key West Carsten Lane Specific Purpose Survey, Key West, FL	62		●							
City of Key West Specific Purpose Survey Sketch to Illustrate Submerged Land Lease Areas of Garrison Bight, Key West, FL	63		●							

## FDEP GEC (1997–2009), Statewide, FL

For more than a decade, Atkins served FDEP's BBCS through a general engineering services contract. Acting as FDEP staff, Atkins professionals were responsible for processing JCP applications from permit issuance to project construction and completion to confirm permit compliance. Atkins provided full-time, in-house staff to manage and process JCP applications for more than 8 years. A JCP is required for any project that meets all of the following criteria:

- Located on Florida's natural sandy beaches facing the Atlantic Ocean, Gulf of Mexico, Straits of Florida, or associated inlets
- Extends seaward of the mean high water line
- Extends into sovereign submerged lands
- Likely to affect the distribution of sand along the beach

Types of projects requiring JCPs include the following:

- Beach restoration and nourishment
- Construction of erosion control structures such as groins and breakwaters
- Construction and maintenance of public fishing piers
- Maintenance of inlets and inlet-related structures
- Dredging of navigation channels that contain beach-quality sand

Atkins staff coordinated with USACE as the applicant and with several other state and federal agencies, such as FWC, Florida State

Clearinghouse, Department of Historical Resources, U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), local port authorities, and county and local government officials.

When a project was contentious, BBCS relied heavily on Atkins staff to manage it. Atkins managed the majority of projects that have been elevated to the governor and cabinet for approval including the Broward County Shore Protection, Stump Pass Channel Realignment, and application for the reopening of Midnight Pass. BBCS counted on Atkins to effectively and efficiently process selected applications that were deemed environmentally and politically sensitive by FDEP and verify that they met the additional regulatory requirements and special criteria for evaluation.

Atkins provided expertise for analysis of impacts to environmental resources, trained FDEP staff, and led educational workshops and presentations. For several years, Atkins scientists coordinated training for federal, state, and local regulatory personnel on seagrass and hardbottom identification and issues. Atkins scientists also coordinated a technical advisory committee on the significance and mitigation of nearshore hardbottom with beach nourishment projects in southeast Florida, and was instrumental in developing the JCP compliance database and user's manual, as well as the JCP processor's manual that was used to train new staff.

### Year completed

2009

### Client

FDEP

### Client representative

Gene Chalecki, PE  
2600 Blair Stone Road  
Tallahassee, FL 32399  
850.488.7708

### Key personnel

Stacey Roberts, EI  
Donald Deis, CEP  
Adam Gelber  
Bryan Flynn, PE  
William Pitcher, PE  
Beth Zimmer

### Fee

\$23 million

### Estimate of construction cost

Not applicable to Atkins work orders

### Contractor awarded project

Not applicable to Atkins work orders

### Contract award amount

Not applicable to Atkins work orders



For more than a decade, Atkins served FDEP's BBCS through a general engineering services contract.

## City of Key West Smathers Beach Nourishment Project Permitting, Construction Management, Restoration, Bathymetry, and Biological Monitoring, Key West, FL

As a subconsultant to Subaqueous Services, Inc., Atkins provided seagrass mitigation services to support the City of Key West's beach renourishment project at Smathers Beach in 2000. As part of the mitigation plan, a total of 1.4 acres of seagrass within a 2-acre mitigation site is required to offset any adverse impacts of the beach renourishment. Services provided by Atkins included transplanting the 0.7+ acres of seagrass that resided within the footprint of the fill site to an abandoned landing site for Naval observation blimps located north of Key West Airport. Atkins personnel have transplanted more than 9,000 planting units into the 2-acre mitigation site. Ninety percent of the transplanted units survived the 3-month warranty period, which has provided the City with the seagrass mitigation necessary to proceed with the renourishment of Smathers Beach.

### Results

The Smathers Beach impact area was 0.7+ acres with a 2:1 restoration ratio; the required restored habitat area was 1.4 acres. The plants were excavated from Smathers Beach and transported to the processing site for processing and transplanting. The second year monitoring report recorded 2.5 acres of *Halodule wrightii* in the transplant area with an average percent cover of 71 percent. In addition, the scrape-down area next to the mitigation area also colonized and revegetated an additional 2.3 acres. The total revegetation is 4.8 acres, or 3.4 acres more than the required acreage.

### Methodology

The transplanting material was collected in large mats with a long-reach hydraulic excavator (grade-all) and transported via trucks to the processing site in water-filled containers. The mats were processed into peat pots, which were in turn moved by floating platform to the transplanting area and planted in the requisite grid pattern. Before the transplanting began, appropriate planting substrate fill was emplaced using rubber-tired front-end loaders and other heavy equipment.

### Schedule and challenges encountered

The project was completed on time and on budget. The only challenge encountered involved stings from jellyfish during the transplanting operation. Long pants reduced the potential for stings.



**The Smathers Beach nourishment project involved placement of 17,000 tons of truck-hauled sand onto Smathers Beach.**

### Current services

Subsequently, Atkins coastal scientists, engineers, and surveyors provided an array of services for the Smathers Beach nourishment project to confirm permit compliance with FDEP, USACE, and FKNMS. The project involved placement of 17,000 tons of truck-hauled sand onto Smathers Beach in 2011.

Atkins performed pre- and post-construction physical and biological monitoring, on-site construction inspection, and regulatory support services for the project. Atkins staff provided regulatory support to the City in preparation for construction by negotiating a reduction in frequency of long-term monitoring, acquired authorization from FKNMS, and provided sea turtle lighting surveys and monitoring plan formulation. Atkins scientists provided pre-, during, and post-construction monitoring of the nearshore seagrass and hardbottom communities as well as construction management of the City-selected contractor during sand placement activities. Atkins surveyors provided topographic and bathymetric surveys, pre- and post-construction document volumetric changes of the beach profile, and contract verification of fill material. Atkins assisted the City with preparation of as-built certification for submittal to regulatory agencies.

Atkins was also awarded a task order from the City to acquire new state and federal permits for continued maintenance of Smathers Beach. Much of the information developed and collected during the nourishment project is being used to prepare the application packages.

### Year completed

Ongoing

### Client

City of Key West

### Client representative

Janet Muccino  
3140 Flagler Avenue  
Key West, FL 33040  
305.809.3897

### Key personnel

W. Mark Henry  
Adam Gelber  
Bryan Flynn, PE  
Stacey Roberts, EI  
Roberto Mantecon, PSM

### Fee

\$233,264

### Estimate of construction cost

Not applicable to Atkins work order

### Contractor awarded project

Not applicable to Atkins work order

### Contract award amount

Not applicable to Atkins work order

## Collier County 2013 Truck Haul Beach Nourishment CEI and Third-Party QA/QC, Collier County, FL

During September 2013, the Collier County Board of County Commissioners approved the 2013 Collier County truck haul beach renourishment project. This project was initiated as a result of erosion sustained through Hurricane Isaac and Tropical Storm Debbie during the 2012 hurricane season.

Eastman Aggregate Enterprises, LLC, of Lake Worth, Florida, and Phillips and Jordan, Inc., of Zephyrhills, Florida, were awarded contracts to renourish Collier County beaches, placing 351,744 cubic yards of sand over 25,380 linear feet of beach between R-25.5 and R-72.1.

The material used for the renourishment—sand source—came from Stewart Mining Industries of Immokalee, Florida (approximately 50 miles inland from the project location), providing beach-compatible sand with a mean grain size of 0.32 mm–0.36 mm, per the FDEP sediment QA/QC plan. In total, more than 15,000 truckloads of sand were sent from the mine to Collier County beaches.

Atkins provided third-party QA/QC services and part-time construction oversight during the project. Atkins was tasked to perform random sediment sampling from the constructed beach berm and sand stockpile locations, review as-built beach profiles, review turbidity reports, sediment gradation logs, truckload ticket tracking, and attend weekly construction meetings among Collier County, the contractors, and engineer-of-record.

As part of Atkins' services, an FTP server was established to host a software package called Load Tracker that was used to document trucks and sand tonnage being delivered to the project sites during construction. The data collected using Load Tracker was used to reconcile weekly deliveries, compiling total tonnage and truck counts received onsite.

**Year completed**  
2014

**Client**  
Collier County

**Client representative**  
Gary McAlpin  
2800 N. Horseshoe Drive  
Naples, FL 34104  
239.252.5342

**Key personnel**  
Bryan Flynn, PE  
Matthew Starr

**Fee**  
\$88,300

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order



This Collier County truck haul beach renourishment project was initiated as a result of erosion sustained through Hurricane Isaac and Tropical Storm Debbie during the 2012 hurricane season.

## City of Key West Rest Beach JCP, Key West, FL

In October 2011, the City of Key West experienced severe weather conditions with high winds and extensive rains. As a result of this weather event, Rest Beach experienced erosion along its shoreline including the vegetated sand dunes. Rest Beach requires a long-term management plan and permit to allow for sand replenishment events.

Atkins is assisting the City with the acquisition of 10-year permits from FKNMS, USACE, and FDEP BCS for sand placement on Rest Beach. As part of this process, Atkins biologists conducted a baseline survey in August 2012 that included sediment sampling, benthic habitat mapping, quadrat sampling of bottom cover along fixed transects, and species

richness. Atkins prepared and submitted the JCP application to FDEP on behalf of the City in December 2012. Permit materials included:

- Final reports for the sand sample analysis and baseline biological assessment.
- Design plans for the renourishment project.
- Sand source characterization.
- Monitoring plans including turbidity controls, protection measures for threatened and endangered marine species, and post-construction biological monitoring.

Final permitting of the project revolves around defining suitable compensatory mitigation that Atkins is in the process of executing.



Atkins is assisting the City with the acquisition of 10-year permits from FKNMS, USACE, and FDEP BCS for sand placement on Rest Beach.

### Year completed

Ongoing

### Client

City of Key West

### Client representative

Janet Muccino  
3140 Flagler Avenue  
Key West, FL 33040  
305.809.3897

### Key personnel

W. Mark Henry  
Bryan Flynn, PE  
Adam Gelber  
Leslie Manzello  
Stacey Roberts, EI  
Donald Deis, CEP

### Fee

\$86,167 (design and permitting)

### Estimate of construction cost

Not applicable to Atkins work order

### Contractor awarded project

Not applicable to Atkins work order

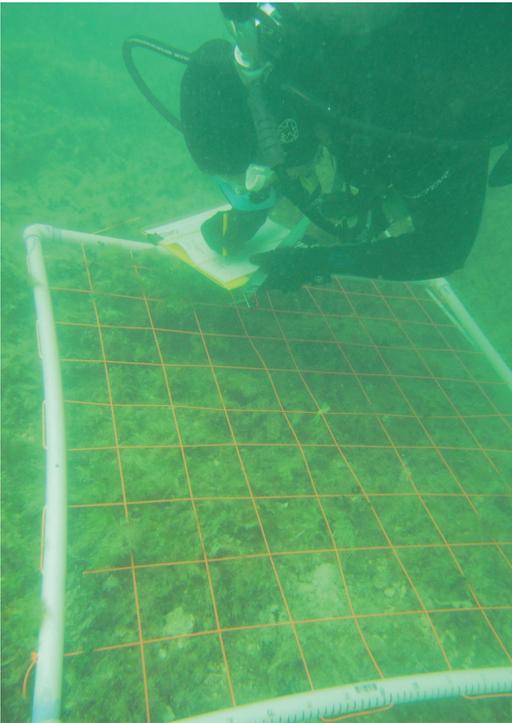
### Contract award amount

Not applicable to Atkins work order

## City of Key West Bight Ferry Terminal, Key West, FL

The City of Key West intended to construct a 20-foot by 121-foot concrete pier extension on the existing ferry terminal located on the eastern end of Key West Bight. The pier extension will facilitate the docking of multiple ferry boats, which arrive and depart daily. The City also intended to conduct dredging in the vicinity of the ferry terminal to provide safe vessel navigation. In support of the permitting process with the FDEP and USACE, Atkins biologists conducted a benthic assessment to identify natural resources of concern, such as coral and seagrass, within the project area of 2.3 acres. The survey methodology used during the benthic assessment included protocols described in the NMFS Southeast Region Habitat Conservation Division's *Best*

*Management Practices for Surveying Seagrass for Coastal Construction Planning in Florida* (2010) and the NMFS *Recommended Survey Protocol for Acropora spp. in Support of Section 7 Consultation* (2007). Survey tasks included an initial visual reconnaissance of the survey area, benthic habitat mapping, and a quantitative assessment of the seagrass and coral within the project area. The outer pier pilings and dolphin pilings of the existing ferry terminal were also assessed for coral occurrence. Atkins provided a detailed report describing the benthic habitat types within the project area and the coral communities encountered on the existing pier and dolphin pilings.



Atkins biologists conducted a benthic assessment to identify natural resources of concern, such as coral and seagrass, within the Key West Bight Ferry Terminal project area.



**Year completed**  
2011

**Client**  
City of Key West

**Client representative**  
Elizabeth Ignaffo  
3140 Flagler Avenue  
Key West, FL 33040  
305.809.3966

**Key personnel**  
Leslie Manzello  
Beth Zimmer  
W. Mark Henry

**Fee**  
\$16,477 (assessment services)

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

## City of Key West Sunrise Canal Benthic Resource Survey, Key West, FL

The City of Key West planned to conduct maintenance dredging of the western end of the Sunrise Canal located between Flagler Avenue and Sunrise Lane. The proposed dredging area encompasses a 90-foot by 75-foot area that has experienced natural filling over time. In compliance with federal and state permit applications, the City selected Atkins to conduct a benthic habitat assessment of the proposed dredging

footprint. The purpose of the benthic habitat assessment was to locate the presence and distribution of submerged aquatic vegetation and live hardbottom habitat. Atkins coastal engineers provided support for best management practices for containment of turbidity during dredging activities. These activities supported the City project manager during the permitting process.



The City selected Atkins to conduct a benthic habitat assessment of the proposed dredging footprint. The purpose of the benthic habitat assessment was to locate the presence and distribution of submerged aquatic vegetation and live hardbottom habitat.

**Year completed**  
2011

**Client**  
City of Key West

**Client representative**  
Elizabeth Ignaffo  
3140 Flagler Avenue  
Key West, FL 33040  
305.809.3966

**Key personnel**  
Leslie Manzello  
Beth Zimmer  
W. Mark Henry

**Fee**  
\$3,205 (assessment services)

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

## City of Key West Phase I ESAs for Angela Street City Hall and City Hall Annex Buildings, Key West, FL

The City of Key West selected Atkins to provide Phase I ESA support, including asbestos and lead-based paint contamination investigations, for the Angela Street City Hall and City Hall Annex buildings in preparation for planned demolition activities. The Phase I ESA was performed in accordance with American Society for Testing and Materials (ASTM) Practice E 1527-05 to determine whether recognized environmental conditions

(REC) existed on the subject property. The general scope of the Phase I ESA included interviews, a site inspection, and governmental records review. Atkins provided a separate detailed report of the findings for each of the projects. In addition, Atkins teaming partner EE&G supported this effort with an asbestos-containing materials and lead-based paint assessment as part of the deliverables.



The City selected Atkins to conduct a Phase I ESA, including potential asbestos and lead-based paint contamination investigations, for the City Hall Annex, left—now demolished—and Angela Street City Hall, right, buildings in preparation for planned demolition and site redevelopment.

**Year completed**  
2010

**Client**  
City of Key West

**Client representative**  
Janet Muccino  
3140 Flagler Avenue  
Key West, FL 33040  
305.809.3897

**Key personnel**  
W. Mark Henry  
EE&G (subconsultant)

**Fee**  
\$9,500

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

## City of Key West City Hall Site Assessment Report Addendum, Key West, FL

Atkins provided a Phase II contamination assessment for the City of Key West to address Petroleum Cleanup Protection Program completeness issues related to the Angela Street City Hall property. Atkins coordinated with FDEP to develop agency-approved plans to sample existing and install new groundwater monitoring wells within the potentially contaminated area to delineate the extent of the plume.

Groundwater samples from the existing and new wells were acquired, and the analytical results were compared against historical findings to develop a site assessment report addendum to meet FDEP completeness issues. Atkins provided full technical services to complete this contamination assessment and coordinated activities between the City and FDEP.



A new groundwater monitoring well installation is pictured at top, and an existing monitoring well at the Angela Street City Hall site is pictured above.

### Year completed

Ongoing

### Client

City of Key West

### Client representative

Janet Muccino  
3126 Flagler Avenue  
Key West, FL 33041  
305.809.3897

### Key personnel

W. Mark Henry  
Bradley Bayne, PG

### Fee

\$31,630

### Estimate of construction cost

Not applicable to Atkins work order

### Contractor awarded project

Not applicable to Atkins work order

### Contract award amount

Not applicable to Atkins work order

## City of Key West FEMA Appeal, Key West, FL

FEMA's disaster assistance fact sheet DAP9580.8 outlines the criteria for sand replacement of public beaches. Atkins assisted the City of Key West with composing the technical components of an appeal to FEMA in response to an initial denial, or reduced funding, for disaster recovery costs to repair erosion damage to the beach face and berms at Smathers, Rest, South, and Dog Beaches, resulting from the impact of Hurricane Isaac in August 2013. The main task assignments Atkins completed for the City for each of the four locations were:

- Including pre- and post-storm reports/surveys already prepared, and referencing them as appropriate in the line-by-line response.
  - Providing counter technical arguments to points cited by FEMA and the state Division of Emergency Management in their eligibility determination letters to either deny or reduce disaster funding.
- Providing a line-by-line response to FEMA's eligibility criteria in its disaster fact sheet DAP9580.8, Emergency and Permanent Work.



Atkins assisted the City with composing the technical components of an appeal to FEMA in response to an initial denial, or reduced funding, for disaster recovery costs to repair erosion damage to the beach face and berms at Smathers, Rest, South, and Dog Beaches, resulting from the impact of Hurricane Isaac. Key West during Hurricane Wilma is pictured above.

**Year completed**  
2012

**Client**  
City of Key West

**Client representative**  
Scott Fraser  
3140 Flagler Avenue  
Key West, FL 33040  
305.809.3810

**Key personnel**  
W. Mark Henry  
Bryan Flynn, PE  
Stacey Roberts, EI

**Fee**  
\$5,275

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

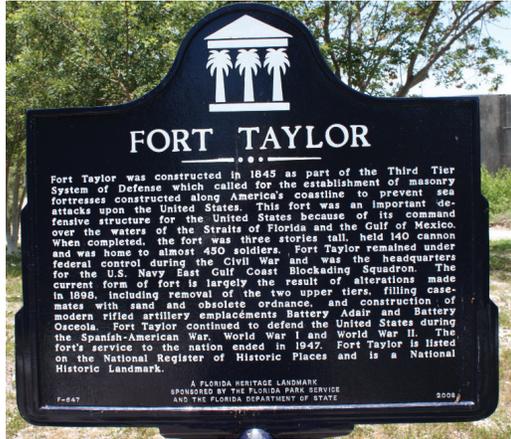
## FDEP Fort Zachary Taylor Historic State Park Permitting and Coral and Seagrass Mapping, Key West, FL

The 2004 and 2005 hurricane seasons produced five major hurricanes that passed within 100 miles of Key West. The shore protection structures fronting the beach of Fort Zachary Taylor Historic State Park in Key West were significantly damaged, resulting in erosion of the park's beach.

The FDEP Division of Recreation and Parks hired Atkins to conduct design and permitting for repairs to the four breakwaters, as well as the terminal groin that runs adjacent to the main ship channel into Truman Harbor.

The project was located within the FKNMS, which is designated as an Outstanding Florida Water. Submerged structures are surrounded by environmental communities containing seagrass and several species of coral. The project included design of structural repairs to restore the terminal groin and breakwaters to their design levels of shore protection.

Atkins obtained the required permits to avoid or minimize potential impacts to this environmentally significant setting. Atkins prepared design documents as well as construction plans, specifications, and bid documents.



**For the Fort Zachary Taylor Historic State Park project, Atkins obtained the required permits to avoid or minimize potential impacts to this environmentally significant setting. Atkins prepared design documents as well as construction plans, specifications, and bid documents.**

**Year completed**  
2011

**Client**  
FDEP

**Client representative**  
Marshall Flake  
3900 Commonwealth  
Boulevard  
Tallahassee, FL 32399  
850.245.3104

**Key personnel**  
Stacey Roberts, EI  
Adam Gelber  
Leslie Manzello

**Fee**  
\$68,000

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

## NPS Seagrass Habitat Restoration Management Plan and NEPA Compliance Document, Florida Bay, Everglades National Park, FL

Florida Bay, in Everglades National Park, covers an area of approximately 400,000 acres. The bay is characterized by extensive areas of shallow water punctuated by deeper natural basins, separated by banks, and connected by natural and artificial channels. Much of the bay bottom supports submerged aquatic vegetation consisting of seagrasses and marine algae of various species. These vegetated areas serve as nursery habitat for commercially and recreationally important fisheries.

Atkins is assisting NPS and local Everglades National Park managers by providing NEPA support for development of a compliance document to address seagrass restoration efforts in Florida Bay. Seagrass habitat and the natural quality of wilderness value can recover from minor injuries, over time, from natural processes. However, without intervention, large individual injuries or areas with extensive repeated and cumulative injuries could take decades to recover.

Atkins is developing the Florida Bay Seagrass Habitat Restoration Management Plan that includes:

- SOPs for integrated natural, cultural, and wilderness damage assessment protocols of benthic resources in Florida Bay damaged as a result of vessels.
- SOPs for seagrass bed restoration methods/protocols to repair seagrass beds damaged as a result of vessel traffic.



**Atkins is assisting NPS and local Everglades National Park managers by providing NEPA support for development of a compliance document to address seagrass restoration efforts in Florida Bay.**

- SOPs for monitoring methods/protocols of restored seagrass beds.
- Identification of priority or hot-spot areas in Florida Bay with a likelihood of success (based on resource characteristics, types of damage, types of projects, and location/geography) that should be the focus of future restoration efforts.

When completed, the Florida Bay Seagrass Habitat Restoration Management Plan will be compliant and fully consistent with applicable laws and policies including, but not limited to, NEPA, National Historic Preservation Act, Native American Graves Protection and Repatriation Act, Archeological Resources Protection Act, Endangered Species Act, Essential Fish Habitat, and Wilderness Act.

### Year completed

Ongoing

### Client

NPS

### Client representative

Jonathan Taylor  
40001 State Road 9336  
Homestead, FL 33034  
305.242.7876

### Key personnel

Adam Gelber  
Donald Deis, CEP  
Leslie Manzello  
Beth Zimmer

### Fee

\$70,000

### Estimate of construction cost

Not applicable to Atkins work order

### Contractor awarded project

Not applicable to Atkins work order

### Contract award amount

Not applicable to Atkins work order

## Martin County St. Lucie Inlet Federal Navigation Project/Hardbottom Long-Term Monitoring (Program Support and Reef Monitoring), Martin County, FL

Since 2009, Atkins has supported Martin County with maintenance of St. Lucie Inlet, a federally maintained inlet with the County as local sponsor. Atkins' role is to assist Martin County with local sponsor responsibilities in coordination with USACE. The Atkins team assists with managing inlet-related activities such as design, permitting, construction oversight, and physical and biological monitoring. In late 2011, after advertising the project for bid, USACE unexpectedly pulled out of the project, and Atkins assisted the County in taking over. In an expedited manner, Atkins redesigned the project, prepared construction plans and specifications, assisted the County with advertising the bid, reviewed bids, made recommendations for award, and moved swiftly into construction in early 2012.

### Design and permitting

Atkins secured a time extension of the existing state permit, assisted the County with acquisition of a new federal permit to move forward with dredging, obtained a special use permit from USFWS for use of federal lands for beach placement of dredged material, and prepared a JCP application for future maintenance of the inlet.

### Construction management

In 2009, the County, in partnership with USACE, completed structural improvements to the north jetty. The Atkins team provided construction monitoring and oversight when the structure was elevated to further reduce wave energy. The jetty was also tightened to minimize sand transport through the structure, instead focusing it over the weir section and into the impoundment basin. In 2012, the Atkins team provided construction management and oversight for maintenance dredging of the inlet and impoundment basin with placement of beach-quality sand on the downdrift beaches of the Hobe Sound National Wildlife Refuge, more than 4 miles south of the inlet.



Pictured above are worm reefs south of St. Lucie Inlet.

### Physical monitoring

In accordance with regulatory authorizations, the County is responsible for maintaining a countywide physical monitoring program. The Atkins team assists with monitoring activities including beach profile surveys, inlet bathymetric surveys, sediment budget analysis, aerial photography, and annual reporting.

### Biological monitoring

When the inlet was dredged, beach quality sand was placed on the downdrift beaches of greatest need. Extensive hardbottom communities exist along the nearshore throughout the County; therefore, biological monitoring was required by permits. The Atkins scientific dive team has conducted annual biological monitoring in accordance with the state-approved monitoring plan that consisted of data collection such as digital video transects, in situ quadrant analysis and photography, sediment measurements, and hardbottom edge mapping. Atkins has performed quantitative and qualitative analyses and prepared annual reports for submittal to regulatory agencies.

### Year completed

Ongoing

### Client

Martin County

### Client representative

Kathy Fitzpatrick, PE  
2401 SE Monterey Road  
Stuart, FL 34996  
772.288.5927

### Key personnel

Stacey Roberts, EI  
Adam Gelber  
Donald Deis, CEP  
W. Mark Henry  
Leslie Manzello  
Beth Zimmer

### Fee

\$154,860

### Estimate of construction cost

Not applicable to Atkins work order

### Contractor awarded project

Not applicable to Atkins work order

### Contract award amount

Not applicable to Atkins work order

## City of Miami Beach South Pointe Park Pier Coral Relocation, Artificial Reef, Planning, and Permitting, Miami Beach, FL

In May 2011, Atkins was selected to provide architectural, engineering, coastal permitting, surveying, and geotechnical services for the South Pointe Park Pier project. The purpose of the project was to replace the existing recreational pier within South Pointe Park, which had been closed to the public due to its poor structural condition. The project included demolition of the existing derelict pier and construction of a new, redesigned pier with a similar footprint with a total construction cost of \$4.8 million.

### Coastal permitting

Atkins prepared the joint ERP application for submission to USACE and FDEP as well as a Class I application for submission to Miami-Dade County Regulatory and Economic Resources (RER). Throughout the permitting process, Atkins addressed comments and information requests by closely coordinating with multiple agencies including USACE, NMFS Protected Resource Division and Habitat Conservation Division, FDEP, FWC, and RER.

### Environmental resource survey and avoidance and minimization plan (AMP)

As part of the permitting requirements, Atkins conducted an environmental resource baseline survey to characterize the benthic habitats in the vicinity of the project area and to identify any habitats of environmental concern. The environmental resource survey included a preliminary reconnaissance of the project area, detailed visual survey of the existing pier footprint and pilings, and transects to

*"It's actually a pleasure to review a project, particularly one with so many unique features and design factors, when it has been done so correctly, adhering to all structural codes and regulatory requirements."*

– Ralph Clark, PE, FDEP

characterize the benthic community. The environmental resource survey identified the presence of scleractinian corals and octocorals on the pier pilings, within the pier footprint, and in the area surrounding the pier.

Atkins prepared an AMP that provided guidance to the construction contractor and addressed impacts to corals and water quality. Impacts to scleractinian corals were minimized by relocating all scleractinian corals (with diameters >5 cm) within the project footprint prior to construction. Impacts to octocorals were minimized by relocating colonies of certain octocoral species (all rare species and a percentage of the common species) that are 10 cm in height or greater. The scleractinian corals and octocorals were relocated onto artificial reef modules within a recipient site west of the project location. In addition, 29 coral-encrusted rock boulders within the project footprint were carefully relocated to the recipient site. To address impacts to water quality, the AMP detailed a turbidity monitoring plan for the construction contractor.

**Year completed**  
2013

### Client

City of Miami Beach

### Client representative

Matilde Reyes  
1700 Convention  
Center Drive  
Miami Beach, FL 33139  
305.673.7071

### Key personnel

William Pitcher, PE  
Bryan Flynn, PE  
Adam Gelber  
Beth Zimmer

### Fee

\$788,816 (includes planning, permitting, geotechnical, surveying, design, construction documents, bidding, construction administration, and full-time resident inspector)

### Estimate of construction cost

Not applicable to Atkins work order

### Contractor awarded project

Not applicable to Atkins work order

### Contract award amount

Not applicable to Atkins work order



The new South Pointe Park Pier under construction is pictured at top, and the former pier is pictured above.

## Miami-Dade County Coastal Engineering Services, Miami-Dade County, FL

### 32<sup>nd</sup> Street breakwaters

In 2007, the Miami-Dade County Department of Environmental Resource Management began investigating solutions to decrease or eliminate the erosion downdrift of the 32<sup>nd</sup> Street breakwaters. Atkins studied and reviewed existing engineering and modeling data and performed modeling of structural alternatives.

To assess the effectiveness of a variety of structural configurations, a dynamically coupled wave and circulation model was created. The two models used, CMS-WAVE and CMS-FLOW, were coupled to exchange water surface elevation and velocity information, resulting in a combined wave and circulation model. Ten initial alternatives were selected for modeling. Conclusions gathered from the modeling results led to the design and modeling of a preferred structural configuration.

Based on design guidance and modeling results, a recommended alternative design of the southern breakwater was completed. Atkins recommended that the southernmost breakwater be dismantled and removed and a new breakwater be constructed farther offshore and parallel to the shoreline. The new location of the southernmost breakwater would align the structure to the prevailing wave climate and mitigate the erosional tendencies created downdrift of the southern breakwater with the goal of

maintaining a wider beach to be maintained after equilibration. Atkins also recommended that sand be placed behind the structure as impoundment "pre-fill."

### South Beach sand backpassing alternatives analysis

Atkins conducted an alternatives analysis for treating erosional hot spots along Miami-Dade beaches. The purpose of the investigation was to develop backpassing methods for excavating and transporting between 70,000 and 140,000 cubic yards of sand that had accreted in areas near Government Cut to four identified hot spots to the north.

Alternative methods were assessed based on cost, efficiency, safety, long- and short-term benefits, and effects to local business and tourism. Alternatives included permanent pipeline for backpassing, temporary pipeline for backpassing, backpassing by barge, truck hauling, and no action.

The lowest cost alternative, besides no action, involved the use of heavy equipment and large off-road dump trucks. This method was the simplest and had been used successfully in the past; however, it resulted in significant impacts, particularly to beach usage by tourists and vendors.

The results of the study led to the use of a small hydraulic dredge system with contractor-supplied piping and booster pumps as the highest-ranked alternative. This determination

**Year completed**  
2009

**Client**  
Miami-Dade County

**Client representative**  
Marina Blanco-Pape  
701 NW 1<sup>st</sup> Court  
Miami, FL 33136  
305.372.6529

**Key personnel**  
Adam Gelber  
Bryan Flynn, PE  
Stacey Roberts, EI

**Fee**  
\$94,750

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order



The beach on Virginia Key is represented above.

## Miami-Dade County Coastal Engineering Services, Miami-Dade County, FL (continued)

was based on construction cost for moving the sand and the minimization of impacts to tourists, vendors, and the environment. These impacts could be further mitigated by trenching the discharge pipe along the base of the dune during construction.

Second on the list of preferences was the small dredge with permanent pipe alternative. This method was slightly less attractive due to the need for significant capitalization of a permanent structure but, more importantly, the need for annual maintenance to exercise pipes, valves, and pumps. The high risk of loss due to hurricanes also was a consideration.

### Virginia Key dune restoration

Atkins designed a dune restoration project along the public beach on Virginia Key—a beach of cultural and historical significance. A stockpile of dredged material from maintenance dredging of nearby channels located on site was proposed as the dune material source. Atkins obtained sand samples and conducted an analysis to determine suitability of the material for use in the dune project.

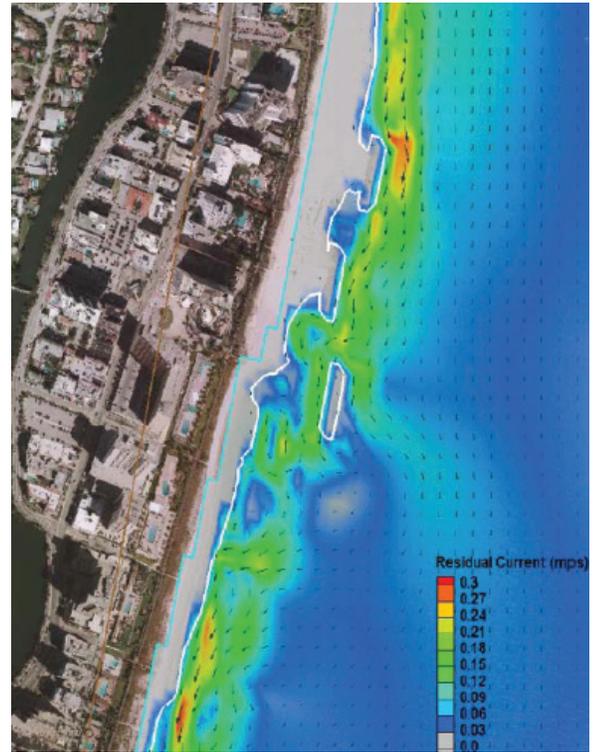
Atkins surveyed the site and prepared the design and permit documents for two distinct dune features along the park shore to offer storm protection benefits while providing enhancement to aesthetics and recreation. Dune features included a plan for planting native vegetation to stabilize the dunes, as well as breaks in the dune for public accessibility with a rope and bollard system to direct foot traffic while protecting the dunes.

### Anchorage Artificial Reef site modification

Atkins developed permit drawings to expand the boundaries of the County's previously authorized Anchorage Artificial Reef site.

### Mooring buoy pilot

Atkins designed and prepared permit drawings for a pilot mooring field project using the Manta Ray Anchor System. Permit drawings were prepared for installation of 37 mooring buoys at nine different sites throughout the county.



South Beach is represented above.

## Sarasota County Bird Colony Island Shoreline Protection and Coastal Engineering Services, Roberts Bay, Sarasota, FL

This project for Sarasota County involved construction of a 1,250-linear-foot breakwater and backfilling with dredged material to create an inland marsh. The focus was the enhancement and protection of a vital wading bird rookery in Roberts Bay. This area had a considerable amount of subsidence due to currents and waves from boat wakes. The project included stabilization of the shorelines of three mangrove islands in the Intracoastal Waterway. Located south of Sarasota Bay, Roberts Bay is inland of northern Siesta Key. The islands are located just south of the Siesta Drive bridge.

Atkins provided turnkey professional coastal engineering services including bathymetric surveys, geotechnical investigations, feasibility study drawings, volume calculations, construction plans, bidding support, and construction oversight. Atkins staff managed the survey and geotechnical consultants, using collected data to complete the project.

Atkins' ecologists provided support to the coastal engineering efforts by assisting with expert advice for establishing marsh elevations for specific planting regimes. Dredge material was deposited to optimize planting success and further enhance erosion protection. Additional key project elements included:

- Atkins sited and installed regulatory navigation signs and buoys.
- Seagrasses in the footprint of the breakwater were transplanted behind the islands prior to construction.
- The breakwater was 2.7 feet high (NAVD 88) and 35 feet wide, with 2- to 3-foot limestone rock.
- Seventy-five red mangrove and 775 smooth cordgrass were planted on the created marsh areas.
- Birds were monitored throughout the process, and construction had no significant impact on bird nesting activity.



**Atkins provided turnkey professional coastal engineering services for this Sarasota County project.**

**Year completed**  
2009

**Client**  
Sarasota County

**Client representative**  
Spencer Anderson  
1001 Sarasota Center  
Boulevard  
Sarasota, FL 34240  
941.915.3421

**Key personnel**  
Bryan Flynn, PE

**Fee**  
\$230,000

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

## Miami-Dade County Seaport Department Wharves I–VII Underwater Inspections, PortMiami, FL

As part of the CEI professional services agreement for the PortMiami cargo wharves strengthening project, Atkins was tasked with performing periodic underwater inspections of wharf strengthening program work as it progressed along a distance of more than 6,100 linear feet (Wharf I–Wharf VII).

Atkins' underwater dive teams comprised a lead professional engineer diver/special inspector, two relief divers, and one safety diver in addition to the vessel captain.

The purpose of these underwater inspection dives was to examine, at close range, the condition of the newly installed steel sheet piling bulkhead walls including cylindrical king piles and intermediate sheet piles, precast concrete wall panels, cast-in-place wall caps, and other new construction that was installed below the surface of the bay waters. Divers focused specifically on the soundness and integrity of the interlock closures between sheet pile to sheet pile and sheet pile to king pile to verify that no gaps, voids, or other damaged areas were present.

Because Biscayne Bay is a national marine sanctuary and Outstanding Florida Water of the state, the inspections also included the inspection of the sea floor for construction debris and other objects detrimental to the berthing of cargo vessels adjacent to the new work. The Atkins dive team examined the new construction in water depths of up to 46 feet as measured from the bay bottom to the water surface.



**As part of the CEI professional services agreement for the PortMiami cargo wharves strengthening project, Atkins was tasked with performing periodic underwater inspections of wharf strengthening program work.**

Following the inspections, Atkins prepared a comprehensive underwater inspection report documenting the observations and findings and containing pertinent underwater photographs, which served to officially notify the contractor of any issues requiring attention. All reports were authored by the Atkins chief diver/special inspector and signed and sealed accordingly.

A total of nine underwater inspections were performed by the Atkins dive team specifically for this wharf strengthening program.

**Year completed**  
2014

**Client**  
Miami-Dade County  
Seaport Department

**Client representative**  
Art Tillberg  
1015 North America  
Way  
Miami, FL 33132  
305.347.4891

**Key personnel**  
Adam Gelber  
Beth Zimmer  
W. Mark Henry

**Fee**  
\$3.3 million (CEI)

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

## City of Miami Bicentennial Park Seawall Investigation – Study Area 1, Miami, FL

In February 2010, the City of Miami Capital Improvements Division engaged Atkins to perform a forensic structural investigation, assessment, and evaluation of newly constructed steel sheet piling seawalls that exhibited unusual ground subsidence and loss of backfill material.

The City was planning to award a construction contract to install 16 new large vessel mooring dolphins just seaward of the existing steel sheet pile seawall. During the request for proposal process for the new dolphins, a number of technical inquiries were raised by prospective bidders. Some of the inquiries related to the possible adverse effects that pile driving activities required to install the new dolphins would or might have on the existing seawall.

To fully evaluate these inquiries, the City authorized Atkins to undertake a review of the design and construction aspects of the new seawall, which was installed in 2004. As part of the investigation, the City requested that Atkins examine the possible cause or causes of ground subsidence, which occurred shortly after its construction and following heavy rainstorms events.

The seawall investigation area comprised 1,185 linear feet of cantilevered steel sheet piling walls known as “combi-walls,” which formed the hard edge along the northside of the former Florida East Coast Railroad boat slip otherwise known as the south wall of the Bicentennial Park property. The new combi-walls were installed in 2004.

Atkins undertook an exhaustive review including above and underwater inspections, as well as review of all available design and construction documentation. The seawall investigation also included geotechnical explorations to confirm the composition of backfill materials and the landside condition of the bulkhead and a vibration analysis with proposed mooring dolphin pile driving evaluations. Atkins engineers performed



**The City of Miami Capital Improvements Division engaged Atkins to perform a forensic structural investigation, assessment, and evaluation of newly constructed steel sheet piling seawalls that exhibited unusual ground subsidence and loss of backfill material.**

structural calculations to determine the stresses and behavior of the steel sheet pile seawalls when subjected to various loading conditions, including differential hydrostatic forces, dynamic wave forces, and live load surcharges, in an effort to determine the cause of the wall movement and soil subsidence and the future performance of the seawall.

Atkins prepared a comprehensive report that detailed the investigative processes with concise findings, conclusions, and recommendations. Based on Atkins’ recommendations, the 16 new large vessel mooring dolphins were successfully installed without incident.

**Year completed**  
2010

**Client**  
City of Miami  
Capital Improvements  
Division

**Client representative**  
Sandra Vega  
3500 Pan American  
Drive  
Miami, FL 33133  
305.416.1243

**Key personnel**  
William Pitcher, PE

**Fee**  
\$45,000

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

## Miami-Dade County American Airlines Arena Shoreline Stabilization, Parcel B, Miami-Dade County, FL

In 2010, the Miami-Dade County General Services Administration (GSA) engaged Atkins to perform a forensic structural investigation, assessment, and evaluation of newly constructed steel sheet piling seawalls that exhibited outward lateral movement, bow, upland ground subsidence, loss of backfill material, and concrete walkway settlement and displacement.

The seawall investigation area comprised 611 linear feet of cantilevered steel sheet piling walls known as “combi-walls,” which formed the hard edge along the waters of the Intracoastal Waterway and American Airlines Arena property. In 2009, the new combi-walls were installed in front of the old existing seawalls.

As authorized by GSA, Atkins undertook an exhaustive review that included above- and underwater inspections, review of all available design and construction documentation, and topographic and accurate location surveys to document the position and movement of

the seawall. The seawall investigation also included geotechnical explorations, ground-penetrating radar surveys to confirm the composition of backfill materials, and landside condition of the bulkheads. Atkins engineers performed structural calculations using state-of-the-art computer software to determine the stresses and behaviors of the steel sheet pile seawalls when subjected to various loading conditions, including differential hydrostatic forces, dynamic wave forces, and live load surcharges, in an effort to determine the cause of the wall movement and soil subsidence.

Atkins prepared a comprehensive report that detailed the investigative processes with concise findings, conclusions, and recommendations. The report included descriptions and analysis of the pre-existing seawalls, new seawalls, new wall caps, aggregate fill materials, limerick fill, control and expansion joints, as well as drainage systems and the performance of the riprap revetment along the base of the seawall.



The seawall investigation area comprised 611 linear feet of cantilevered steel sheet piling walls known as “combi-walls,” which formed the hard edge along the waters of the Intracoastal Waterway and American Airlines Arena property.

**Year completed**  
2010

**Client**  
Miami-Dade County  
GSA

**Client representative**  
Jose Camero, RA,  
LEED AP  
Stephen P. Clark Center  
111 NW 1<sup>st</sup> Street  
Miami, FL 33128  
305.375.3542

**Key personnel**  
William Pitcher, PE

**Fee**  
\$45,000

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

## Canaveral Port Authority Northside Cargo Pier Evaluations, Port Canaveral, FL

Atkins performed a structural and utility condition inspection, assessment, and evaluation of Northside Cargo Piers 3 and 4 at Port Canaveral. Inspections were performed by marine structural engineers fully experienced in the evaluation of waterfront structures in conformance with the American Society of Civil Engineers' Underwater Investigations Standard Practice Manual. Northside Cargo Piers 3 and 4 provide berthing for the U.S. military and cement transport vessels, respectively.

Extensive rehabilitation and preservation work was undertaken in 2004, wherein cathodic protection systems were introduced to extend each facility's service life.

The evaluation provided the Port Authority with the tools needed for planning, budgeting, and prioritizing future maintenance and improvement projects. Atkins evaluated the condition of existing concrete deck slabs and supporting understructures, deck surfaces and joints, fender beams, curbs, pile bents, landside and waterside mooring bollards, mounted dock fenders, multi-pile mooring dolphins, shoreline revetment, concrete and steel piles, cathodic protection systems, steel sheet pile bulkhead and seawalls, safety

ladders, and other pertinent structural and functional aspects of the cargo berthing facilities including potable water pipelines, utility stations, and pier lighting. The inspections were performed using a visual/tactile examination approach to detect obvious major damage or deterioration of the piers. Utility service conduits were evaluated to determine the condition of their exterior surfaces and structural supports.

Following the inspections, Atkins evaluated the various project components, rated each based upon the level of damage or deterioration observed, and recommended actions, which were prioritized to establish the order in which they should be completed. The report included detailed observations and assessments of the piers. A description of recommended action options included emergency action, engineering evaluation, repair design inspection, special inspection, develop repair plans, and no action.

All bollards and fenders were inventoried, photographed, and rated. The report was designed to form the basis for future action by the Port Authority. Atkins completed the project on time and within the Authority's established budget.



Atkins performed a structural and utility condition inspection, assessment, and evaluation of Northside Cargo Piers 3 and 4 at Port Canaveral.

**Year completed**  
2012

**Client**  
Canaveral Port Authority

**Client representative**  
Christine Hartnett, PE  
445 Challenger Road  
Cape Canaveral, FL  
32920  
321.783.7831

**Key personnel**  
William Pitcher, PE  
Samuel Smith, PE

**Fee**  
\$50,000

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

## FEMA Coastal Flood Hazard Analyses, STARR JV, FEMA Regions I, V, and X

Atkins is managing partner of the joint venture known as STARR JV, which is providing engineering and technical services to FEMA Regions I, V, VII, and X in support of FEMA's vision for Risk MAP to create resilient, sustainable communities nationwide. Services include program management; regulatory and non-regulatory product development; technical support to FEMA, CTPs, and other Risk MAP program stakeholders; regional support/service; and processing of MT-2 LOMCs. STARR JV is a joint venture comprised of Atkins, Stantec, and CDM-Smith.

### Great Lakes coastal flood hazard analyses, FEMA Region V

Atkins is performing ADCIRC and WAM (wave) modeling analysis of Lake Huron for FEMA. This requires the coupling of characterizing Lake Huron to Lake Michigan and the dual analysis of this region of the Great Lakes. This project includes:

- Long-term and seasonal-scale water level variations within Lake Huron based on measured water levels from U.S. and Canadian sources.
- Definition of short-term time scale events.
- Development of a methodology for estimating probabilities of short-term events, predicting the responses that correspond to them, and identifying sources of uncertainty in defining water level and wave conditions for these events.
- Evaluation of the statistical analysis approach developed by USACE/ERDC for Lake Michigan for applicability.
- Generation of wind and pressure fields for validation events and production runs.
- Evaluation of the effects of ice fields on the water levels.

- Set-up and validation of wave and storm surge models.
- Wave and storm surge model production simulations.
- Technology transfer group participation.

### Washington state coastal studies, FEMA Region X

Atkins has teamed with the Center for Coastal and Marine Observation and Prediction in a collaborative effort to develop offshore water level and wave models for the near coast region of the Pacific Ocean off Oregon and Washington state. This modeling effort extends into the Columbia River Estuary, Grays Harbor, and Willapa Bay. Water levels will be generated by the CMOP SELFE model with the use of STWAVE and SWAN to capture wave dynamics along the coast and in the enclosed bays. These models will provide the basic information for countywide coastal hazard studies consistent with FEMA Region X guidelines.

### External initial review: Flood insurance study (FIS) report and Technical Support Data Notebook (TSDN), FEMA Region I

As part of the STARR QC team, Atkins provided an independent initial review of the revised coastal analyses and coastal redelineation for various communities in coastal New England. Atkins reviewed the FIS and TSDN for Coastal Flood Insurance Study/Map Revision Coastal Analysis Update and Redelineation reports. The purpose of the review was to identify potential material deviations from applicable FEMA guidelines and the reasonableness of the provided TSDN and FIS. The RUNUP and WHAFIS models were used in the analysis.

#### Year completed

Ongoing

#### Client

FEMA

#### Client representative

Suzanne Vermeer, PE,  
CFM  
1800 Bell South Bell  
Street  
Arlington, VA 20598  
202.646.3941

#### Key personnel

Stacey Roberts, EI  
Todd DeMunda, PE

#### Fee

\$80 million (Atkins total for contract, which includes multiple task orders)

#### Estimate of construction cost

Not applicable to Atkins work order

#### Contractor awarded project

Not applicable to Atkins work order

#### Contract award amount

Not applicable to Atkins work order

## Florida Gas Transmission Phase VIII Expansion Permit Support, Mitigation, and Compliance Services, Various Counties, FL and AL

In 2009, Florida Gas Transmission received federal authorization for the Florida Gas Transmission Phase VIII expansion project, which involved the expansion of approximately 500 miles of pipeline through various counties in Alabama and Florida. Due to the project size, Atkins used its scientists from the Miami, Pensacola, Tallahassee, Orlando, and Tampa offices.

Initially, Atkins was tasked to assist with additional wetland reviews and delineations for construction access roads. Shortly after initiating this work, Atkins was tasked with state and federal environmental permitting for the project. Permitting required compiling substantial field data for more than 1,000 wetlands and waterbodies. A joint ERP application was completed for the project, as well as Uniform Mitigation Assessment Method evaluations, USACE data sheet evaluations, and various county-required applications. ERP permitting activities included site evaluations coordinated through five FDEP offices. The ERP process also included contact and coordination with USACE.

As the project progressed, Atkins resources were further used to include specific county arbor permitting; environmental clearances for contractor yards, mud yards, aboveground

facilities, reroutes, and new work areas; creation of a SharePoint GIS access database for nightly uploading of GPS coordinates and field data; Phase I evaluations; soil testing and classifications; wetland mitigation determinations; sampling services for hydrostatic testing areas; Sovereign Submerged Lands determinations; safe upland line determinations for horizontal directional drills launching and surfacing pits; threatened and endangered surveys; and public noticing. Ultimately, a joint ERP was received for the project, along with several site-specific county permits, on time and within the limits of the established budget.

Following construction, Atkins was retained to provide post-environmental monitoring services. The construction permits, including the Federal Energy Regulatory Commission permit, required post-construction monitoring of the wetlands that were authorized for impact along the entire pipeline corridor. Pursuant to permit conditions, Atkins was requested to provide vegetative monitoring services as well as develop and manage a nuisance and exotic vegetative control program for the entire 500-mile project to confirm compliance with each permitting agency.

### Year completed

2013 (Phase VIII)

### Client

Florida Gas Transmission

### Client representative

Joe Kolb  
5444 Westheimer Road  
Houston, TX 77056  
813.989.7084

### Key personnel

Adam Gelber  
W. Mark Henry

### Fee

\$5.2 million

### Estimate of construction cost

Not applicable to Atkins work order

### Contractor awarded project

Not applicable to Atkins work order

### Contract award amount

Not applicable to Atkins work order



Pictured above is a temporary groundwater monitoring well installation via Geoprobe at the proposed contractor yard.

## Two Walgreens Site Assessments, Vero Beach and Miami Shores, FL

Atkins was contracted by Tri Realty, LLC, to provide Phase I ESA-related services along with a limited engineering review as part of the due diligence process. The two sites were located in Vero Beach and Miami Shores. Each of these sites underwent rigorous reviews to advise the client on issues related to the existing conditions of the properties in advance of contract negotiations to purchase. The Phase I ESA was completed in general accordance with ASTM Standard Practice E1527-05. The assessment was designed to identify RECs associated with the subject properties through a review of available historical records; visual inspection of the properties, its facilities, and current operations; and a preliminary visual inspection of the surrounding vicinity. ASTM Standard Practice E1527-05 defines RECs as the presence or likely presence of any hazardous substances or petroleum products on properties under conditions that indicate an existing release, a past release, or a material threat of a release into structures or into the ground, groundwater, or surface water of the property.

The limited engineering site assessment consisted of a two-part process including a structural and civil review. The limited assessment consisted of a non-intrusive review of the physical sites, parking lots, and physical structures built on each of the properties. In addition to the Phase I ESA and limited engineering, Atkins also conducted survey services to provide an elevation certificate to the client for the Miami Shores location. For each of these services provided, detailed reports were prepared for the client in order to arrive at real estate transaction decisions.



Atkins was contracted to provide Phase I ESA-related services along with site-specific limited engineering reviews.

**Year completed**  
2012

**Client**  
Tri Realty, LLC

**Client representative**  
Bruce Hermelee  
101 NE 3<sup>rd</sup> Avenue,  
Suite 1110  
Fort Lauderdale, FL  
33301  
954.764.4445

**Key personnel**  
W. Mark Henry  
Bradley Bayne, PG  
Samuel Smith, PE  
Roberto Mantecon, PSM

**Fee**  
\$14,520

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

## UST Removal, Tank Closure Assessment Report, and Groundwater Monitoring, Ireland's Inn, Fort Lauderdale, FL

Atkins has been providing continual services for contamination assessment, UST removal, reporting, and agency coordination since 2007 for the various owners of the Ireland's Inn facility at various stages during site development activities. The property has experienced various contamination issues prior to Atkins being requested to assist with the project to address the requirements of the Broward County Environmental Protection Department and Growth Management Division. Atkins was initially contracted to remove two unused USTs at the facility. During the removal process, petroleum contamination

was encountered in the soil below the former tank location. Upon proper notification of the petroleum contamination to Broward County, Atkins was contracted to provide 5 years of natural attenuation monitoring for the subject property due to the structural undermining implications that remediation activities would have had on the facility. Due to changes in property development activities creating direct access to the contaminated area of the property, Atkins has been contracted to provide a full site contamination assessment report to address site-specific remediation alternatives to achieve regulatory closure.



Pictured at left is a monitoring well installation via Geoprobe at the site. At right is a UST during excavation and removal site activities.

### Year completed

Ongoing

### Client

PRH Fairwinds, LLC  
(current owner/property management)

### Client representative

Patrick Cambell  
315 S. Biscayne  
Boulevard  
Miami, FL 33131  
305.460.9900

### Key personnel

W. Mark Henry  
Bradley Bayne, PG  
Earth Tech Drilling  
(subconsultant)

### Fee

More than \$75,000

### Estimate of construction cost

Not applicable to Atkins work order

### Contractor awarded project

Not applicable to Atkins work order

### Contract award amount

Not applicable to Atkins work order

## City of Miami Springs Groundwater Sampling, Golf and Country Club, Miami Springs, FL

Atkins has been providing continuous service to the City of Miami Springs for more than 50 years. The City of Miami Springs is one of Atkins' longest clients, and we have been providing, among many other assignments, contamination-related services on this project. Atkins has been retained to conduct biannual groundwater sampling at the City golf course since 2009 to maintain compliance with the conditions of the Agricultural Waste Annual Operation Permit (AW-00234) for the facility. Representative groundwater samples are collected from two on-site groundwater-monitoring wells in the vicinity of the golf course maintenance

building. Sampling activities are conducted in accordance with the FDEP SOP for Field Activities (DEP-SOP-001/01). All samples are analyzed for volatile organics by EPA Method 8260, oil and grease by EPA Method 1664, and metals (arsenic, chromium, copper, lead, and zinc) by the EPA Method 200 series. The laboratory analytical results are compared to the applicable FDEP Groundwater Target Cleanup Levels (GCTL). The analytical reports are provided to the City and Miami-Dade County RER on a biannual basis subsequent to each monitoring event.

### Year completed

Ongoing

### Client

City of Miami Springs

### Client representative

Tom Nash  
345 North Royal  
Poinciana Boulevard  
Miami Springs, FL 33166  
305.805.5172

### Key personnel

W. Mark Henry

### Fee

\$20,000

### Estimate of construction cost

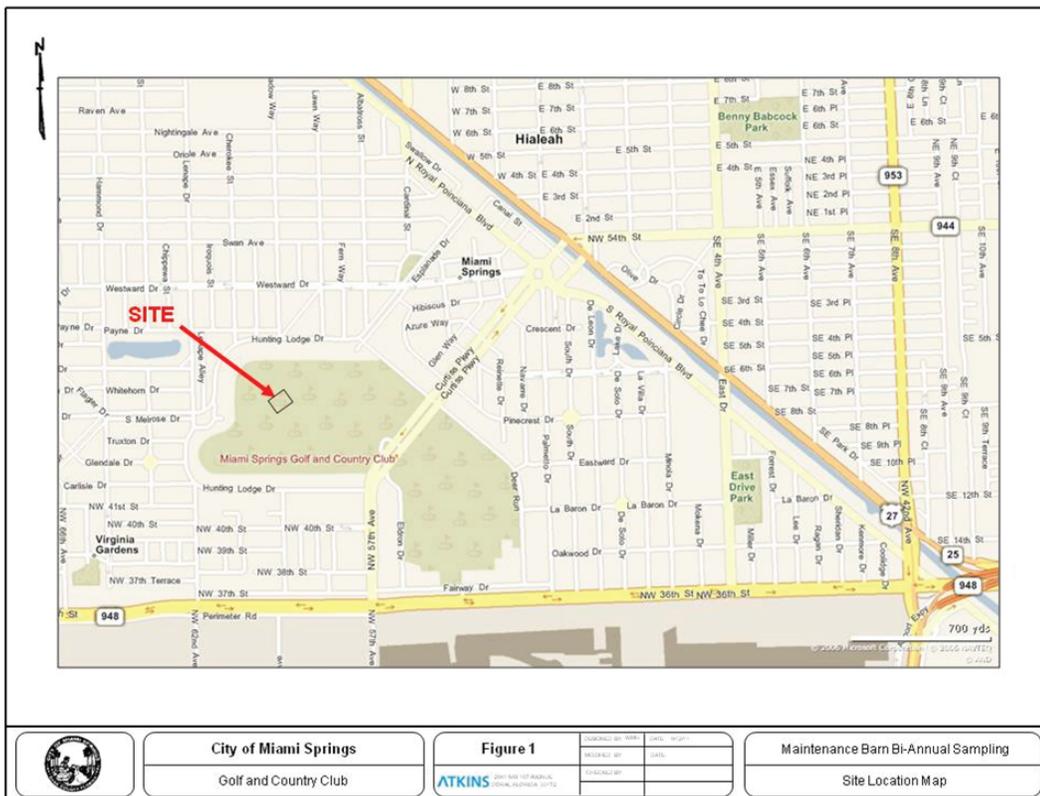
Not applicable to Atkins work order

### Contractor awarded project

Not applicable to Atkins work order

### Contract award amount

Not applicable to Atkins work order



Atkins conducts biannual permit compliance groundwater sampling at the City golf course.

## Seminole Tribe of Florida Phase I ESA, Davie, FL

Atkins provides general engineering and consulting services on an as-needed basis to the Seminole Tribe of Florida. As a result of this contract, Atkins was awarded separate tasks to assist the Seminole Tribe of Florida with two Phase I ESA contamination assessments, a lead and asbestos survey, and a limited Phase II investigation addressing concerns over iron and chlorinated pesticides at one of the properties. In association with

the general services contract, these task orders at the two properties were performed in accordance with ASTM Practice E 1527-05 to determine whether RECs existed on the subject property. The general scope of the Phase I ESA included interviews, a site inspection, and governmental records review. EE&G conducted asbestos-containing material and lead-based paint assessments. Atkins provided a separate detailed report of the findings for each of the projects.



Atkins provides general engineering and consulting services on an as-needed basis to the Seminole Tribe of Florida. As a result of this contract, Atkins was awarded separate tasks to assist the Seminole Tribe of Florida with two Phase I ESA contamination assessments, a lead and asbestos survey, and a limited Phase II investigation.

**Year completed**  
2014

**Client**  
Seminole Tribe of Florida

**Client representative**  
Stacey Myers  
6365 Taft Street  
Hollywood, FL 33024  
954.965.4380

**Key personnel**  
W. Mark Henry  
Bradley Bayne, PG  
EE&G (subconsultant)

**Fee**  
\$25,000

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

## City of Palmetto Police Department Assessment and Monitoring, Palmetto, FL

The City of Palmetto Police Department headquarters began operation at 1115 10<sup>th</sup> Street West, Palmetto, Florida, in 1961. A 1,000-gallon UST was installed to the south of the site building for storage of leaded gasoline. In 1974, the UST and dispenser were converted to store unleaded gasoline. The 1,000-gallon UST was taken out of service on May 23, 1991. In June 1991, the UST was removed by a licensed contractor, and the excavation was backfilled with clean fill.

In January 1998, a petroleum discharge was reported at the site. Evidence of petroleum-impacted groundwater had been encountered during geotechnical boring activities on the property. Between January 1998 and December 2004, the City conducted contamination assessment activities at this site to determine the extent of any impacts to soil or groundwater. Petroleum-impacted groundwater (mainly due to methyl-tert-butyl-ether, MTBE) was identified primarily in the area south of the central portion of the police department building. Monitoring for natural attenuation was approved by FDEP for the site in March 2005, and periodic groundwater monitoring was conducted between May 2005 and March 2010. However, by 2011, FDEP was requesting additional investigations at the site.

Atkins was contracted to perform a supplemental site assessment report (SSAR) investigation in February 2011. The scope of work for these investigations included installation of one deeper monitoring well, installation of two additional shallow monitoring wells, and sampling of 16 on-site monitoring wells for benzene, toluene, ethylbenzene, and xylenes (BTEX) and MTBE, with sampling of three wells for polynuclear aromatic hydrocarbons. Based on the information gathered during these groundwater investigations, the extent of the MTBE impacts was fully delineated. Elevated

MTBE concentrations appeared to be confined to the south-central portion of the site, and they were found in the surficial aquifer at depths from the top of the water table to 25 feet below the surface. The concentrations of MTBE were highest at the original source areas. It appeared that the vertical limit (i.e., bottom) of the MTBE-impacted zone within the surficial aquifer is between 25 feet and 31 feet below the surface, as indicated by the very low MTBE concentrations in deepest monitoring well.

Based on the findings of the SSAR, Atkins recommended annual sampling of the site, and Atkins prepared a natural attenuation monitoring (NAM) plan for FDEP approval in July 2011. FDEP approved the NAM plan on August 25, 2011. Between March 1, 2012 and February 13, 2014, three annual NAM sampling events were performed by Atkins. Five NAM monitoring wells (MW-1, MW-12, MW-14, DMW-1, and DMW-4) were sampled for BTEX and MTBE. The concentrations of MTBE in the source area monitoring wells were shown to be declining, and the overall size of the MTBE plume had decreased by 2014. The general groundwater flow direction in the shallow surficial aquifer at this site was toward the east.

On April 18, 2014, FDEP indicated that the site qualified for low scored site initiative (LSSI) no further action (NFA) status. The City was no longer required to perform annual sampling of the on-site monitoring wells. The conditions of the LSSI NFA prohibited the use of the site's groundwater for drinking water or irrigation purposes. However, the City was released from any requirement to perform further rehabilitation of the site.

The entire file on this project can be found on the FDEP Oculus website, Profile: Storage Tanks, Facility ID: 9102615.

**Year completed**  
2014

**Client**  
City of Palmetto

**Client representative**  
Javier Vargas  
516 8<sup>th</sup> Avenue West  
Palmetto, FL 34221  
941.723.4580

**Key personnel**  
Bradley Bayne, PG

**Fee**  
\$82,403

**Estimate of construction cost**  
Not applicable to Atkins work order

**Contractor awarded project**  
Not applicable to Atkins work order

**Contract award amount**  
Not applicable to Atkins work order

## 436 Cleaners Site Assessment, Remediation, and Monitoring, Casselberry, FL

During a Phase II ESA in 1998, a private developer in Casselberry, Florida, discovered groundwater contaminated by solvents (trichloroethylene and perchloroethylene) at the dry cleaner business occupying their site. The developer's insurance company agreed to fund the assessment and cleanup of the site. From 1998 through 2002, site assessment activities were conducted including soil sampling and installation and sampling of 18 monitoring wells. From 2002 through 2004, a remedial action plan was completed (and approved by FDEP), and an air sparging/soil vapor extraction (AS/SVE) pilot test was conducted.

In 2005, the full-scale AS/SVE system was installed and operated for approximately 1 year. The system reduced the solvent concentrations, but they remained at concentrations greater than FDEP criteria. The site was monitored again from 2006 through 2008, and the AS/SVE system was restarted for 5 months in 2009. However, the solvent concentrations remained at concentrations that did not meet FDEP criteria for site closure.

In June 2009, Atkins recommended an alternate remediation strategy for the site: bioremediation. Atkins was contracted by the client to complete a remedial action plan modification and perform bioremediation in the areas where solvent concentrations remained too high. In May 2010, Atkins implemented bioremediation injections at the site. A slurry of bioremediation nutrients was injected into 16 locations in the subsurface (using DPT) at depths between 4 feet

above the water table to 8 feet below the water table. Approximately 420 gallons of bioremediation product/slurry were injected into the subsurface.

Between September 2010 and September 2013, Atkins performed quarterly post-active remediation monitoring (PARM) sampling at this site. Six PARM monitoring wells (MW-1, MW-3, MW-4, MW-6, MW-7, and MW-8) were sampled for halogenated solvents. The concentrations of trichloroethylene and perchloroethylene in the monitoring wells were shown to be declining, and the overall size of the solvent plume had decreased significantly by September 2013. The general groundwater flow direction in the shallow surficial aquifer at this site was toward the southeast. As of September 2013, there had been two consecutive sampling events with all solvent concentrations less than the FDEP criteria.

On December 16, 2013, FDEP approved NFA status for the site and requested that the wells on the site be abandoned. Atkins supervised the plugging and abandonment of the monitoring wells and AS/SVE system in February 2014. On May 28, 2014, FDEP issued a site rehabilitation completion order without conditions for the 436 Cleaners site. The private developer was released from any requirement to perform further rehabilitation of the site.

The entire file on this project can be found on the FDEP Oculus website, Profile: Waste Cleanup, Facility ID: COM\_25530.

### Year completed

2014

### Client

Lowndes, Drosdick, Doster, Kantor, & Reed, P.A.

### Client representative

Jonathan Huels  
235 North Eola Drive  
Orlando, FL 32802  
407.418.6483

### Key personnel

Bradley Bayne, PG

### Fee

\$81,409 (bioremediation and monitoring)

### Estimate of construction cost

Not applicable to Atkins work order

### Contractor awarded project

Not applicable to Atkins work order

### Contract award amount

Not applicable to Atkins work order

## City of Miami Beach Maurice Gibb Memorial Park Soil Investigation, Miami Beach, FL

Atkins maintains a general engineering and consulting contract with the City of Miami Beach. Under this existing agreement, Atkins was selected to assist the City with providing contamination assessment services to bring the park to regulatory closure. Atkins will be providing the following services under this task order:

- Coordinating with Miami-Dade County Pollution Control Division (PCD) on behalf of the City
- Preparing sampling plan for review by PCD
- Implementing the approved plan that will include 13 soil borings to specifically test the soils at the subject site
- Processing samples with the selected laboratory to analyze for polyaromatic hydrocarbons and volatile organic aromatics
- Installing up to six temporary shallow monitoring wells to delineate the contamination plume and sampling those wells
- Delineating the plume based on the above temporary well installation
- Conducting contractor oversight during source removal activities
- Preparing a site assessment report, which may include additional post-construction monitoring to determine whether clean-up targets have been met



Atkins maintains a general engineering and consulting contract with the City of Miami Beach. Under this existing agreement, Atkins was selected to assist the City with providing contamination assessment services to bring Maurice Gibb Memorial Park to regulatory closure.

### Year completed

Ongoing

### Client

City of Miami Beach

### Client representative

Margarita Wells  
1700 Convention  
Center Drive  
Miami Beach, FL 33139  
305.673.7080

### Key personnel

W. Mark Henry  
Bradley Bayne, PG

### Fee

\$135,000

### Estimate of construction cost

Not applicable to Atkins work order

### Contractor awarded project

Not applicable to Atkins work order

### Contract award amount

Not applicable to Atkins work order

## Key West Waste Transfer Station, Stock Island, Key West, FL

As a subconsultant to another firm, EE&G provided consulting and testing services for asbestos and lead-containing materials prior to renovation upgrades of the waste transfer station. The purpose of this asbestos inspection was to identify the presence, extent, and condition of asbestos-containing materials in the surveyed areas of this facility. The areas surveyed during this inspection

included approximately eight structures: resource recovery building, solid waste tipping area, storage shed, raised cooling tower structure, fire equipment shed, electrical building, scale house, and ash transfer building. The incinerator was not observed on the property at the time of this inspection. All observed suspect materials were either sampled to determine asbestos content or assumed to contain asbestos.



EE&G has established a reputation for providing cost-effective solutions to environmental and engineering issues.

**Year completed**  
2011

**Client**  
City of Key West  
(owner)

**Client representative**  
Doug Bradshaw  
3140 West Flagler  
Avenue  
Key West, FL 33040  
305.293.8338

**Key personnel**  
Hiram Aguiar

**Fee**  
Approximately \$10,000

**Estimate of construction cost**  
Not applicable to EE&G work order

**Contractor awarded project**  
Not applicable to EE&G work order

**Contract award amount**  
Not applicable to EE&G work order

## Former Glynn Archer Elementary School/Future Key West City Hall Site, Key West, FL

As a subconsultant to another firm, EE&G provided consulting, testing, and oversight of removal of asbestos/mold-impacted/lead-containing materials from the former elementary school prior to conversion into the new Key West City Hall. Services included conducting phase contrast microscopy (PCM) final air clearance under aggressive conditions and analyzing the samples by PCM

in accordance with the National Institute of Occupational Safety and Health (NIOSH) Method 7400. The U.S. EPA clean air standard for airborne asbestos fibers is 0.01 fibers/cubic centimeter (f/cc). The airborne fiber concentration of all final air clearance samples collected during this project were less than 0.007 f/cc and so remained well below the EPA clean air standard of 0.01 f/cc.



Pictured are before and after images of the former Glynn Archer Elementary School/future Key West City Hall site project.

### Year completed

2013 (testing); 2014 (abatement oversight)

### Client

City of Key West (owner)

### Client representative

J. Michael Vieux, AIA,  
LEED AP BD+C  
3140 Flagler Avenue  
Key West, FL 33040  
305.809.3964

### Key personnel

EE&G personnel

### Fee

Approximately \$40,000

### Estimate of construction cost

Not applicable to EE&G work order

### Contractor awarded project

Not applicable to EE&G work order

### Contract award amount

Not applicable to EE&G work order

## City of Key West Smathers and Rest Beaches, Key West, FL

EE&G staff was contracted by the City of Key West to clean Smathers Beach and Rest Beach on a daily schedule beginning first thing in the morning.

EE&G contacts the volunteer non-profit organization Save-A-Turtle daily during season for marine-turtle nesting activity and to confirm that daily surveys have been performed before beach cleaners operate. Debris, trash, and seaweed are removed from the beach and properly disposed of at a trash yard facility approved by FDEP.

Other work performed includes:

- The beach, rock areas, dune systems, last 150 feet east of the easterly end of beach on Smathers Beach, wheelchair access ramp, and boat ramp are cleaned of trash and debris daily and disposed of in dumpsters supplied by the City.
- The beach area around trees, picnic tables, and walkways are hand cleaned. This area cannot be accessed by larger beach cleaning machinery.
- The groins are cleaned of seaweed with EE&G's Lull 4-in-1 bucket and deposited into self-contained dump trucks ready for approved disposal.
- Trash cans are emptied and relined with new bags.
- On-site supervisor coordinates with recreational director and provides checklist for approval.
- EE&G team sweeps/blows off all walkways and wheelchair access ramps daily, starting at the sidewalk and progressing beachward to save sand.
- EE&G hauls via dump trucks all cleaned seaweed to an approved transfer station.
- EE&G has an environmental plan in place, along with a daily maintenance schedule for equipment, to ensure that fuel, oil, and hydraulic fluid leaks will be kept to a minimum.

### Year completed

Ongoing

### Client

City of Key West

### Client representative

Greg Velize  
604 Simonton Street  
Key West, FL 33040  
305.809.3711

### Key personnel

EE&G personnel

### Fee

Approximately \$651,547  
(to date)

### Estimate of construction cost

Not applicable to EE&G work order

### Contractor awarded project

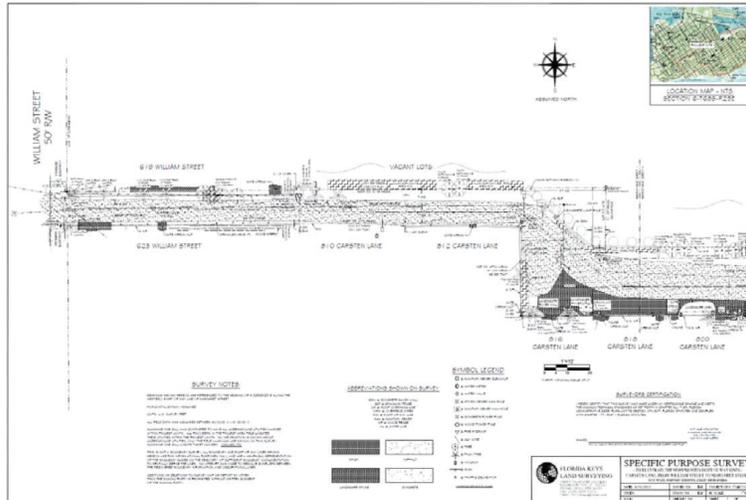
Not applicable to EE&G work order

### Contract award amount

Not applicable to EE&G work order

## City of Key West Carsten Lane Specific Purpose Survey, Key West, FL

This project included developing a specific purpose survey to illustrate the monumented right-of-way lines of Carsten Lane from William Street to Margaret Street in Key West. Florida Keys Land Surveying's services included monumenting the north and south right-of-way lines of Carsten Lane, locating existing utilities within the Carsten Lane right-of-way, monumenting the centerline of Carsten Lane, identifying and locating all trees within the Carsten Lane right-of-way, and identifying and dimensioning any encroachments into the Carsten Lane right-of-way.



**This project included developing a specific purpose survey to illustrate the monumented right-of-way lines of Carsten Lane from William Street to Margaret Street in Key West.**

**Year completed**  
2012

**Client**  
City of Key West

**Client representative**  
Karen Olson  
3140 Flagler Avenue  
Key West, FL 33040  
305.809.3963

**Key personnel**  
Eric Isaacs, PSM

**Fee**  
\$3,920 (specific purpose survey)

**Estimate of construction cost**  
Not applicable to Florida Keys Land Surveying work order

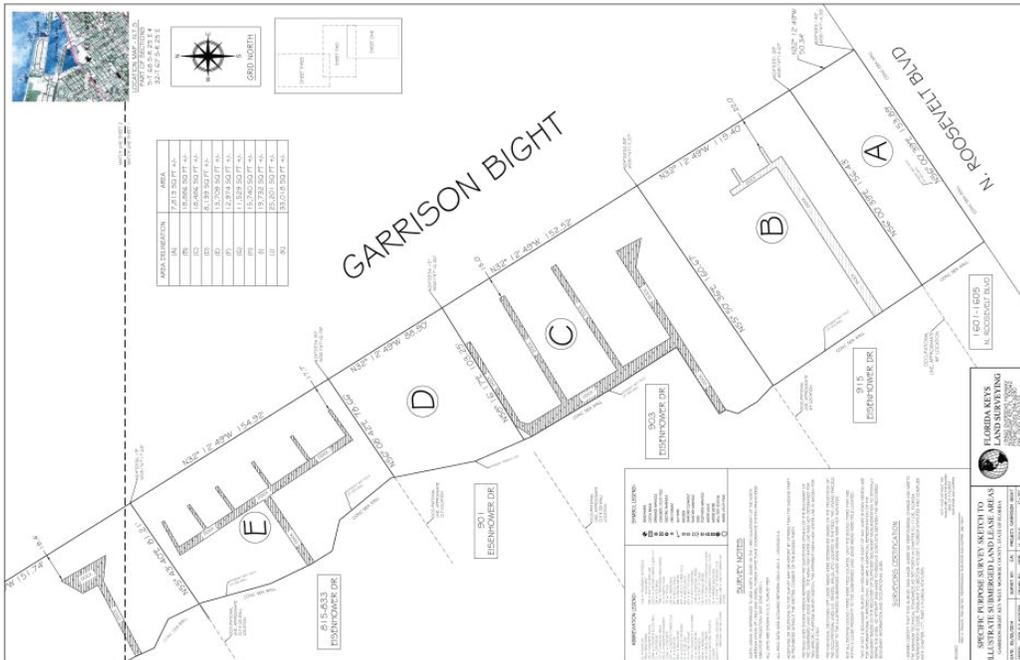
**Contractor awarded project**  
Not applicable to Florida Keys Land Surveying work order

**Contract award amount**  
Not applicable to Florida Keys Land Surveying work order

## City of Key West Specific Purpose Survey Sketch to Illustrate Submerged Land Lease Areas of Garrison Bight, Key West, FL

This project included developing a specific purpose sketch to illustrate submerged land lease areas of Garrison Bight, Key West. Florida Keys Land Surveying's services included locating and mapping existing shoreline, seawalls, ends of existing docks/piers, and occupational property lines including fences

and walls. Florida Keys Land Surveying created, calculated, and drafted lease areas, supplying the client with a graphic representation of the lease areas as well as the square footage of the lease areas for use in the client's applications and negotiations with adjoining property owners and the State of Florida.



This project included developing a specific purpose sketch to illustrate submerged land lease areas of Garrison Bight, Key West.

**Year completed**  
2014

**Client**  
City of Key West

**Client representative**  
Janet Muccino  
3140 Flagler Avenue  
Key West, FL 33040  
305.809.3897

**Key personnel**  
Eric Isaacs, PSM  
Matthew Blomberg

**Fee**  
\$4,150 (topographic survey)

**Estimate of construction cost**  
Not applicable to Florida Keys Land Surveying work order

**Contractor awarded project**  
Not applicable to Florida Keys Land Surveying work order

**Contract award amount**  
Not applicable to Florida Keys Land Surveying work order

## D. Client Commendations



## D. Client Commendations

The most significant indicator of Atkins' success is our high volume of repeat business—nearly 90 percent—which reflects our sincere commitment to client service.

Atkins understands the importance of client service and strives to make each project an exceptional experience. We take our performance very seriously and recognize that client satisfaction is critical to our practice. Table 5 includes excerpts from client letters. Full letters have been included on the following pages.

**Table 5.** Client commendations

*"Their work has proven to be consistently on time and within budget. On several occasions the District has realized a significant cost savings at project end. The District and its staff have been pleased with the work performed by Atkins resulting in reselection for services. We would recommend them for their technical expertise."*

– Martin Smithson, Administrator, The Sebastian Inlet District Commission  
March 5, 2014

*"We have been extremely satisfied with the quality and commitment of Atkins staff."*

– Dawn Griffin, Planning Manager, Boating and Waterways Section, Division of Law Enforcement, FWC  
February 27, 2014

*"Atkins' efforts helped create the vision for Port Manatee for decades to come. Their efforts have been lauded by local and state agencies as one of the best master plans developed by a Florida seaport. ...The Authority and its staff are extremely pleased with the work Atkins has accomplished and we highly recommend them for their visionary and technical expertise. ...Atkins not only strives for excellence in their work, they achieve it."*

– Carlos Buqueras, Executive Director, Port Manatee  
February 1, 2012

*"Atkins staff members have helped us to meet our schedules and keep our costs and concerns as low as possible. Atkins staff work well with other engineering and environmental consultants to provide the best total results for the County. ...The County staff has been pleased with the work that Atkins staff has accomplished and we highly recommend them for their technical expertise."*

– Kathy Fitzpatrick, PE, Coastal Engineer, Martin County  
February 28, 2014

*"Atkins was selected for this project based on their experience in dealing with marine related projects as well as their extensive knowledge in coastal permitting with the State and Federal regulatory agencies. They have performed exceptionally well in providing their contractual services and have also gone the extra mile. ...Our project required a single firm that carried the experience and manpower to meet the critical deadlines and design of a pier that would meet the expectations of the residents of Miami Beach. I am pleased to say that Atkins has met the goals identified by City staff and their project team has provided a design that the City of Miami Beach can be proud of."*

– Matilde Reyes, RA, Senior Capital Project Manager, City of Miami Beach  
April 13, 2012

*"The FP&L staff has been pleased with the work that Atkins staff has accomplished and we highly recommend them for their technical expertise."*

– Jacquelyn Kingston, Environmental Project Manager, Power Delivery/Engineering and Technical Services, FPL  
March 5, 2014

## Client commendations

# The Sebastian Inlet District Commission

*A multi-county independent special taxing district*  
114 Sixth Avenue, Indialantic, Florida 32903 (321)724-5175 / (321)951-8182 FAX



March 5, 2014

**Re: Letter of Recommendation for Atkins North America, Inc.**

To whom it may concern:

Atkins has provided the Sebastian Inlet District (District) with environmental consulting services since 2005 when they were asked to assist the District engineering firm with the permitting of a new channel from the inlet to the Intracoastal Waterway. Through their assistance, we received the federal and state Environmental Resource Permits for the project. They have assisted in the development of a program to mitigate for the impacts to seagrasses and oversaw its successful implementation. Atkins (formally PBS&J) has been monitoring that program since construction of the channel and the mitigation projects.

Atkins has continued to provide seagrass monitoring services and assist in permitting other inlet related projects providing ecological resource assessments. The District Commissioners have been provided with regular updates of progress that also include information about the health of the resources around the inlet as compared to the Indian River Lagoon.

When negotiating cost proposals, Atkins has proven to be a cost-competitive firm providing practical rates and costs for the services requested. They have worked cooperatively with the District to meet budgeting and accounting requirements and constraints. Their work has proven to be consistently on time and within budget. On several occasions the District has realized a significant cost savings at project end.

The District and its staff have been pleased with the work performed by Atkins resulting in reselection for services. We would recommend them for their technical expertise. Please feel free to contact me for further details on the work they have performed for the District.

Sincerely,

Sebastian Inlet District

Martin Smithson  
Administrator

JENNY LAWTON SEAL, Chairman; JIM CULBERSON, Vice-Chairman;  
BETH L. MITCHELL, Secretary/Treasurer; ANN PERRY, Commissioner; MICHAEL J. ROWLAND, Commissioner;  
MARTIN S. SMITHSON, Administrator



Florida Fish  
and Wildlife  
Conservation  
Commission

Commissioners

**Richard A. Corbett**  
Chairman  
Tampa

**Brian S. Yablonski**  
Vice Chairman  
Tallahassee

**Ronald M. Bergeron**  
Fort Lauderdale

**Aliese P. "Liesa" Priddy**  
Immokalee

**Bo Rivard**  
Panama City

**Charles W. Roberts III**  
Tallahassee

Executive Staff

**Nick Wiley**  
Executive Director

**Eric Sutton**  
Assistant Executive Director

**Karen Ventimiglia**  
Chief of Staff

Division of Law  
Enforcement  
**Colonel Calvin Adams, Jr.**  
Director

(850) 487-3796  
(850) 921-5786 FAX

Wildlife Alert  
888-404-3922 or  
[tip@myfwc.com](mailto:tip@myfwc.com)

*Managing fish and wildlife  
resources for their long-term  
well-being and the benefit  
of people.*

620 South Meridian Street  
Tallahassee, Florida  
32399-1600  
Voice: (850) 488-4676

Hearing/speech-impaired:  
(800) 955-8771 (T)  
(800) 955-8770 (V)

MyFWC.com

February 27, 2014

**Re: Letter of Recommendation for Atkins North America, Inc.**

To whom it may concern

Atkins (formerly Post, Buckley Schuh and Jernigan) has provided continuous services and technical support to the Florida Fish and Wildlife Conservation Commission since October 5, 2005. During this time, they have worked on almost 60 different projects. Projects include all or major portions of extensive waterway marker construction work plans which included field data collection, GIS analysis, and development of work plan template and scope of work. Their assistance also included the development of technical specifications and supporting details/drawings, representing FWC at meetings, and construction engineering field inspection.

Since 2005, Atkins has worked closely with FWC staff on extensive waterway marker assessments and construction projects from Duval County south to Monroe County; within major portions of the St. John River, and in Citrus County. In 2014, Atkins will be assisting FWC with waterway marker projects in Brevard, Citrus, Hillsborough and Pinellas counties.

In 2006, Atkins developed the highly successful Marker On Call Response Program to address and respond to hazards to navigation and correcting discrepant (damaged, misplaced, missing) waterway markers. The program continues to provide an efficient method to report and correct waterway marker problems throughout Florida in a timely manner.

When negotiating cost proposals, Atkins has proven to be a cost-competitive firm providing practical rates and costs for the services requested. They have worked cooperatively with our organization to meet budgeting and accounting requirements and constraints.

We have been extremely satisfied with the quality and commitment of Atkins staff.

If you have any questions, please contact me at (850) 617-9493 or by e-mail at [dawn.griffin@myfwc.com](mailto:dawn.griffin@myfwc.com).

Sincerely,

Dawn Griffin, Planning Manager  
Boating & Waterways Section  
Division of Law Enforcement



Carlos Buqueras  
Executive Director

February 1, 2012

**RE: Letter of Recommendation—Atkins North America, Inc.**

To Whom It May Concern:

Atkins successfully developed Port Manatee's Master Plan, which was accepted as complete by the Florida Department of Community Affairs in May 2010. Atkins' two years of hard work included not only reviewing historical and immediate needs for the port's development, but also contemplated a future expansion (known as North Port) that will carry Port Manatee throughout the rest of this century. Atkins' efforts helped create the vision for Port Manatee for decades to come. Their efforts have been lauded by local and state agencies as one of the best master plans developed by a Florida seaport.

Our own Planning Commission members commented on the depth and insight this plan brought to the future of the port. Currently, Atkins is working with us to implement the environmental mitigation plan required to successfully develop North Port by the end of this decade.

When negotiating cost proposals, Atkins was the most cost-competitive firm in contention for the project. Atkins provided practical rates and costs, which were developed and controlled through a rigid system of budget preparation and monitoring.

The Authority and its staff are extremely pleased with the work Atkins has accomplished and we highly recommend them for their visionary and technical expertise. Please feel free to contact me for any further details on work that they have performed at Port Manatee. Atkins not only strives for excellence in their work, they achieve it.

Yours Truly,

Carlos Buqueras  
Executive Director

---

Manatee County Port Authority  
300 Tampa Bay Way • Palmetto, FL 34221-6608 941-722-6621 • Fax: 941-729-1463  
www.portmanatee.com cbuqueras@portmanatee.com



## MARTIN COUNTY

### BOARD OF COUNTY COMMISSIONERS

2401 S.E. MONTEREY ROAD • STUART, FL 34996

Telephone: 772-288-5927  
 Fax: 772-288-5955  
 Email: [pknott@martin.fl.us](mailto:pknott@martin.fl.us)

February 28, 2014

**DOUG SMITH**  
 Commissioner, District 1

**ED FIELDING**  
 Commissioner, District 2

**ANNE SCOTT**  
 Commissioner, District 3

**SARAH HEARD**  
 Commissioner, District 4

**JOHN HADDOX**  
 Commissioner, District 5

**TARYN KRYZDA, CPM**  
 County Administrator

**MICHAEL D. DURHAM**  
 County Attorney

**Re: Letter of Recommendation for Atkins North America, Inc.**

To whom it may concern:

Since 2009, Atkins has supported Martin County with maintenance of St. Lucie Inlet, a federally maintained inlet with the County as local sponsor. Atkins' role has been to assist Martin County with local sponsor responsibilities in coordination with U.S. Army Corps of Engineers and also on projects where the County has been the contracting agent. In both cases, the Atkins team has provided assistance with management of inlet-related activities such as design, permitting, construction oversight, and physical and biological monitoring.

The Atkins scientific dive team has conducted annual biological monitoring in accordance with the state-approved monitoring plan that consisted of data collection such as digital video transects, in situ quadrant analysis and photography, sediment measurements, and hardbottom edge mapping. Atkins has performed quantitative and qualitative analysis and prepared annual reports for submittal to regulatory agencies.

The dredging business has become competitive and costly. Because of all of the environmental constraints on dredging periods, scheduling and performing projects within the agency approved time periods is no small task. Atkins staff members have helped us to meet our schedules and keep our costs and concerns as low as possible. Atkins staff work well with other engineering and environmental consultants to provide the best total results for the County.

When negotiating cost proposals, Atkins has proven to be a cost-competitive firm providing practical rates and costs for the services requested. They have worked cooperatively with our organization to meet budgeting and accounting requirements and constraints.

The County staff has been pleased with the work that Atkins staff has accomplished and we highly recommend them for their technical expertise. If you have any further questions, please do not hesitate to contact me.

Sincerely,

Kathy Fitzpatrick, P.E.  
 Coastal Engineer  
 Martin County

**TELEPHONE**  
 772-288-5400

**WEB ADDRESS**  
<http://www.martin.fl.us>

Eng2014L155



## MIAMIBEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, [www.miamibeachfl.gov](http://www.miamibeachfl.gov)

CAPITAL IMPROVEMENT PROJECTS OFFICE

Tel: 305-673-7071, Fax: 305-673-7073

April 13, 2012

To Whom It May Concern:

Atkins is currently serving as the Consultant for the new South Pointe Park Fishing Pier in Miami Beach. This project consists of demolishing the existing +10,000 square foot fishing pier and installation of a new pier supported by more than 60 reinforced concrete piles within the footprint of the non-serviceable pier.

Atkins was selected for this project based on their experience in dealing with marine related projects as well as their extensive knowledge in coastal permitting with the State and Federal regulatory agencies. They have performed exceptionally well in providing their contractual services and have also gone the extra mile.

Project highlights include:

- Detailed design involving structural, civil, plumbing, electrical, landscape, and architectural components, all of which Atkins conducted in-house.
- Meeting an aggressive design and permitting approval schedule
- Applying and obtaining permits with City, County, State, and Federal agencies
- Holding public meetings for nearby residents
- Serving as advisor to the City during selection of the Construction Management firm

Our project required a single firm that carried the experience and manpower to meet the critical deadlines and design of a pier that would meet the expectations of the residents of Miami Beach. I am pleased to say that Atkins has met the goals identified by City staff and their project team has provided a design that the City of Miami Beach can be proud of.

Victor Herrera, PE has worked diligently on this project from the inception of the project, from planning through the permitting of several jurisdictional agencies. He has been instrumental in keeping the project on schedule and getting the permits approved.

We are very pleased with Atkins and are excited to see our project under construction in the Fall of 2012. If you have any questions, please feel free to contact me directly at (305) 673-7071.

Sincerely,

Matilde E. Reyes, RA  
Sr. Capital Project Manager

*We are committed to providing excellent public service and safety to all who live, work, and play in our vibrant, tropical, historic community.*



March 5, 2014

**Re: Letter of Recommendation for Atkins North America, Inc.**

To whom it may concern:

Florida Power & Light (FPL) selected Atkins in 2012 to provide long term seagrass monitoring services which will continue through September 2017. FPL requires these services in order to maintain commitments established in the federal, state and local environmental permit conditions. Atkins role has been to assisting FPL by providing scientific marine biological support for investigating the success of the seagrass the mitigation effort that resulted from a project specific impact related to infrastructure upgrades. The Atkins team has been assisting FPL with maintenance of Geographic Information System geodatabase, field monitoring, statistical analysis of field data, reporting, and agency coordination.

The Atkins scientific dive team has conducted the 6, 12, and 18 month monitoring efforts in accordance with the federal, state and local approved monitoring plans which includes, but not limited to, seagrass Braun-Blanquet evaluation, percent cover, species type and year to year changes over time of the mitigation target locations.

When negotiating cost proposals, Atkins has proven to be a cost-competitive firm providing practical rates and costs for the services requested. They have worked cooperatively with our organization to meet budgeting and accounting requirements and constraints. To date, Atkins has met the timelines established for this project.

The FP&L staff has been pleased with the work that Atkins staff has accomplished and we highly recommend them for their technical expertise. If you have any further questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jacquelyn Kingston". The signature is written in a cursive, flowing style.

Jacquelyn Kingston  
Project Manager, Environmental  
Power Delivery / Engineering & Technical Services

## E. Management Approach and Availability of Resources



## E. Management Approach and Availability of Resources

Atkins makes the commitment that all key personnel on our proposed project team will be available and dedicated to meeting the City's needs.

### Proposed management approach to be taken on any service rendered

Every successful project requires a dedicated, effective, and responsive project manager, and **W. Mark Henry** is committed to filling this role for this contract. Mr. Henry, who will manage the Atkins team from our Miami office, will be the City's primary point of contact for all contractual and task assignments. He will be directly responsible for the successful planning, execution, and delivery of the team's service and work products. Mr. Henry will provide day-to-day technical and administrative management, coordinating and scheduling subconsultant activities, monitoring progress of work efforts and schedule, and coordinating transmission of information to the City and all team members. Mr. Henry will be readily available to the City's project manager to discuss all project matters. During the course of the contract, our principal-in-charge, **Adam Gelber**, will be available to meet independently with the City's project manager to discuss project progress.

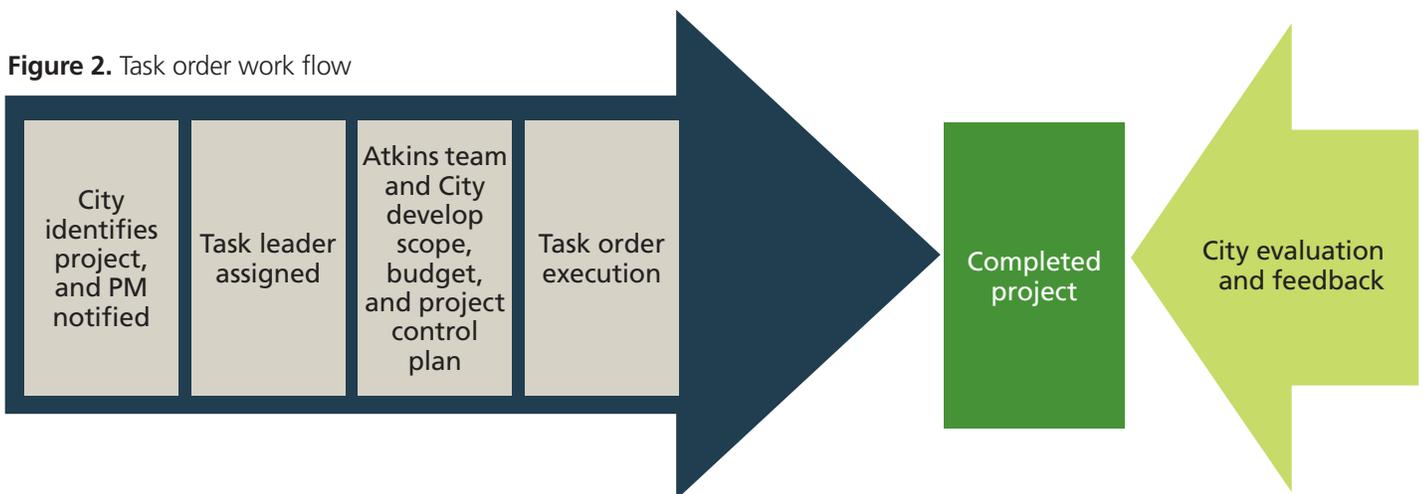
It is anticipated that over the duration of this contract the City will issue multiple task orders, each requiring expertise specific to the assignment. Consequently, Atkins will draw from our pool of professional resources to provide quality work products. The goal will be to assign personnel to support the technical and time-sensitive requirements for the task in the most cost-effective manner.

As each assignment is identified by the City, Mr. Henry will meet with the City's project manager to identify task needs and define the effort's objectives, goals, and potential deliverables. As necessary, Mr. Henry will engage Atkins' technical specialist(s) to discuss and clarify issues related to a particular assignment. Once the general scope is established, Mr. Henry will assign the team based on identified technical requirements and develop the staffing plan, which will define the purpose, scope of work, deliverables, meetings, schedule, and budget.

Mr. Henry will also periodically conduct detailed audits to confirm task order assignments are on track and schedule and budget goals are being met. This management approach has proven highly successful on other similar contracts and works well to keep our team, including subconsultants, informed and ready to step in as may be required. A general overview of our task order work flow is described in Figure 2.

Atkins' technical professionals are fully integrated and connected through our office network to facilitate seamless interaction of all staff and team members, regardless of physical location. All of our offices have a state-of-the-art unified communication system that connects employees via instant messaging, autodialed phones, Internet voice capabilities, smart phones, virtual private networks, and video conferencing. This connectivity allows our staff to function as a completely integrated team, able to draw upon the best resources for all projects without constraints

**Figure 2.** Task order work flow



of geographic locations. To provide enhanced accessibility to project information, Atkins employs Team Access, our web-based project collaboration tool. Atkins' Team Access sites are content-driven websites based on Microsoft SharePoint technologies. These sites allow project team members to work together in a secure collaborative environment that allows users to post and modify project documents over the Internet.

## Coordination

Coordination is the most important factor in successful project completion. It is paramount that all stakeholders have a clear understanding and agreement on project goals, objectives, budgets, schedules, and stakeholder needs. Regular coordination between our project team and the City will be essential.

The focal point of project coordination will be our proposed project manager, Mr. Henry. He will provide the single, continual point of coordination between the City and Atkins team. As project manager, Mr. Henry will manage and lead the consultant team, maintain communications, and provide overall coordination on each assignment. He will coordinate daily with the City through meetings, phone calls, and emails as appropriate.

In many cases, the most effective method of communication will be face-to-face meetings. Status reports, meeting minutes, and action item lists will be maintained and distributed. Communications documents can also be posted on a password-protected web-based teamsite available to authorized team members and stakeholders.

Mr. Henry's proven experience managing similar projects, developing integrated teams, and coordinating with local agencies and stakeholders will ensure that our team is responsive and provides the solutions and support the City needs. Mr. Henry will lead all work efforts. His role will entail detailed coordination with team members to ensure the City's projects remain on schedule. He will be responsible for program communications including information dissemination, meeting organization, and project reporting.

Mr. Henry, assisted by key personnel, will develop an overall project delivery plan, which will be the team's road map for delivering each project undertaken as part of this contract. The project delivery plan will include:

- Overarching shared goals and objectives.
- Atkins' team approach and commitments to delivering services.
- CAD/GIS standards.
- QA/QC guidelines and procedures.
- Contact list.
- Communications plan.
- Accounting and invoicing requirements and procedures.
- Status reporting guidelines.
- Document control plan.
- Copies of any applicable documents, such as design and development standards.

**The focal point of project coordination will be our proposed project manager, W. Mark Henry.**

The project delivery plan will be distributed to the project team for review, comment, approval, and use. Using the project delivery plan as the framework, our project manager, assisted by key personnel, will develop a project control plan for each project assignment with details related to each specific assignment. The project control plan expands on the project scope of work to include deliverables, QC reviewers, project schedule and budget details, and other project information.

## Ability to perform requested services expeditiously

Atkins' managing office for this pursuit is in Miami, the location of our project manager. While our core management team is local to the south Florida area, it also has real-time access to highly skilled nationwide resources within the firm; these professionals have the breadth and knowledge to provide additional services if needed. Atkins has the ability to draw from our extensive, diverse resources and quickly augment project teams to address specific scope needs, peak workloads, programs, or projects, and to adjust teams as requirements change.

Our offices are electronically networked, providing efficient communication. Atkins' depth of resources and technical capabilities, coupled with our established local knowledge and relationships, will result in a successful contract.

In addition, our ability to meet the City's expedited schedules has been proven through our proposed project manager, Mr. Henry. He has continually been accessible to City project managers over the last 5 years. Mr. Henry is fully committed to the City and will continue to be readily available and responsive. He has been dedicated to meeting schedules for scopes of work preparation for Smathers Beach, Rest Beach, and City Hall projects to ensure that staff's communication with the City Commission is timely. This timely response leads to timely execution of projects, and Mr. Henry has strived to meet deadlines to keep projects on track. For example, upon the City receiving final authorization of the federal permits for the Smathers Beach nourishment project, the window was closing on the state permits, resulting in a short turnaround to complete the project due to delays by the Department of the Army. As a result, Mr. Henry worked with the City-approved contractor to increase the daily production rate and coordinated with regulatory agencies to extend permit durations to complete the project.

## Location and availability/capacity of technical staff and project manager

Staff availability encompasses providing appropriate technical resources for each assigned task. Atkins offers a tremendous depth of experience and staff capacity to meet contract needs. Staff specialty groups and technical experts work in concert with regional offices close to the project site to provide a thorough and coordinated approach, resolve identified issues, and satisfy client needs.

Atkins is committed to allocating the resources necessary to complete this contract, and we have the capacity to perform the work on time and within budget. Based on our current and projected staff workload, we can immediately proceed with City assignments. We are interested in and excited about potentially supporting this contract.

Our proposed team includes the key personnel shown on the organizational chart as well as significant local staff resources that are available to provide additional support. Atkins' capacity for immediate and instantaneous communication among our 70 offices nationwide enables our team to draw upon the resources of our approximately 2,500 employees nationally, as needed, to complete task assignments on schedule and within budget. The support provided by our Florida offices (Figure 3) is further facilitated by Atkins' instantaneous and fluid communications among offices as well

as our common organizational structure and management hierarchy. These communication networks will enable Mr. Henry to coordinate the resources of our entire firm to complete assignments.

Atkins continually monitors and projects the workload of our technical staff. This resource management enables us to match project requirements to available manpower, identifying areas in need of staff augmentation and areas where additional professional service opportunities may be required. We continually assess backlog to confirm appropriate availability of the project team. The inclusion of the names on our organizational chart comes with a commitment to the City that these professionals have sufficient time available to complete assignments in a timely, cost-effective manner, while maintaining quality, for the duration of each assigned project. Atkins makes the commitment that all key personnel will be available and dedicated to meeting the City's needs.

Effective project management will allow current staff and company workloads to be adjusted to stay on schedule. Our commitment and additional support available throughout our network of offices present the City with a responsive and available project team.

In the area of staffing, past performance is an excellent indicator of future results. We offer individuals with significant and often highly specialized expertise. A large and experienced

**Figure 3.** Atkins' Florida offices



staff assures that personnel will be available for assignments on short notice, or that given a longer lead time, the City and Atkins can formulate teams based upon who best fits the project needs. Many of our professionals are considered industry leaders in their particular areas of specialty.

Table 6 includes our team members' location and estimated availability/capacity.

## QA/QC

The Atkins quality control and assurance program (QCAP) prescribes QA/QC procedures to be implemented on all projects. Our approach to quality is simple—the project manager is accountable for the quality of all deliverables we

submit. Mr. Henry, our project manager, will be responsible for establishing **project controls** and clearly communicating to the project teams the **quality standards** to be used to judge our services and deliverables, so everyone understands what is—and is not—acceptable. Throughout each project, Mr. Henry will verify that extensive, detailed, and documented QCAP reviews occur and that each one takes into consideration project design, operational elements, budget, and constructability requirements.

Task leaders will be responsible for incorporating the required quality into their design and deliverables. Quality must be integrated into all aspects of the process. We will implement QA/QC procedures refined from experience, enabling us to deliver consistent, technically appropriate designs that have been reviewed by independent senior staff before they are submitted.

**Table 6.** Team members' location and estimated availability/capacity

Team member – project role(s)	Office location (Florida)	Estimated percent of availability/capacity
Adam Gelber – principal-in-charge and biological/permitting	Miami	40%
W. Mark Henry – project manager, biological/permitting, and environmental engineering	Miami	70%
Ken Jones, PE – engineering QA/QC	Tallahassee	20%
Donald Deis, CEP – biological QA/QC	Jacksonville	30%
Stacey Roberts, EI – biological/permitting	Sarasota	30%
Leslie Manzello – biological/permitting	Miami	60%
Beth Zimmer – biological/permitting	Miami	60%
Bryan Flynn, PE – coastal engineering	Tampa	60%
Todd DeMunda, PE – coastal engineering	Melbourne	40%
William Pitcher, PE – marine structural engineering	Fort Lauderdale	30%
Samuel Smith, PE – marine structural engineering	Fort Lauderdale	60%
Bradley Bayne, PG – environmental engineering	Tampa	60%
Roberto Mantecon, PSM – surveying	Miami	30%
Michael Ryan, PE, PMP – bidding and construction administration	Fort Myers	40%
Matthew Starr – bidding and construction administration	Tampa	60%
Janet Luce – bidding and construction administration	Melbourne	60%
Robert Orlando – environmental engineering – geotechnical	Pompano Beach	50%
Michael Orlando – environmental engineering – geotechnical	Pompano Beach	50%
Timothy Dehen, PG – environmental engineering – UST removal and remediation construction	Pompano Beach	25%
Hiram Aguiar – environmental engineering – industrial hygiene	Miami Lakes	70%
Mark Skweres – environmental engineering – industrial hygiene	Miami Lakes	70%
Jay Sall, CIH, LAC – environmental engineering – industrial hygiene	Miami Lakes	70%
Matthew Blomberg – surveying	Sugarloaf Key	70%
Eric Isaacs, PSM – surveying	Sugarloaf Key	70%

*Depending on the assignment, each team member can be 100 percent available to the City for an extended period of time.*

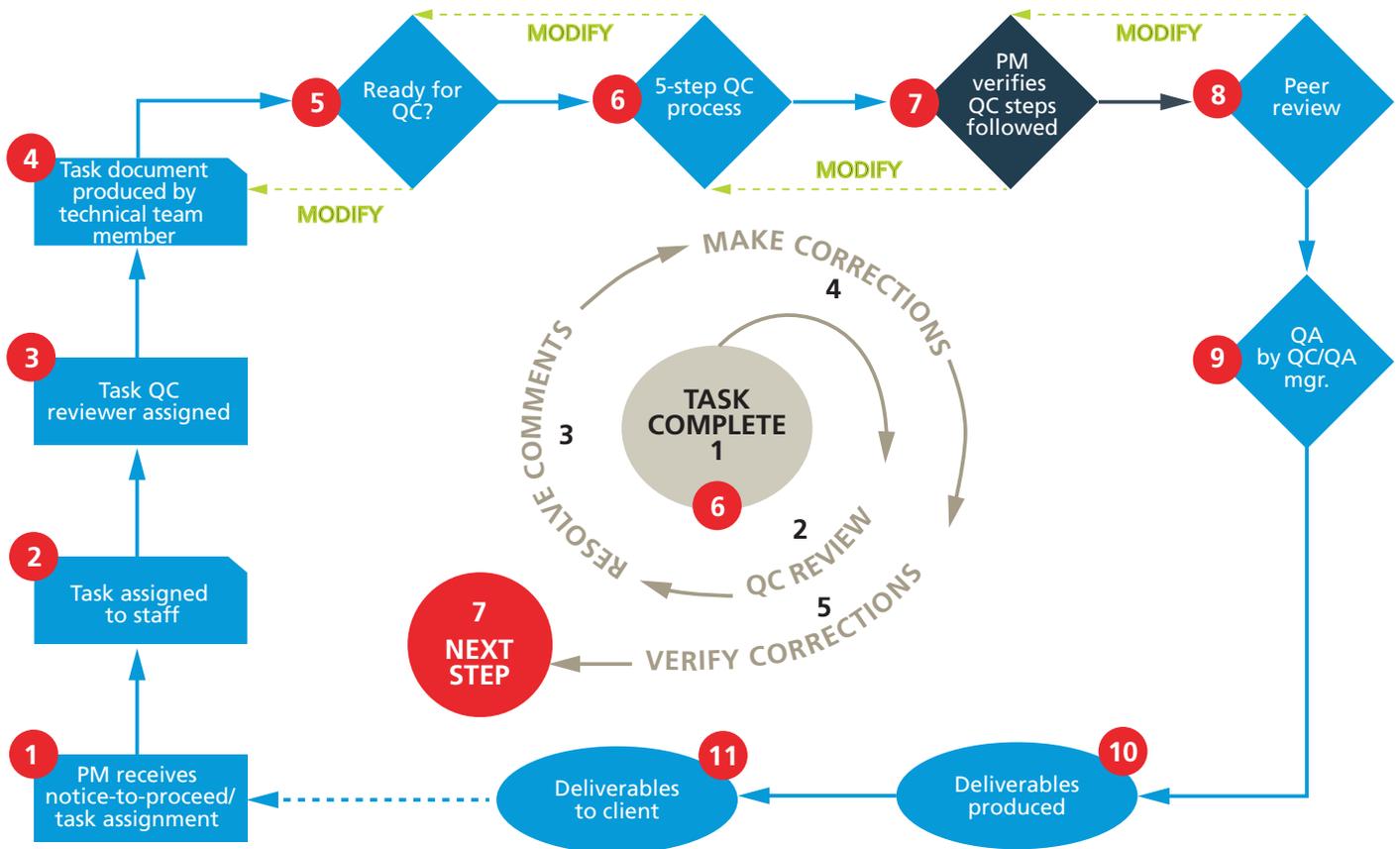
These reviews will be conducted by design team members as well as individuals with no other direct involvement with the project to ensure independent objectivity. **Ken Jones, PE**, will lead engineering QA/QC reviews, and **Donald Deis, CEP**, will lead biological QA/QC reviews. They will assemble an appropriate review team based on the project. Items to be checked will include technical design parameters and calculations, consistency of the construction plan sets with technical specifications, proper presentation and sufficiency of information to provide for contractor understanding, and proper grammar and spelling. Additionally, QA/QC reviews will be performed on items such as quantity calculations, opinions of probable construction costs, planning forecasts, and demand capacity analyses. This focused effort will allow for a competitive bid environment and mitigate issues during construction.

Atkins uses a five-step QC review procedure to monitor work progress for small, medium, and large projects. Specific elements of this process include:

1. The lead technical professional responsible for the work refines it and confirms it is ready for release.
2. The work is given to a second, qualified person or QC reviewer who reviews it and notes any recommended modifications. On highly complex projects, there could be several QC reviewers.
3. The two professionals reach consensus on the suggested revisions.
4. Changes are made by the lead technical professional.
5. Changes are verified by the QC reviewer.

Figure 4 provides an overview of our QA/QC process. Additionally, for medium and large projects, we perform a **risk assessment** in coordination with the client at the beginning of the project. The risk assessment is revisited as the project progresses to manage potential issues.

**Figure 4.** QA/QC process



# Appendix



## Appendix

Atkins understands the importance of client service and strives to make each project an exceptional experience.

We have included in this section:

- Resumes
- Addendum No. 1
- Required forms.
- Atkins' insurance certificate.
- Team's relevant licenses and certifications.



## Adam Gelber

### Principal-in-charge and biological/permitting

#### Education

B.S., Wildland/Wildlife Management, University of Miami, 1997

#### Registrations/licenses

U.S. Coast Guard (USCG)  
– Operator of Uninspected Passenger Vessels (OUPV)  
6-Pack Captain's License (since 2001)

#### Certifications

CPR, 2008 to current

First Aid, 2008 to current

Oxygen Administration, 2008 to current

Nitrox Diver, National Association of Underwater Instructors (NAUI), 2001

Professional Association of Diving Instructors (PADI), 1984

Transportation Worker Identification Credential (TWIC) – National Transportation Safety Board (NTSB) Certification – Security Clearance

#### Professional affiliations

Coastal Conservation Association, State and National Board of Directors

Florida Department of Environmental Protection Environmental Regulation Commissioner

South Florida Water Management District Water Resources Advisory Commission

Adam Gelber has 20 years of experience and has been involved in all forms of environmental consulting, assisting clients with scientific investigation, planning, permitting, compliance, advocacy, public involvement, and public policy. His core focus is to guide clients through the maze of various local, state, and federal permits including wetlands, hardbottom, coral, and seagrass planning, design, and construction compliance monitoring as well as long-term monitoring. Mr. Gelber has logged more than 3,000 scientific and recreational dives. He has an extensive resume for projects spanning Florida, Texas, Grand Cayman, Bahamas, and the Dominican Republic. Mr. Gelber also previously served as a biological technician for 5 years with the National Park Service (NPS) at Biscayne National Park.

Mr. Gelber's project experience includes:

**Smathers Beach Joint Coastal Permit (JCP) Renewal, Key West, FL.** Mr. Gelber is client service manager on the contract associated with this task order and provides technical quality control of work products. The project involves renewal of the Florida Department of Environmental Protection (FDEP) JCP for the City of Key West. The City desires to have long-term permits from the U.S. Army Corps of Engineers (USACE) and FDEP that allow for periodic renourishment events over an extended period of time and that contain similar specific conditions and physical and biological monitoring requirements for each event. The specific conditions and monitoring requirements in the new permit must be coordinated with appropriate state and federal resource agencies including the U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), Florida Keys National Marine Sanctuary (FKNMS), and FDEP, which includes coordination with the Florida Fish and Wildlife Conservation Commission (FWC).

**Smathers Beach Seagrass Transplantation, Subaqueous Services, Inc., Key West, FL.** Mr. Gelber conducted a seagrass transplantation project for the City of Key West according to an FDEP permit. Work included removal of mainly shoal grass (*Halodule wrightii*) from Smathers Beach to a salt pond on the north side of Key West Airport. The permit called for the transplanting of 8,100 peat pot (3 inches by 3 inches) planting units to be planted in a 2-acre mitigation area. The project concluded with 9,000 planted units. Subsequent monitoring of the site by the City of Key West has revealed a greater than 90 percent survival rate of transplanted units and grasses proliferating throughout the mitigation site.

**City of Key West Cow Key Channel Seagrass Restoration, Key West, FL.** Mr. Gelber and his team of biologists conducted the monitoring of a seagrass mitigation construction project comprised of 10,250 square feet of propeller scars restored by Seagrass Recovery using biodegradable sediment-filled tubes. After installation of the sediment tubes, all restored scars were mapped with GPS coordinates, and observations were recorded to describe the surrounding community composition. Six months after installation, an additional monitoring event was conducted by Mr. Gelber and his team to document the general condition of the sediment tubes and propeller scars and any in-filling by adjacent seagrasses as well as to record any unusual circumstances encountered. Photographic/video images were collected during both monitoring events, and a detailed report was developed.

**City of Key West Mitigation Flow Improvement, Key West, FL.** Mr. Gelber served as project manager overseeing work completed by the Atkins team. Atkins was contracted by Perez Engineering and Development, Inc., to provide contractor oversight for construction upgrades to eight stormwater drainage basins in Key West. Over time, the drainage conveyance canals were overgrown with red mangroves (*Rhizophora mangle*) and other native, salt-tolerant species, along with trapped vegetative material, debris, and sediments. This vegetative overgrowth and accumulation of debris and sediments limited the capacity of the drainage system to properly operate, resulting in flooding of neighborhoods during heavy rain events.

**Adam Gelber**  
Principal-in-charge and  
biological/permitting

**Seagrass Habitat Restoration Management Plan and National Environmental Policy Act (NEPA) Compliance Document, Everglades National Park, FL.** Mr. Gelber serves as project manager and lead technical author on the development of a seagrass restoration handbook for Everglades National Park for 400,000 acres of the Florida Bay. Services include development of (1) standard operating procedures (SOP) for integrated natural, cultural, and wilderness damage assessment protocols of benthic resources in Florida Bay damaged as a result of vessels; (2) SOPs for seagrass bed restoration methods/protocols to repair damaged seagrass beds as a result of vessel damage; (3) SOPs for monitoring methods/protocols of restored seagrass beds; and (4) identification of priority or hot-spot areas/sites in Florida Bay that should be the focus of future restoration efforts based on likelihood of success (based on resource characteristics, types of damage, types of projects, and location/geography).

**FKNMS – Seagrass Restoration and Monitoring Services, NOAA, Key West, FL.**

Mr. Gelber was lead project manager and scientist responsible for this NOAA contract to provide submerged aquatic vegetation (SAV) restoration throughout the FKNMS on a task order basis. This contract facilitated seagrass-related restoration activities from Key West to Key Largo. Mr. Gelber provided contractor oversight to complete the restoration activities associated with this indefinite delivery/indefinite quantity (IDIQ) contract.

**FDEP (Parks and Recreation) – Fort Zachary Taylor – FDEP Parks and Recreation, Monroe County, FL.**

Mr. Gelber was lead scientist performing an environmental resource assessment (seagrass and coral) in the vicinity of the terminal groin and breakwaters fronting the beach at Fort Zachary Taylor Historic State Park in Monroe County to facilitate the JCP process. The purpose of the survey was to locate and assess submerged biological resources for the proposed terminal groin and breakwater rehabilitation project to avoid construction impacts.

**South Pointe Fishing Pier Coral Permitting Support, Coral and Seagrass Avoidance and Minimization Planning, City of Miami Beach, FL.**

Mr. Gelber served as principal biological investigator for preparation of the environmental resource permit (ERP) application for submission to USACE and the Class I application for submission to the Miami-Dade County Department of Permitting, Environment, and Regulatory Affairs (PERA) and FDEP to address coral impacts from the proposed project. Atkins prepared an avoidance and minimization plan (AMP) that provided guidance to the construction contractor. The AMP provided detailed instructions regarding the coral removal and reattachment methodologies to be used for the project.

**Broward County Outfall Pipe Coral Relocation and Monitoring, Pompano Beach, FL.**

Mr. Gelber served as project manager on this task assignment. The Broward County North Regional Wastewater Treatment Plant's (NRWWTP) existing 54-inch iron outfall pipe, installed in 1973–1974, is located directly east of the NRWWTP in Pompano Beach. In 2002, the armoring of the near-shore portion of the outfall was damaged during dredging activities associated with the Hillsboro Inlet improvement project. Mr. Gelber was contracted to execute the relocation plan of all scleractinian and octocorals within the 1,500-foot corridor.

**Sunrise Boulevard and South New River Essential Fish Habitat (EFH), Florida Department of Transportation (FDOT) District Four, Broward County, FL.**

Mr. Gelber served as lead scientist on this project. As part of the permitting of this bridge crossing, FDOT District Four contracted the services of Atkins' biologists to conduct benthic surveys to identify resources that might be impacted by construction of the new elevated bridge. As a result of the in-water activities, there were no benthic resources identified at this location within the survey limits. A detailed report was generated. In addition to the benthic surveys, Atkins biologists prepared an EFH evaluation of the existing conditions as part of the permit process for this bridge section. In support of the EFH process, Mr. Gelber directed staff on development of an oyster mitigation plan in consultation with NMFS.

**Adam Gelber**  
Principal-in-charge and  
biological/permitting

**Indian River Lagoon (IRL) Seagrass Restoration Engineering and Surveying Services, FDEP, Indian River County, FL.** Scientist responsible for all permitting and agency coordination for powerline infrastructure rehabilitation, mapping of seagrass in the IRL, and conducting wetland delineation of coastal mangrove habitat for this contract with FDEP. He performed a historic and recent database review, completed field reconnaissance, developed a feasibility plan for 51 conservation spoil islands and other potential sites within the IRL, developed a geographic information systems (GIS)-based matrix for potential sites, produced a final report and engineering drawings for permitting, and verified the site after consultation with FDEP's Office of Coastal and Aquatic Managed Areas.

**Port Everglades Reef Mapping and Assessment Services, Fort Lauderdale, FL.** As project manager, he managed a habitat impact analysis for reefs near Port Everglades. As part of the study, USACE, in conjunction with Port Everglades, completed a feasibility study to evaluate widening and deepening of the outer entrance channel to determine the impacts offshore on marine biological resources, including coral reef ecosystems. He mapped the coral reef habitats and performed a quantitative assessment of those habitats to determine the extent and nature of the possible impacts, minimization of impacts, and the amount of mitigation required to compensate for unavoidable impacts.

**Sebastian Inlet Channel Seagrass Mitigation, Sebastian, FL.** Field project manager for this corridor evaluation of seagrass impacts and mitigation analysis associated with connecting the Sebastian Inlet to the Intracoastal Waterway (ICW) to the west of the inlet. Subconsultant services included assistance with the permitting process for a channel to the ICW through the inlet flood shoal, which contains seagrasses and critical habitat for Johnson's seagrass (*Halophila johnsonii*). Support services included the identification of seagrass resources within the proposed project area including potential project alternative areas and seagrass projects within the IRL around Sebastian Inlet. The construction of a shoal within the Pelican Island National Wildlife Refuge that would both protect Pelican Island from identified erosion and provide seagrass habitat was one of the alternatives considered.

**Lockheed Martin MS2 Seagrass Permitting and Mitigation Plan Development Services, The Bernd Group, Palm Beach County, FL.** Mr. Gelber and his team of biologists provided technical oversight of the mitigation plan to offset impacts from the dredging of this facility in northern Palm Beach County, just west of Peanut Island in Riviera Beach. The impacts to the SAV, which included Johnson's seagrass (*H. johnsonii*) and paddle grass (*H. decipiens*), encompassed approximately 1.2 acres. Mr. Gelber, working closely with the engineering firm of Issminger and Stubbs, developed a mitigation plan that addressed USACE commenting agencies and FDEP. The mitigation plan incorporated a combination of innovative concepts that included debris removal and water quality improvements to the Lake Worth Lagoon. The FDEP and USACE permits were subsequently issued.



## W. Mark Henry

### Project manager, biological/permitting, and environmental engineering

#### Education

B.A., Geology, Florida  
International University, 1995

B.S., Biology, Florida  
International University, 1991

#### Certifications

Professional Association of  
Diving Instructors (PADI) Open  
Water Diver Certification, 2001

National Association of  
Underwater Instructors (NAUI)  
Enriched Air Nitrox Diver  
Certification, 2002

#### Professional development

40-Hour Occupational Safety  
and Health Administration  
(OSHA) Health and Safety (29  
CFR 1910.120), 1995

8-Hour OSHA Refresher  
(annually)

30-Hour OSHA Construction  
Safety and Health Training  
Course, 2000

W. Mark Henry has 20 years of experience in environmental fieldwork, permitting, and project management. This experience involves hazardous waste and ecological sciences work performed for federal, state, and county agencies as well as private-sector clients. His projects have included contamination assessments and remediation, environmental assessments, and groundwater and soil remediation systems. Mr. Henry has also performed permanent and temporary monitoring well installations, underground storage tank (UST) removals, soil borings, and contaminated soil/sludge excavations and removals. Mr. Henry has written and submitted tank closure assessment reports, contamination assessment plans, contamination assessment reports, and remedial action plans (RAP) to the Miami-Dade County Department of Regulatory and Economic Resources (RER), Broward County Environmental Protection and Growth Management Department, and Florida Department of Environmental Protection (FDEP). He has investigated soil and groundwater contamination at numerous facilities throughout south Florida. His responsibilities included work plan preparation; selection of and contracting with subcontractors; supervision and performance of field activities; regulatory notifications; site documentation; quality control; data validation, reduction, and evaluation; and final report preparation.

Mr. Henry has also supervised the installation of numerous monitoring, recovery, and production wells throughout south Florida. These wells were drilled using numerous techniques including mud rotary, hollow stem augers, and hand augering. He has gained hands-on experience in borehole sampling techniques such as split spoons and Shelby tubes.

Mr. Henry has also been responsible for the installation, operation, troubleshooting, and maintenance of dedicated well purging and sampling systems, compliance checks at gasoline stations in south Florida, percolation and pump testing, and servicing and repairing air stripping towers, soil vapor extraction units, and thermal catalytic oxidizers.

His experience includes remedial investigations under the Comprehensive Environmental Response, Compensation, and Liability Act, monitoring well/soil boring installations, soil and groundwater sampling, wetland and upland evaluations, seagrass surveys, Phases I and Phase II environmental site assessments (ESA), contamination assessments and initial remedial actions, and construction oversight.

Mr. Henry's project experience includes:

**Smathers Beach Renourishment – General Environmental Consulting Service Agreement, Key West, FL.** As senior scientist/permitting task manager, he recently completed two sand renourishment efforts to replenish the eroded beach face at Smathers Beach. He was responsible for ensuring the project was in compliance with all existing state and federal permit conditions pre-, during, and post-construction. He communicated frequently with FDEP, National Oceanic and Atmospheric Administration (NOAA), and U.S. Army Corps of Engineers (USACE) on behalf of the City. He coordinated, and at times, conducted construction engineering inspections that included water quality monitoring, conducted biological monitoring and reporting, and coordinated physical beach monitoring. He has been responsible for coordinating the permitting effort with FDEP and USACE for continued beach maintenance over the next 10-year period.

**Rest Beach Renourishment – General Environmental Consulting Service Agreement, Key West, FL.** Rest Beach is considered a critically eroded beach by FDEP. As senior scientist/permitting task manager, he is coordinating the effort to obtain a 10-year permit with FDEP and USACE to conduct periodic sand renourishment efforts.

**City of Key West City Hall/Annex ESA Services, Monroe County, FL.** As the Atkins environmental project manager, he conducted a Phase I ESA and a limited site assessment at the City Hall building on Angela Street in Key West. The site had been sitting idle for some time, and FDEP requested that the City complete a site assessment report addendum to identify groundwater quality conditions related to the discovery of leaking USTs in 1992. He prepared a sampling plan that was approved for implementation by FDEP and coordinated with TestAmerica for sampling and laboratory analysis. He prepared and submitted the report to FDEP, which was signed and sealed by an Atkins engineer. This assessment effort is ongoing.

**W. Mark Henry**

Project manager,  
biological/permitting,  
and environmental  
engineering

**Federal Emergency Management Agency (FEMA) Appeal – General Environmental Consulting Service Agreement, Key West, FL.** FEMA’s Disaster Assistance Fact Sheet DAP9580.8 outlines the criteria for sand replacement of public beaches. Mr. Henry assisted the City with composing the technical components of an appeal to FEMA in response to an initial denial, or reduced funding, for disaster recovery costs to repair erosion damage suffered to the beach face and berms at Smathers, Rest, South, and Dog Beaches, resulting from the impact of Hurricane Isaac in August 2013.

**Blaylock Oil and Gas Station Facility/Walgreens Contamination Assessment and Cleanup, Marathon/Monroe County, FL.** As a staff geologist, he was involved in the contamination assessment and cleanup attempt of the former Blaylock Oil and adjacent gas station facility in Marathon Shores—currently a Walgreens retail store (#3574). He sampled on- and off-site monitoring wells, supervised pump tests, and coordinated source removal activities. Due to the nature of the subsurface geology and hard and impervious cap rock, total site cleanup could not be readily achieved. As such, he coordinated with design engineers to adjust the site plan building layout, traffic flow, and landscaping to assist in obtaining final construction approval from Monroe County and FDEP.

**City of Miami Capital Program Support Services (CPSS) Environmental Support, Miami, FL.** As Atkins’ environmental project manager to the City of Miami, he was responsible for providing technical and project management assistance on the closing and redevelopment of a 20-acre former municipal landfill and dredging 2.5 miles of waterway (Wagner Creek and Seybold Canal). He reviewed all documents prepared by subconsultants to be submitted on behalf of the City, attended/chaired meetings with the City and subconsultants, attended meetings with other stakeholders and the public, and reviewed and approved subcontractor invoices.

**Ireland’s Inn UST Removal, Fortune International, Fort Lauderdale, FL.** As hazardous waste scientist, he coordinated the permitting and supervised the removal of two abandoned USTs at the facility. He conducted soil screening and groundwater testing to assess the condition of the soil and water in the vicinity of the former tank locations. Soil contamination was identified below one of the former UST locations. He prepared an FDEP/EPGMD-approved Natural Attenuation Monitoring Only Plan (NAM) that has been under implementation since 2009, involving semiannual groundwater monitoring. As a result of pending site redevelopment plans, he has been tasked with coordinating final contamination assessment, contamination source removal, and regulatory site closure responsibilities.

**City of Miami Springs Fleet Maintenance Facility Soakage Pit and the Golf and Country Club Maintenance Barn, Miami Springs, FL.** As senior hazardous waste scientist, he prepared and implemented an initial remediation plan to reduce discharges from an on-site soakage pit at the fleet maintenance facility. The facility was later issued a “no further action” status by Miami-Dade County RER after implementation of a monitoring only plan (MOP). Since 2009, he also has been coordinating the implementation of a biannual groundwater sampling program at the City golf course maintenance facility to maintain compliance with conditions of the Agricultural Waste Annual Operation Permit for the facility. Monitoring reports are prepared and submitted to RER on a semiannual basis.

**Miami-Dade Transit (MDT) Maintenance Facility Spill Prevention Plan Assessment, Miami, FL.** As hazardous waste scientist, he conducted site visits of MDT train and bus maintenance facilities to assess spill prevention measures and best management practices. He inventoried chemical storage and handling areas and evaluated ways to minimize discharges of hazardous materials to the environment. He also evaluated the vehicle maintenance areas for safe handling of hazardous materials and adequate spill prevention and cleanup procedures.

**Munisport Landfill Closure and Development Services, Swerdlow Boca Developers LLC, North Miami, FL.** Served as ecologist. Atkins provided ecological services as part of a 300-acre development project in northeast Miami-Dade County on a former landfill. Work associated with this project included conducting wetland delineations, jurisdictional determinations, mitigation alternatives for roadway improvements, and mitigation design and implementation.

**W. Mark Henry**

Project manager,  
biological/permitting,  
and environmental  
engineering

**Florida Gas Transmission (FGT) Permitting Natural Gas Pipeline Installation, Miami, FL.** As senior scientist, he assisted with permitting and coordinated with the Propane Education and Research Act of 1996 (PERA), FDEP, and USACE. FGT expanded its natural gas pipeline system in Florida. The 24-inch, 6-mile segment in Miami-Dade County crossed sensitive environmental habitats, including freshwater herbaceous wetlands and coastal mangrove systems. In addition to open trench installation, construction included three horizontal directional drilling segments—one with a horizontal distance of 5,500 feet.

**City of Miami CPSS – Waste Management Building Demolition, Miami, FL.** Senior scientist for assessment of a waste management building site in Miami, prior to demolition. The visit identified possible environmental concerns during demolition and disposal of the resultant debris. The visual reconnaissance of the interior and perimeter of the building focused on determining whether hazardous materials or conditions were present, or whether any debris generated during the demolition process would require additional permitting or special handling. Results of the field visit were submitted to the City in a memorandum.

**City of Miami CPSS – Virginia Key North Point Park Bike Trail, Miami, FL.** Senior scientist. Atkins provided environmental oversight (before, during, and after construction) for development of bike trails at North Point Park on Virginia Key. He reviewed the flagged vegetation to be avoided during path-clearing activities and reviewed (at significant milestones) project progress, as well as adherence to the goals and objectives to avoid all native vegetation and wetland features. After construction, he assisted with review of final sketches, attended meetings at the site, and reviewed the final report prepared by the construction contractor.

**Broward County Beach Renourishment, Rudy M. Ortiz, Fort Lauderdale, FL.** As senior ecologist, he was responsible for monitoring coral stress indicators and sand sedimentation rates in the vicinity of burrow pits intended to supply sand for the beach renourishment project. He visited pre-established monitoring sites on a weekly basis to collect stress indicator data and photographs.

**U.S. Southern Command (SouthCom) Headquarters Design-Build – Wetland Impact Permitting, Hellmuth + Obata + Kassabaum, Inc. (HOK), Doral, FL.** As task manager, he successfully managed the assessment, field reviews, scoring and mitigation negotiations, and permitting with USACE, South Florida Water Management District, and Miami-Dade County Department of Permitting, Environment, and Regulatory Affairs (PERA) for impacts to 55.42 acres of jurisdictional wetlands in Miami-Dade County for the development of this Department of Defense facility. He coordinated with the construction management firm to gain early access to the site for clearing and geotechnical work to begin ahead of permit issuance from the permitting agencies.

**Broward County Remediation System Operation and Maintenance (O&M) at Fort Lauderdale-Hollywood International Airport, Broward County Aviation Department, Hollywood, FL.** The project included O&M for a groundwater treatment system at Fort Lauderdale-Hollywood International Airport in Hollywood.

Mr. Henry's additional project experience included:

- Construction oversight, start-up, initial testing, and O&M of groundwater recovery and soil vapor extraction and treatment systems for Miami-Dade County EDI program cleanup sites. He has conducted contamination assessments, initial remediation action, supplemental contamination assessments, and MOPs. Remediation systems have been installed at two sites following RAP approval. Ongoing activities include conducting O&M, natural attenuation, and several MOPs.
- Remediation of soil and groundwater contamination and continued environmental compliance assistance for a large corrugated box manufacturing facility in Miami-Dade County, Florida.
- Initial characterization of a multiuse property in Monroe County, Florida.



## Ken Jones, PE Engineering QA/QC

### Education

M.S., Physical Oceanography,  
Florida State University, 1990

B.S., Civil Engineering, Ohio  
State University, 1980

### Registrations/licenses

Professional Engineer:

Florida 39523, 1988

Louisiana 31881, 2005

### Professional affiliations

Coastal and Estuarine Research  
Federation

Florida Shore and Beach  
Preservation Association

Florida Engineering Society

American Society of Civil  
Engineers

American Shore and Beach  
Preservation Association

### Certifications

International Association of  
Nitrox and Technical Divers

Professional Association  
of Diving Instructors (PADI  
Divemaster)

National Association for Cave  
Diving (NACI) (Cavern Diving)

Transportation Worker  
Identification Credential  
Holder, Transportation Security  
Administration

Ken Jones provides technical and management supervision of ports and coastal engineering, environmental permitting, and planning projects for Atkins. He also provides technical guidance throughout the firm in the field of physical/coastal oceanography. As a chief technical expert in this area, Mr. Jones is responsible for the design and direction of complex efforts in the coastal zone. He has 30 years of experience in consulting and government positions, performing project development, design, permitting, contracting, and construction management, as well as water resources analyses in river and estuarine systems and multidisciplinary studies in coastal and estuarine systems.

Mr. Jones' project experience includes:

**Florida Department of Environmental Protection (FDEP), Bureau of Beaches and Coastal Systems (BBCS), Program Management Support, FL.** As Atkins' on-site coordinator/contract manager for the FDEP BBCS statewide engineering contract, he managed on-site personnel, as well as multiple support staff around the state. Select task assignments managed or undertaken by Mr. Jones include the following:

- Development of statewide coastal master plan
- Facilitation of statewide beach monitoring plan development
- Notice of general permit (coastal construction control line [CCCL] siting rule)
- Permit processing and compliance program
- Development of statewide long-range budget plan
- Program management, coordination, and support
- Seagrass and hardbottom training courses
- Permit compliance (expert witness) – Dog Island
- Development of quality assurance/quality control (QA/QC) criteria for Amelia Island nourishment project
- Database design contract
- Eglin Porous Media Groyne monitoring program
- Erosion control program audit
- Various project-specific audits

**Marineland Shoreline Restoration, St. Augustine, FL.** Engineer-of-record for the Marineland revetment project, which involved construction of a 1,000-foot-long granite revetment to replace a coquina rock revetment damaged during Hurricane Floyd. The revetment protects Marineland of Florida, a marine research and tourist facility. In addition to the revetment, 1,100 feet of vertical sheetpile wall was constructed to protect the roadway (A1A). This approach enabled landward translation of the dune, along with establishment of 1,100 feet of significant marine turtle habitat.

**Navarre Beach Dune Construction, Santa Rosa County, FL.** Project manager. After Hurricane Opal, the Navarre Beach area was devastated by storm surge, requiring removal of the entire dune system over the 4-mile reach. Atkins designed, permitted, and managed the dune reconstruction for Santa Rosa County. The project, funded by the Federal Emergency Management Agency (FEMA), provided initial short-term protection to structures and infrastructure. Later, working for FDEP, Atkins augmented the dune construction, doubling the size of the beach berm using FDEP Opal restoration funds. Subsequently, sea oats were planted, finalizing a significant beach berm and dune restoration project. Mr. Jones was later requested to serve as engineering representative to Santa Rosa County in an arbitration case associated with the FEMA project. Studies conducted by Atkins assisted Santa Rosa County in successfully defending this project.

**Ken Jones, PE**  
Engineering QA/QC

**Smathers Beach, Key West, FL.** QA/QC of comprehensive coastal engineering, design, surveying, permit preparation, preparation of contract specifications, preparation of bid and proposal documents, assisting the City with technical review and ranking to attain qualified contractors for work, environmental assessments, construction administration and owner project representation services relating to operation, new construction, permit modification, construction improvements, rehabilitation and/or retrofit of coastal facilities, erosion control, beach design, and beach renourishment.

**Design Storm Grade Elevation Study, FL.** FDEP requested that Atkins review the work conducted by the Beaches and Shores Resource Center for establishment of the CCCL. Mr. Jones analyzed work conducted by FDEP staff and the center to develop a report for the Department, establishing the 100-year design grade for the lowest structural member of a habitable structure in the coastal zone. The joint FDEP/Atkins document was used as the basis for establishment of minimum finished floor elevations for every coastal county as part of the Standardized Florida Building Code.

**Port Master Plan, Manatee County Port Authority, Port Manatee, FL.** Project manager for development of the port's 2030 Vision Plan including development of the \$800 million North Port container facility. In addition to examining the new container terminal, the master planning team is assessing reallocation of waterside and non-waterside uses to maximize the highest-valued lands.

**General Engineering Consultant, Port St. Joe, FL.** The Port Authority of Port St. Joe tasked Atkins to develop a short-term operational plan for development of the Smurfit-Stone Container paper mill site, most of the infrastructure for which was demolished. This plan provided preliminary information relative to potential development opportunities at the mill site, with special emphasis on benefits to Gulf County and its constituency.



## Donald Deis, CEP

### Biological QA/QC

#### Education

M.S., Marine Biology/Ecology,  
Florida Atlantic University, 1978

B.S., Biology, Wright State  
University, 1974

#### Certifications

Certified Environmental  
Professional (CEP), #91032285

Certified 40-hour HAZWOPER  
and 8-hour HAZWOPER  
Refreshers

YMCA Open Water Diver

NAUI Nitrox

PADI Advanced Diver

PADI Rescue Diver

Current O<sup>2</sup> delivery, First Aid,  
CPR Certifications

Licensed Captain (uninspected  
passenger vessel)

#### Professional affiliations

Estuarine Research Federation

National Association of  
Environmental Professionals

Florida Association of  
Environmental Professionals

International Society for Reef  
Studies

Co-chair – Submerged Coastal  
Habitats – Uniform Mitigation  
Assessment Method Rule  
Revision for State of Florida

Donald Deis is a certified environmental professional with more than 36 years of experience in the environmental science field as a consultant to industry and government. His areas of expertise include environmental evaluation, assessment, and monitoring of marine, estuarine, and coastal projects; restoration of estuarine and marine ecosystems; and environmental rules and regulation.

Mr. Deis has experience in evaluation (modeling) and assessment (monitoring) of restoration projects. He has a keen understanding of mitigation program development through impact and mitigation scaling. Mr. Deis has extensive experience in the restoration of estuarine, coastal, and marine habitats and unique experience in seagrass and coral reef restoration. He is a member of the Estuarine Research Federation and National Association of Environmental Professionals. Mr. Deis serves as board president of the Academy of Board of Certified Environmental Professionals. He has authored or co-authored hundreds of technical reports and published articles.

Mr. Deis' project experience includes:

**Port Canaveral Preemptive Mitigation Program, FL.** Mr. Deis is project manager for conducting a preliminary feasibility study of the port's expansion program to determine the scale of impacts and the mitigation opportunities that could be available to meet mitigation needs for seagrass and mangrove impacts.

**St. Lucie Inlet Federal Navigation Project, Martin County, FL.** Mr. Deis has been providing environmental support for Martin County's Coastal Engineering Department, assisting them in their role as local sponsor to the U.S. Army Corps of Engineers for the St. Lucie Inlet federal navigation project.

**Sebastian Inlet Channel Permitting and Comprehensive Seagrass Mitigation Program, Indian River County, FL.** Mr. Deis was Atkins' lead for permitting and long-term monitoring of the channel extension to the Intracoastal Waterway.

**Port Manatee Seagrass and Wetland Mitigation Program, FL.** As a result of the port's master planning process, Atkins described future mitigation associated with construction of additional facilities at the port. Mr. Deis has served as environmental lead on the studies to describe the current seagrass and wetland impacts that would be caused by build-out of future facilities and the selection of mitigation projects that would mitigate for those impacts in advance of the impacts.

**Seagrass Habitat Restoration Management Plan, Everglades National Park, FL.** Mr. Deis served as senior coordinator for this seagrass habitat restoration management plan for Florida Bay. The document serves as a comprehensive and adaptive plan for assessing, restoring, and monitoring vessel-induced damages to seagrasses.

**Seagrass and Hardbottom Permits Training for Florida Department of Environmental Protection (FDEP), Tallahassee, FL.** This project, part of a larger consulting contract with FDEP, involved a series of ecological workshops and training courses focused on issues related to marine and estuarine habitats including seagrasses, wetlands, and hardbottom habitats.

**Joint Coastal Permit (JCP) Program Support for FDEP, Tallahassee, FL.** The JCP program overseen by FDEP Bureau of Beaches and Coastal Systems involves the concurrent processing of applications for coastal construction permits, environmental resource permits, wetland resource (dredge and fill) permits, and sovereign submerged lands authorizations. Environmental consulting services provided in support of the JCP program included technical oversight, permit processing, and permit application review. Mr. Deis assisted with permit processing and technical oversight on various task orders.

## Donald Deis, CEP

### Biological QA/QC

**Assessment and Restoration of Coral Reef After Container Ship Houston Ran Aground in Florida Keys, FL.** Mr. Deis provided an assessment of damage while the ship was aground and, subsequently, negotiated a cooperative assessment and restoration by the responsible party using data and information from the original assessment. The ship ran aground in the FDEP/National Oceanic and Atmospheric Administration jointly managed Florida Keys National Marine Sanctuary. The restoration is documented in:

G. P. Schmahl, D.R. Deis, and S. K. Shutler. 2006. "Cooperative Natural Resource Damage Assessment and Coral Restoration at the Container Ship Houston Grounding in the Florida Keys National Marine Sanctuary." Chapter 13, In: W.F. Precht (ed.) *Coral Reef Restoration Handbook*. CRC, Taylor & Francis Group.

This book chapter explains the project development through assessment into restoration and compensatory mitigation alternatives.

**Project Manager of Assessment and Restoration of Coral Reef After Damage from Telecommunication Cable Deployment, ATT.** This, the first of a series of fiber-optic cable projects, was a response action to the first two cables resulting in damage to the corals on the reef system. Mr. Deis developed an assessment plan and natural resource damage assessment.

**Telecommunications Cables Coral Reef Mitigation and Repair Services, Sunny Isles, Dania Beach, and Boca Raton, FL.** Mr. Deis was responsible for the overall management and science on the projects. The CFX-1 project included a deep-water coral study from the nearshore reefs to the EEZ off southeast Florida.

**Smathers Beach Renourishment Construction Engineering and Inspection, Survey, and Biological Support Services, Key West, FL.** Mr. Deis assisted with development of the biological monitoring plan, participated in data collection, analyzed data to determine the potential effects of beach renourishment on nearshore biological resources, and was lead author on all biological monitoring reports.

Additional project experience includes the following:

- Seagrass consultant for seagrass restoration in Sarasota Bay for the Town of Longboat Key
- Project manager for environmental assessment and expert witness testimony services for grounding of the MV Igloo Moon in Biscayne National Park
- Project manager for a seagrass planting project in Biscayne Bay for the Miami-Dade County Department of Environmental Resource Management Bay Restoration Program

### Courses/seminars taught

Permitting Projects in Coastal Systems. Environmental Permitting Short Courses, Florida Chamber, 2008, 2009, 2010, 2011, 2012, 2013.

Planning, Permitting, and Mitigating for Transportation Corridors, Ports, and Intermodal Logistic Centers. Environmental Permitting Short Courses, Florida Chamber, 2014.



## Stacey Roberts, EI Biological/permitting

### Education

M.S., Ocean Engineering,  
Florida Institute of Technology,  
2000

B.S., Ocean Engineering,  
Florida Institute of Technology,  
1998

### Certifications

Engineer Intern:  
Florida 1100001597, 1998

Rescue Diver Certification  
(PADI)

Certified First Aid and Oxygen  
Administration (NAUI)

Nitrox Certified Diver (NAUI)

Certified Research Diver (OAR  
- NAUI)

Transportation Worker  
Identification Credential (TWIC)  
Holder, Transportation Security  
Administration

### Professional affiliations

Women in the Environment

Society of Naval Architects and  
Marine Engineers

American Academy of  
Underwater Sciences

Florida Shore and Beach  
Preservation Association

Florida Engineering Society

### Professional development

Atkins Project Management,  
2003

U.S. Army Corps of Engineers  
CIRP Technology Workshop,  
2003

FDEP Submerged Lands and  
Environmental Resource  
Workshop, 2002

Stacey Roberts has more than 13 years of experience with coastal/marine projects. Her experience has focused on many aspects of coastal construction such as beach nourishment, inlet maintenance, construction and maintenance of coastal structures, and innovative coastal erosion technologies. Ms. Roberts is a member of Atkins' scientific dive team. She is well versed in coastal zone management, policy, water quality, and assessment and monitoring of submerged marine resources.

Ms. Roberts' project experience includes:

**St. Lucie Inlet Federal Navigation Project, Martin County, FL.** Ms. Roberts is project manager for Martin County, assisting them in their role as local sponsor to the U.S. Army Corps of Engineers (USACE) for the St. Lucie Inlet federal navigation project. Responsibilities include project management and coordination with the county, USACE, state, and local stakeholders to maintain safe navigation and manage dredged material consistent with the state-approved inlet management plan. Atkins performs several support tasks including annual bathymetric surveys, construction management and oversight, state funding requests, grant progress reports, acquisition of regulatory permits, permit compliance, and physical and environmental monitoring. Atkins' scientific dive team performs annual monitoring of nearshore hardbottom off the Hobe Sound National Wildlife Refuge in association with sand bypassing activities. Atkins is engineer-of-record and has supported the county with construction of two dredging events, each with placement of dredged material on the downdraft beaches.

**Florida Department of Environmental Protection (FDEP) Bureau of Beaches and Coastal Systems (BBCS) General Engineering Consultant (GEC), Statewide, FL.** From 2005 to 2009, Ms. Roberts was project manager for Atkins' GEC contract with FDEP BBCS. She managed full- and part-time embedded staff providing program, policy, technical, and permitting support to BBCS. Prior to managing the GEC contract, Ms. Roberts served as full-time regulatory support staff in the joint coastal permitting section for more than 5 years, processing applications for coastal construction, port, inlet, and river dredging projects. Ms. Roberts managed and reviewed applications for all types of coastal construction for sound design and minimization and avoidance of environmental impacts. She was also charged with the management of all innovative technologies project applications. Projects were managed within statutory time frames including close coordination with state and federal wildlife and regulatory agencies as well as the public and other stakeholders. Ms. Roberts' unique expertise in coastal construction regulation has been an invaluable asset in her career in serving other coastal clients.

**Best Management Practices (BMP) for Coastal Construction Adjacent to Coral Reefs, FL.** Ms. Roberts played a lead role in the development of the BMP manual for coastal construction in sensitive marine environments in southeast Florida. She conducted research and coordinated with state and federal agencies to understand their concerns related to coastal construction. Construction methods were scrutinized and BMPs researched and developed for this manual intended to protect sensitive marine resources. The project included significant stakeholder involvement including non-governmental interest groups and interested citizens. She was the primary presenter in the project public workshops and led several breakout and discussion groups. She is co-author of the final report and findings and dissemination of the BMP document for use primarily in southeast Florida.

**Fort Zachary Taylor Historic State Park Breakwater Rehabilitation, Key West, FL.** Ms. Roberts was project manager and provided engineering analysis and support for this project for the Florida Park Service. The terminal groin and four breakwaters protecting park beaches were damaged during the 2004/2005 hurricane seasons. Atkins performed design and permitting of structural repairs to restore shore protection effectiveness. Project elements included design calculations to determine boulder size, materials, elevations, and configuration for structural rehabilitation. Atkins' scientific dive team conducted a resource survey and prepared state and federal permit applications for the activity entirely within the Florida Keys National Marine Sanctuary. The project was successfully designed and permitted and stands 'shovel ready' pending funding for construction.

**Stacey Roberts, EI**  
Biological/permitting

**Biological Monitoring, Flower Garden Banks National Marine Sanctuary, Gulf of Mexico.** Ms. Roberts was a team member performing long-term biological monitoring of the Flower Garden Banks National Marine Sanctuary coral reefs from 2003 to 2008. As a member of Atkins' scientific dive team, her primary role was repetitive still photography of lateral growth stations and dive support for other data collection tasks including wide angle photography, coral coring, and underwater videography. Ms. Roberts was responsible for upkeep of the daily activity log, centralizing data collected in the field, adjusting data collection plans according to project progress, and drafting the cruise log for incorporation into the final report.

**CFX-1 Fiber-Optic Cable Monitoring for Coral Impacts, Fort Lauderdale, FL.** Ms. Roberts was a team member for this project for Columbus Network Cable that provided evaluation prior to and following installation of a fiber-optic cable from Fort Lauderdale into federal waters, eventually traversing to Colombia, South America. Pre-lay work involved environmental assessment, selection, and permitting of the cable corridor. Following installation, inshore dives were performed to assess impacts to submerged resources. Offshore, a shipboard ROV was used to assess impacts to deep coral habitat.

**Port of Palm Beach Environmental Feasibility Study, FL.** As a member of Atkins' scientific dive team, Ms. Roberts provided diver support for the environmental resource survey through Palm Beach Harbor. The project documented marine resources in and around the harbor and the inlet to assess the feasibility of port expansion. Resources included seagrasses, colonized hardbottom, manatee habitat, and popular diving and snorkeling spots adjacent to public areas. A geographic information system repository was created as an accompaniment to the feasibility report.

**Publications**

Brantly, R. M., Jr., PE, P. Woodruff, W.D. Lasch, D.R. Deis, S.B. Roberts. 2003. The State of Florida Strategic Beach Management Plan – The Template for Solving Florida's Coastal Erosion Problems.

Jones, W.K., PE, S.B. Roberts, M. Robbart. Best Management Practices (BMP) for Construction, Dredge and Fill and Other Activities Adjacent to Coral Reefs. Southeast Florida Coral Reef Initiative's (SEFCRI) Maritime Industry and Coastal Construction Impacts (MICCI) Focus Team, Local Action Strategy (LAS) Project #6, 2008. Miami, FL.



## Leslie Manzello

### Biological/permitting

#### Education

B.S., Marine Science, University of Miami, 2005

#### Certifications

American Academy of Underwater Sciences Scientific Diving Certification, 2005

SCUBA Schools International (SSI) Open Water Diving Certification, 1996

CPR Administration, 2012

O<sup>2</sup> Administration-Certified, 2007

National Association of Underwater Instructors (NAUI) Nitrox Certification, 2005

PADI Advanced Open Water Diver, 2012

PADI Rescue Diver, 2012

Leslie Manzello has been working as an environmental scientist in south Florida for 8 years. She has worked on a variety of projects, and her areas of expertise include seagrass restoration/mapping, coral reef monitoring and mitigation, and water quality monitoring programs. Ms. Manzello has logged more than 500 scientific and recreational dives, and the majority of her work efforts have been concentrated throughout Florida. She has been supporting our services for the City of Key West for Smathers Beach and Rest Beach current assignments.

Ms. Manzello's project experience includes:

**Smathers Beach Renourishment Construction Engineering and Inspection, Survey, and Biological Support Services, City of Key West, Key West, FL.** Ms. Manzello assisted with the development of the biological monitoring plan; conducted fieldwork during the pre-, during-, and post-construction biological monitoring events (tasks included benthic habitat mapping and quadrats along permanent transects to calculate visual percent cover of biological components), analyzed field data to determine potential effects of beach renourishment on nearshore biological resources, and was lead author on all biological monitoring reports.

**Rest Beach Field Permit Application Support, City of Key West, Key West, FL.** This project involves assisting the City of Key West with obtaining a field permit from the Florida Department of Environmental Protection (FDEP) to place 200 cubic yards of sand-fill material on Rest Beach. Ms. Manzello assisted with the acquisition of biological data supporting the Joint Coastal Permit (JCP) application.

**Smathers Beach JCP Renewal, City of Key West, Key West, FL.** Ms. Manzello assisted with the preparation of the JCP application for this project, which involves renewal of the FDEP JCP for the City of Key West. The specific conditions and monitoring requirements in the new permit will need to be coordinated with state and federal resource agencies including the U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), Florida Keys National Marine Sanctuary (FKNMS), and FDEP, which includes coordination with Florida Fish and Wildlife Conservation Commission (FWC).

**Key West Bight Ferry Terminal Benthic Assessment, City of Key West, Key West/Monroe County, FL.** Ms. Manzello performed the benthic survey and identified the locations of coral and seagrass habitat. She was also lead author of the report. This task was in support of developing a benthic habitat report for use by the City in coordination with the U.S. Army Corps of Engineers (USACE) and the State of Florida.

**Fort Zachary Taylor Breakwaters, FDEP, Key West, FL.** Ms. Manzello performed the environmental habitat assessment, delineating the submerged aquatic resources in the vicinity of the proposed project. She was also lead author of the environmental resource survey report, which was included in the JCP application submittal. The Atkins team also prepared the JCP application.

**Broward County Beach Renourishment, Broward County, Fort Lauderdale, FL.** A marine biological monitoring program was implemented in association with beach renourishment activities in Broward County. As an environmental scientist, Ms. Manzello collected data at select offshore sites in Boca Raton and Fort Lauderdale. Data collection involved measuring sediment trays and photographing established stations to monitor changes to the benthic community as a result of the beach renourishment project.

**Maurice Gibb Park Soil Investigation, City of Miami Beach, Miami Beach, FL.** Ms. Manzello completed a historical desktop review of the project area and assisted with development of the project's sampling plan. Atkins was contracted by the City of Miami Beach to provide contamination assessment services at Maurice Gibb Park and bring it to regulatory closure.

**Leslie Manzello**  
Biological/permitting

**Florida Bay Seagrass Habitat Restoration Management Plan (SHRMP) and National Environmental Policy Act (NEPA) Compliance Document, National Park Service, Homestead, FL.** Ms. Manzello was a co-author of the Florida Bay SHRMP, which required in-depth background knowledge of Florida Bay's ecology, seagrass biology, mitigation techniques, and National Park Service guidelines regarding the maintenance of federally designated wilderness areas.

**South Pointe Pier Park Design and Construction Administration Services, City of Miami Beach, Miami Beach, FL.** Ms. Manzello was part of the scientific dive team that completed the environmental assessment to determine the presence, location, and species composition of marine vegetation and any nearshore hardbottom/reef resources; and document this information in an environmental existing conditions report. In addition to conducting the survey, Ms. Manzello assisted with the existing conditions report as well as the avoidance and minimization plan associated with the project as part of the permitting process.

**St. Lucie Inlet Biological Monitoring Services, Martin County, FL.** Ms. Manzello participated in the annual biological monitoring of ten established transects in Martin County in 2009 and 2010. The purpose of the project was to determine the effects of beach sand placement on nearshore benthic communities. Data collection included video transects, in situ quadrats, sediment accumulation measurements, and hardbottom mapping. In addition to completing the surveys, Ms. Manzello's responsibilities also included lead data analyst and author of report.

**Port of Palm Beach – Palm Beach Harbor Navigation Feasibility Study Environmental Resources Report, Ardaman & Associates, Inc., Palm Beach, FL.** Ms. Manzello participated in the submerged aquatic resources survey for the Port of Palm Beach, extending from the 42-foot-contour shoreward. The objective was to document, based on existing information and field surveys, the marine, wetland, and terrestrial habitats and associated biological communities within the Port of Palm Beach. Marine habitat types were to include seagrasses, hardbottom, and reef communities. Ms. Manzello also assisted with the project report writing.

**Port Everglades Reef Mapping and Assessment Services, Dial Cordy and Associates, Inc., Fort Lauderdale, FL.** Ms. Manzello assisted with data collection and performed data analysis. Data collection included in situ assessments in the field (species, size, and condition) and video transects. She also analyzed the transect video for benthic composition using Coral Point Count software.



## Beth Zimmer

### Biological/permitting

#### Education

M.S., Biology, Florida International University, 2012

B.S., Marine Science/Biology, University of Miami, 2000

#### Certifications

AAUS Diving Certification, 2005

PADI Advanced Open Water Diver, 1994

NAUI Nitrox Certification, 2005

PADI Rescue Diver, 2012

CPR Certification, American Red Cross, 2012

Oxygen Administration, 2012

OSHA Hazardous Waste Site Operations Training, 29 CFR 1910.120, 40 hours

Beth Zimmer has been working as a staff scientist in the environmental field for more than 13 years in the private sector. Her job experience covers an array of services from National Environmental Policy Act (NEPA) documentation to seagrass and coral mitigation and monitoring.

Ms. Zimmer's project experience includes:

**City of Key West Smathers Beach Renourishment Monitoring, Key West, FL.** Atkins was contracted by the City of Key West to provide general environmental services, including the Smathers Beach renourishment project. Ms. Zimmer assisted with development of the biological monitoring plan; conducted fieldwork during the pre-, during-, post-, 6-month, 1-year, and 2-year post-construction biological monitoring events (tasks included benthic habitat mapping and quadrats along permanent transects to calculate visual percent cover of biological components), and conducted quality assurance/quality control (QA/QC) on the resulting biological monitoring reports.

**City of Key West Bight Ferry Terminal Benthic Assessment, Key West, FL.** The City of Key West intended to construct a 20-foot by 121-foot concrete pier extension on the existing ferry terminal in Key West Bight and conduct dredging in the vicinity of this project. In support of the permitting process with state and federal agencies, a benthic survey was required to identify natural resources of concern (i.e., coral and seagrass) within the dredging footprint. This project is in support of developing a benthic habitat report for use by the City in coordination with the U.S. Army Corps of Engineers (USACE) and the State of Florida, should the need arise. Ms. Zimmer performed the benthic survey, identified locations of coral and seagrass habitat, and co-authored the resulting project report.

**City of Key West Bight Ferry Terminal Floating Dock Benthic Assessment, Key West, FL.** The City of Key West intended to develop several floating docks along Trumbo Road. In support of the permitting process with state and federal agencies, a benthic survey was required to identify natural resources of concern (i.e., coral and seagrass). This proposal is in support of developing a benthic habitat report for use by the City in coordination with USACE and the State of Florida, should the need arise. Ms. Zimmer performed the benthic survey, identified locations of coral and seagrass habitat, and co-authored the resulting project report.

**City of Key West Rest Beach Baseline Biological Assessment, Key West, FL.** Atkins was retained to support the City's application for a Florida Department of Environmental Protection (FDEP) Joint Coastal Permit (JCP) application for periodic sand placement on Rest Beach in Key West. As part of the JCP process, Atkins conducted a baseline survey of existing biological conditions. Ms. Zimmer performed the baseline benthic survey, which documented locations of various nearshore biological communities and characterized the benthic habitat within the project area. Ms. Zimmer also co-authored the resulting project report.

**City of Miami Beach South Pointe Park Pier, Miami Beach, FL.** Structural damage required redesign and replacement of an existing recreational fishing pier. An environmental resource survey was conducted to characterize the existing benthic habitats within the project area. Ms. Zimmer developed a coral avoidance and minimization plan for the project, which included relocating impacted stony and soft corals prior to construction.

**Broward County Outfall Pipe Coral Relocation and Monitoring, Pompano Beach, FL.** The Broward County North Regional Wastewater Treatment Plant's (NRWWTP) existing 54-inch iron outfall pipe, installed in 1973–1974, is located directly east of the NRWWTP in Pompano Beach. In 2002, the armoring of the near-shore portion of the outfall was damaged during dredging activities associated with the Hillsboro Inlet improvement project. Atkins was contracted to execute the relocation plan of all scleractinian (stony) corals and octocorals within the 1,500-foot corridor. Ms. Zimmer conducted fieldwork and reporting for the pre-construction baseline coral survey. In addition, she relocated coral colonies and performed construction compliance monitoring, relocated corals, and conducted the time-zero monitoring event.

**Beth Zimmer**  
Biological/permitting

**Florida Bay Seagrass Habitat Restoration Management Plan (SHRMP) and National Environmental Policy Act (NEPA) Compliance Document, National Park Service, Homestead, FL.** Atkins was contracted by Everglades National Park (National Park Service) to create a comprehensive and adaptive plan for assessing, restoring, and monitoring vessel-induced damages to seagrass. The Florida Bay SHRMP is consistent with, and part of, previously approved NEPA compliance documents and qualifies as a categorical exclusion. It provides technical guidance to Everglades National Park staff for evaluating seagrass damage, determining the appropriate restoration action, determining the required permits and compliance/regulatory review, implementing restoration, and evaluating the recovery process. Ms. Zimmer was a lead author of the Florida Bay SHRMP, which required in-depth background knowledge of Florida Bay's ecology, seagrass biology, mitigation techniques, and National Park Service guidelines regarding the maintenance of federally designated wilderness areas.

**Florida Department of Transportation (FDOT) District One, Conceptual Seagrass Mitigation Plan for Anna Maria Bridge and Cortez Bridge Project Development and Environment (PD&E) Study.** Atkins was tasked to identify and review various mitigation options that might be used to offset potential impacts to seagrass habitat associated with the Anna Maria Bridge and Cortez Bridge projects. Ms. Zimmer prepared a conceptual seagrass mitigation plan to support FDOT District One's mitigation planning efforts for these projects. The conceptual seagrass mitigation plan assessed five individual seagrass mitigation options (consisting of restoration and creation of seagrass habitat) and included a conceptual mitigation plan and preliminary design plans for each mitigation option, conceptual cost estimates, a conceptual long-term monitoring plan, and a permitting discussion.



## Bryan Flynn, PE

### Coastal engineering

#### Education

M.S., Civil Engineering/Water Resources, University of South Florida, 2008

B.S., Ocean Engineering, Florida Institute of Technology, 2000

#### Registrations/licenses

Professional Engineer: Florida 70856, 2010

#### Certifications

Self-Contained Underwater Breathing Apparatus (SCUBA) Certified

#### Honors and awards

Florida Institute of Technology Presidential Scholarship, 1996–2000

#### Software

AutoCAD Land Development Desktop, Civil 3, HYPACK, Trimble RTK

#### Presentation

Flynn, Bryan D., Pam Latham, George Thomas, and George Wise, "Sawgrass Lake Restoration," Society of Ecological Restoration, Tallahassee, FL, October 20, 2011

Bryan Flynn has 11 years of experience in project management, coastal engineering, hydrographic surveying, CAD design, permitting, engineering drawings, construction administration, and staff supervision on projects involving beach nourishment, coastal monitoring, dredging and navigation, permitting, and shoreline protection and restoration.

Mr. Flynn's project experience includes:

**Post-Isaac Physical Monitoring of Beach Nourishment, Collier County, FL.** Project manager for shoreline and volume change analysis to assess the impact of Hurricane Isaac on the 2006 renourishment project conducted along Vanderbilt, Park Shore, and Naples beaches. Physical monitoring included assessment of shoreline and volume changes within and adjacent to the 2006 renourishment area.

**Peer Review Services for Beach Nourishment Design, Collier County, FL.** Project manager for peer review of the beach nourishment design methodology used for the Vanderbilt, Park Shore, and Naples Beach nourishment design. This peer review included an evaluation of the predicted design life of the nourishment; review of drawings, calculations, modeling results, and construction standards; and detailed analysis and explanation of the total quantity of sand to be placed on the beach as part of the nourishment.

**Collier County Beach Renourishment Third-Party Construction Oversight, Collier County, FL.** As project manager, was involved in construction oversight/monitoring, permit compliance review, and pay application authorization.

**Coastal Zone Management, Clam Bay Data Collection and Analysis, Collier County, Naples, FL.** This ongoing effort with Collier County involves physical data collection, data analysis, and numerical modeling of hydrodynamics and sediment transport. Mr. Flynn has been responsible for developing custom data manipulation tools to facilitate the simultaneous analysis of more than a dozen field instruments.

**Beach Monitoring Reports, Collier County, FL.** Coastal engineer and project manager responsible for analyzing beach survey data and calculating beach change characteristics for engineering monitoring reports of beach nourishment projects throughout Collier County. This project included the analysis of profiles along Vanderbilt Beach, Pelican Bay, Park Shore Beach, Naples Beach, and South Marco Island, as well as monitoring reports for Caxambas Pass, Doctors Pass, and Capri Pass.

**City of Key West, Smathers Beach Renourishment, Key West, FL.** Coastal engineer responsible for analyzing beach survey data and calculating beach change characteristics for engineering monitoring reports of the beach nourishment project along the Smathers Beach shoreline. Atkins was contracted by the City of Key West to assist with the Smathers Beach renourishment project by providing construction oversight including biological and physical monitoring services. Physical monitoring was conducted at 15 profile lines to assess the effectiveness of the project in terms of shoreline and volumetric changes.

**Port Alto Beach and Wetland Restoration, Calhoun County, Port Lavaca, TX.** Coastal engineer providing design, permitting, and bidding support to Calhoun County. The project included a combination of beach fill placement and rubble riprap rock structures including a jetty and y-groin designed to retain the sand on the nourished beach. A second phase could add two rubble riprap rock offshore breakwaters and rehabilitation of an existing groin. The project called for placing approximately 8,000 tons of rock and 4,100 tons of sediment from upland sources on the beach to protect the shoreline and intertidal marsh. The project also involved complex state and federal grant timelines and compliance.

**Port Panama City Maintenance Dredging and Dredged Material Disposal, Panama City, FL.** As senior civil/coastal engineer, Mr. Flynn led the redesign of the dredge material containment area facility on the Navy property, and dredging design included removal of 320,000 cubic yards of material. This project obtained permits for deepening the entrance channel, turning basin, and all berths to -40 feet mean low water.

**Bryan Flynn, PE**  
Coastal engineering

**Coconut Point Shoreline Stabilization, Sebastian Inlet, FL.** Mr. Flynn was project manager and engineer-of-record for design and permitting of traditional armoring methods, while emphasizing native wetland vegetation and creating a living shoreline. Armoring was necessary to dissipate the high wave energy often experienced at Sebastian Inlet; however, topsoil was used to cover the riprap, reduce voids, and serve as a planting medium for native species. The upland portion of Coconut Point was regraded with approximately 1,400 cubic yards of material stored at the Sebastian Inlet District dredged material management area (DMMA) to promote better drainage. This project provided a beneficial use of dredged material, while improving bird nesting habitat at Coconut Point.

**City of Naples, East Naples Bay, Naples, FL.** Coastal engineer responsible for field data collection (including bathymetric survey, probes, cores, sediment samples, and side-scan sonar survey), channel design, and permit drawings. This project involved design and permitting to dredge 8 miles of canals to improve navigation in the East Naples area. The permitting process included dewatering site design and design of shoreline stabilization for mitigation credits. Mr. Flynn was project lead from data collection through completion of construction and was heavily involved in public outreach, with monthly project updates to the community advisory board.

**Sarasota County, Bird Colony Island Shoreline Protection Services, Roberts Bay, Sarasota, FL.** Coastal engineer responsible for feasibility study drawings, volume calculations, construction plans, and construction oversight. The project involved creation of a 1,300-foot breakwater to protect a vital wading bird rookery in Roberts Bay from erosion. As part of construction management, Mr. Flynn facilitated coordination among the multiagency interests (Audubon, Southwest Florida Water Management District, and Sarasota Bay Estuary Program), the county, and the contractor.

**City of Palm Bay, Lagoon House Shoreline Stabilization Construction Services, Palm Bay, FL.** This project involved oversight of construction of an integrated shoreline protection project. Mr. Flynn served as a coastal engineer responsible for construction management.

**Sebastian Inlet District, Tide Pool Restoration and Dredged Material Management Area, Sebastian Inlet, FL.** As project manager and engineer-of-record, Mr. Flynn was involved with design, permitting, and construction oversight of the tide pool restoration. This project phase involved mechanical dredging of 12,000 cubic yards of sandy material that had shoaled into the popular swimming site for park visitors, while maintaining 1 acre of wading bird foraging area. The material was used to create a DMMA to dewater material from future dredge projects in the inlet. The entire Sebastian Inlet area is an aquatic preserve, so particular care was taken to monitor construction activities for permit compliance.

**PortMiami Wharves I–VII Strengthening Program, Miami, FL.** This project involves construction engineering and inspection services on behalf of PortMiami. Mr. Flynn served as construction inspector and was in charge of inspecting the sheet and pipe pile coating process prior to shipping to Miami and processing invoices for more than \$8 million in raw materials.

**City of Miami, South Point Park Pier Design-Build, Miami, FL.** Mr. Flynn was in charge of preparing a technical memo on the wave forces on the pilings and uplift forces on the decking during a Category 5 hurricane design storm. The analysis used ACES software to determine the wave heights from offshore to the pier site, located on the north site of Government Cut near PortMiami. This analysis was also used to determine the stability of nearby reef modules. The reef modules were transplant sites for the corals attached to the existing pier pilings. The corals were removed and transplanted to the modules before the pilings were removed in the construction process.

**St. Lucie Inlet Federal Navigation Project, Martin County, FL.** Coastal engineer responsible for analyzing the beach fill template and the equilibrium toe of fill to avoid interaction with nearshore hardbottom. Atkins provided project management services for Martin County's Coastal Engineering Department, assisting them in their role as local sponsor to the U.S. Army Corps of Engineers for the St. Lucie Inlet federal navigation project. USACE unexpectedly withdrew from the planned maintenance dredging of the inlet after posting the bid. Martin County took over the project with the help of Atkins and in 2 months time successfully completed redesign; acquired federal authorization; prepared plans, specifications, and bid documents; advertised the project; reviewed bids; and awarded contract. Construction began immediately, and the project was successfully completed in an expedited manner to comply with regulatory authorizations that required project completion in advance of the marine turtle nesting season.



## Todd DeMunda, PE

### Coastal engineering

#### Education

M.C.E., Coastal Engineering,  
University of Delaware, 2006

B.S., Ocean Engineering,  
University of Rhode Island,  
2004

#### Registrations/licenses

Professional Engineer:  
Florida 71585, 2010  
Maryland 41527, 2012

Todd DeMunda is a coastal engineer with 8 years of experience in research and applied engineering, serving private and public clients across the United States in the fields of coastal engineering, hydrodynamic and morphological numerical modeling, beach and shoreline protection, and hydrodynamic data collection and analysis. This specialized skill set has allowed Mr. DeMunda to support projects such as marshland restoration, beach management plans, wave and circulation modeling, and shore protection design and optimization. Accomplished in Matlab programming for engineering, modeling, and data analysis, he has extensive experience developing two- and three-dimensional hydrodynamic, wave, and sediment transport models using several modeling suites including ADCIRC, SWAN, Delft3D, STWAVE, WAM, PTM, and EFDC.

Mr. DeMunda's project experience includes:

**Storm Surge and Wave Modeling, Structural Loading Analysis, Salem/Hope Creek Nuclear Generating Station, Sargent and Lundy, Lower Alloways Creek Township, NJ.** In support of a reanalysis of extreme flood levels and wave and debris loads at critical structures on the nuclear site, as well as a preliminary analysis of these factors at a proposed adjacent site, a coupled ADCIRC+SWAN numerical model was developed to model a suite of potential storm events impacting Delaware Bay. The Bay-scale model results were linked to a finely detailed SWAN grid of the project site to attain wave and surge magnitudes on site at various locations, taking into account buildings, walls, and other attenuating structures. Fine-grid results were used to calculate both stand-alone wave impact forces as well as debris impact loads on the critical nuclear infrastructure.

**Prime Hook National Wildlife Refuge (NWR) Flood Protection and Marsh Rehabilitation Study, U.S. Fish and Wildlife Service, Milton, DE.** In addition to analysis of historical wind and water level data, a numerical model was developed using Delft3D to investigate the hydrodynamics, salinity, and sediment transport within the marshes of Prime Hook NWR on the shore of Delaware Bay. A series of significant storms, including Superstorm Sandy, created breaches in the barrier island separating the marsh and bay and led to subsequent salt intrusion of the formerly freshwater habitat. The modeling effort was used to determine potential measures that could be taken to either restore the marsh back to its former configuration or best manage the existing system.

**Shore Protection for Port of Gulfport Expansion, Mississippi State Port Authority, Gulfport, MI.** This task was completed as part of a larger design effort for the expansion of the Port of Gulfport. Wave and storm surge data from an extensive modeling effort were used to design and optimize shore protection of the expanded site within specific design criteria using CEM-based tools developed in Matlab for armor stone sizing, wave overtopping, slope stability, and cross-section layout of riprap revetments.

**Gasparilla Island Beach Monitoring, Lee County, FL.** This project involved analysis of beach profiles for volumetric and shoreline changes on Gasparilla Island before and after a beach nourishment project as well as an analysis of the impact and recovery of the offshore sediment borrow area.

**Delaware Bay Beaches Management Plan, Delaware Department of Natural Resources and Environmental Control, Dover, DE.** Mr. DeMunda developed an ADCIRC+STWAVE hydrodynamic and wave model for Delaware Bay and the adjacent Atlantic coast. Model results—in conjunction with SBEACH morphology modeling and historical analyses—were used to develop a 10-year management plan for the State of Delaware for beach protection and restoration in the communities along the western shore of Delaware Bay.

**South Ponte Vedra Beach Restoration Plan, St. Johns County Engineering, St. Augustine, FL.** Performed historical beach profile analyses, SBEACH modeling, and beach planform evolution modeling to develop planning-level beach restoration templates along with an overall management plan in northeast Florida. Study results and findings were presented at multiple stages in the effort during meetings with local sponsors, County officials, and the Florida Department of Environmental Protection.

**Todd DeMunda, PE**  
Coastal engineering

**Navarre Beach Fishing Pier, Santa Rosa County, FL.** Developed a Matlab program to facilitate the use of fully nonlinear wave dynamics in determining wave heights, water levels, pile forces, and uplift pressures for design of the largest fishing pier in the Gulf of Mexico.

**Ogeechee River Storm Surge Modeling, Georgia Department of Transportation, Savannah, GA.** Used the TUFLOW hydrodynamic model to create a coupled 1D-2D model of the Ogeechee River and surrounding floodplain in coastal Georgia. The model was run for both upland flood and storm surge conditions to determine design water levels and current magnitudes for a proposed roadway revetment along GA-144 near Fort McAllister. Tide and flow data were collected to assist in model calibration.

**West Shore Lake Pontchartrain Levee Analysis, U.S. Army Corps of Engineers (USACE), New Orleans, LA.** Performed a preliminary analysis for USACE to determine recommended crest elevations for a future levee alignment northwest of New Orleans. Specific areas of study included wave dissipation over a vegetated floodplain as well as wave runup and overtopping of sloped structures. This effort included presentations and meetings with USACE officials and local governments to develop the project scope and recommend courses of action. This project was part of an ongoing effort that will culminate in final design and construction of the new levee system, and will include 2D and 3D hydrodynamic modeling of the region to be protected.



## William Pitcher, PE

### Marine structural engineering

#### Education

M.S., Structural Engineering,  
University of Connecticut, 1976

B.S., Civil Engineering,  
University of Connecticut, 1973

#### Registrations/licenses

Professional Engineer:  
Florida 31852, 1982  
Maryland 17943, 1992  
Massachusetts 3005, 1980  
South Carolina 21515, 2001

#### Professional affiliations

Florida Engineering Society

American Society of Civil  
Engineers

National Society of Professional  
Engineers

#### Professional development

Chi Epsilon Civil Engineering  
Honor Society

William Pitcher has 39 years of experience in civil and marine structural engineering including planning, design, permitting, construction engineering and inspection (CEI), construction management, contract administration, value engineering, construction quality assurance, and construction claims avoidance and claims mitigation. Mr. Pitcher is also responsible for implementing and monitoring Atkins' structural quality control program for seaports, marine, coastal, and waterfront projects.

During his career, Mr. Pitcher has been involved with preparation of bid documents for construction of steel sheet pile bulkheads and pile-supported open-wharf structures, ocean fishing piers, shoreline protection systems, waterfront parks, marinas, boat ramps and seawalls, jetties and groin construction, channel deepening, and spoil disposal. He also is a well-recognized expert witness in cases involving marine structures.

Mr. Pitcher's project experience includes:

**South Pointe Park Pier, City of Miami Beach, FL.** Mr. Pitcher was lead technical professional for the design of a new signature fishing and observation pier under construction at the entrance to Government Cut for the City of Miami Beach. Design criteria called for the new pier to withstand the forces of a Category 2 hurricane event, in addition to providing a 50-year design service life. Mr. Pitcher directed the Atkins team of marine structural engineers, coastal and civil engineers, electrical and lighting engineers, landscape architects, pier architects, marine biologists, permitting specialists, geotechnical engineers, land and bathymetric surveyors, cost estimators, and project schedulers to complete the construction documents in record time to qualify for and obtain design and construction grant money. The project required a complete understanding of the extreme marine environment including breaking and non-breaking wave impact forces, tidal current forces, storm surges, wind forces, extreme temperature and humidity changes, and highly aggressive salt environment corrosion protection. The project also included marine resource surveys and the transplanting of more than 100 corals to a new recipient site, designed by Atkins.

#### **Design and Construction of Marine Spill Response Corporation (MSRC) Facilities at PortMiami, St. Croix, U.S. Virgin Islands, Port Everglades, and Lake Charles.**

Mr. Pitcher served as project manager and structural engineer for design and construction of MSRC vessel berthing facilities at various locations. Projects included site assessments, preparation of evaluations and alternatives reports, preparation of contract documents for marine spill and response vessel berthing facilities infrastructure including steel sheet pile bulkheads and steel pile berthing piers, channel dredging and dredge disposal, installation of navigational aids, vessel and barge mooring dolphins, shoreline protection, corrosion protection, environmental permitting, civil/site, and electrical work.

**American Airlines Arena Seawall Investigation and Evaluation, Miami, FL.** Mr. Pitcher served as lead structural engineer for the structural investigation and evaluation of more than 600 linear feet of steel sheet piling bulkheads along the Miami waterfront, known as Purcell B. Mr. Pitcher was in responsible charge of the structural investigation that included surface and underwater inspections, geotechnical investigations, ground-penetrating radar surveys, special-purpose location surveys, in-depth structural analysis, structural evaluations, and a comprehensive findings report with conclusions and recommendations for seawall stability, repair, and maintenance.

**Marineland Shoreline Restoration, Florida Department of Environmental Protection Bureau of Beaches and Coastal Systems, FL.** The project consisted of developing and implementing a long-term strategic beach management plan to restore critically eroding beaches. Components of the plan included the identification of regional beach management issues such as erosion, poor public access, navigation problems, and environmental issues, and the development of long-term solutions.

**William Pitcher, PE**  
Marine structural  
engineering

**Crandon Park Marina, Miami-Dade County, Key Biscayne, FL.** This project involved environmental and structural issues at the marina. The structural aspects entailed evaluating and engineering of fender piles, the seawall and bulkhead system, pier caps, and marginal docks as well as new upland tenant spaces of the Crandon Park Marina. The project required a multidisciplinary team to determine environmental and structural conditions in the basin around the seawall as well as the condition of the seawall and landside structures.

**Lakefront Park Marina, City of St. Cloud, St. Cloud, FL.** The park and marina were home to a number of annual festivals and celebrations sponsored by the City of St. Cloud. The marina and park facilities were more than 40 years old and no longer satisfied the needs of the events and a growing community. The two key elements of the project included expansion of the existing marina from approximately 44 slips to 143 slips, and a marina walk with sea wall and civic plaza adjacent to a new 10,400-square-foot marina building and banquet facility. Other important elements of the design included two trailhead locations along a lakefront trail, new three-lane boat launch, larger and more efficient parking and circulation system for boat trailers, new 900-square-foot restroom and stage building, large performance lawn, splash pad and playground structure near an existing beach area, new shade pavilions and park furnishings, redesigned parking areas to service the park and marina building, extensive landscape improvements, and wetland mitigation plantings.

**CEI Services for Wharf Strengthening, PortMiami, FL.** Mr. Pitcher serves as marine structural engineer for the Atkins team that is providing PortMiami with CEI services in connection with the Wharves I–VII Strengthening Program. The project comprises more than 6,100 linear feet of active cargo wharf construction involving the installation of 5,200 linear feet of steel sheet piling and more than 800 linear feet of open pile supported wharfage repairs with new mooring and breasting dolphins. The Atkins CEI team consists of a professional staff including a project manager/special inspector, senior structural engineers, document control manager, and subcontractors fulfilling the role of full-time quality assurance inspectors, materials testing, and geotechnical engineering services during construction.



## Samuel Smith, PE

### Marine structural engineering

#### Education

M.E., Civil Engineering,  
University of Florida, 2007

B.C.E., Civil Engineering,  
University of Florida, 2005

#### Registrations/licenses

Professional Engineer:  
Florida 73430, 2011  
Maryland 40810, 2011  
Texas 112313, 2012  
Virginia 51245, 2012

#### Professional affiliations

American Society of Civil  
Engineers, Secretary, Broward  
Branch, 2014

Samuel Smith's experience includes performing design and analysis calculations; preparing condition evaluation reports; performing structural inspections; and developing details, plans, and cost estimates for various structural marine and environmental engineering projects. Specific structures include seawalls, wharves, docks, piers, bridges, pump stations, and water treatment plants.

Mr. Smith's project experience includes:

**SR 5 and SR 811 Over Loxahatchee River Marine Observation Deck Replacements, Florida Department of Transportation District Four, Jupiter, FL.** Structural engineer responsible for design and plan production of two marine observation decks. The design included prestressed concrete piles, reinforced concrete pier caps, and prestressed concrete beams. The design accounted for dead and live loads, wind, and the 100-year flood levels, in accordance with Federal Emergency Management Agency statistics.

**Bicentennial Park Seawall Stabilization, City of Miami, FL.** Structural engineer responsible for the Bicentennial Park seawall investigation and design-build (D-B) services. This project initially involved investigating the condition and causes of lateral seawall deflection and proposing recommendations for repair. Following this investigation, the City of Miami requested that Atkins provide D-B services, including reviewing design submittals, shop drawings, and requests for information, and providing miscellaneous engineering consultation.

**Crandon Marina Restaurant Seawall Emergency Response and Design, Neville/Steffens Architects LLP, Key Biscayne, FL.** Structural engineer responsible for emergency evaluation, design, and plan production resulting from a collapsed seawall at Crandon Marina. This project initially involved addressing a collapsed seawall as part of an emergency response effort to provide sound temporary stabilization of the structure. After temporary stabilization was achieved, a final design was prepared that included cantilevered steel sheet piling with a concrete cap, and accounted for earth, water, and surcharge loads.

**Construction Engineering and Inspection (CEI) Services for PortMiami Wharf Strengthening, Miami-Dade County Seaport Department, Miami, FL.** Structural engineer responsible for CEI and miscellaneous structural analysis and consultation. He provided contractor oversight to facilitate sound repairs in conformance with project specifications. Structural engineering analysis responsibilities included determining wharf structural integrity resulting from additional loads due to gantry crane relocation and managing the installation of larger cranes. He also provided recommendations and structural review for design changes to the sheet pile bulkhead wall for the Wharves Strengthening Program.

**Infrastructure Analysis and Design for Various Projects, Otay Water District, San Diego County, CA.** Structural engineer responsible for the structural analysis and design for select infrastructure for Otay Water District. Responsibilities included engineering analysis to determine permissible loadings of Otay Reservoir and Pump Station, design of environmental manhole structures, and design recommendations for buried pipes with surcharge loads from retaining walls and vehicular traffic.

**Northside Piers Evaluation, Canaveral Port Authority, Cape Canaveral, FL.** Structural engineer responsible for inspection and structural assessment of the North Cargo Piers 3 and 4 and Cruise Terminals 5, 8, and 10. Responsibilities included field inspections of the structural condition and summarizing the findings in a report that provides detailed assessments and recommendations for repairs. Components evaluated included pilings, pile bents, crane rail beams, fenders, bollards, and bulkhead walls.

**Seawall and Tank Foundation Design, Vopak Terminal, Deer Park, TX.** Structural engineer responsible for structural design, quality control, specifications, and plan production for fuel tank foundations and sheet pile seawalls for Vopak in Deer Park. Mr. Smith produced calculations to determine the design for pile supported annular ring foundations for tanks ranging from 75 feet to 125 feet in diameter and 65 feet in height. He also designed and performed quality control for steel sheet pile bulkhead walls, reinforced with prestressed grouted soil anchors.



## Bradley Bayne, PG

### Environmental engineering

#### Education

M.S., Geology, Northern Arizona University, 1987

B.S., Geology, University of Nebraska-Lincoln, 1985

#### Registrations/licenses

Professional Geologist:  
Florida PG2733, 1994

Bradley Bayne has 24 years of experience in scientific and technical analyses, program development, environmental consulting, and project management, including more than 22 years of experience working on environmental projects. He has successfully completed tasks involving contamination assessment, remedial action design, hydrogeologic site characterization, regulatory compliance, risk assessment/management, waste management and characterization, wastewater permitting, asbestos consulting, and field work (soil and groundwater sampling, and well installation and purging).

Mr. Bayne's project experience includes:

**City of Key West Former City Hall Site, Key West, FL.** Mr. Bayne assists W. Mark Henry with review and technical support for groundwater monitoring and remediation at the City of Key West former City Hall site. Mr. Bayne has provided report reviews and cost estimates for remediation of the site.

**City of Palmetto Police Department, Palmetto, FL.** Mr. Bayne performs annual natural attenuation monitoring for the City of Palmetto Police Department. Atkins completed a supplemental site assessment report at that facility in 2011, and natural attenuation monitoring has been performed annually for the past 3 years. The site is now eligible for conditional no further action.

**436 Cleaners Site, Casselberry, FL.** Mr. Bayne recently completed the monitoring and closed out (abandoned the monitoring wells) the 436 Cleaners site in Casselberry. After bioremediation was implemented at this facility in 2010, Atkins performed quarterly natural attenuation monitoring until the solvent concentrations at the site qualified for no further action.

**Sawgrass Lake Restoration, Pinellas County, FL.** Mr. Bayne is currently the remediation task manager for the Sawgrass Lake restoration project in Pinellas County. His duties include approval of manifests for disposal of the waste soil, inspection of the construction contractor's work, and documentation of proper sampling and disposal of lead-impacted media.

**Sarasota County Solid Waste Department, Sarasota County, FL.** Mr. Bayne supports the Sarasota County Solid Waste Department as senior geologist on a variety of landfill-related projects. He has conducted contamination assessments, monitoring, and prepared permit modifications for the following facilities: Central County Solid Waste Disposal Complex (CCSWDC), closed Class I Venice Landfill, closed Class I Bee Ridge Landfill, and the former 17<sup>th</sup> Street Landfill. His support was crucial to the investigation and discovery of the relationship between elevated arsenic concentrations in the site's groundwater and the elevated iron concentrations in the soil and groundwater at the CCSWDC.

**Florida Department of Transportation (FDOT) District One, FL.** Under Atkins' general engineering consultant contract, Mr. Bayne supports FDOT District One with technical support and oversight of its contamination assessment/remediation contractor. He has supported review of invoices and technical reports on dozens of FDOT District One roadway projects, including US Highway 301 in Sarasota, Florida. This project involved the contamination assessment and subsequent construction of a drainage pond on the Marion Anderson Place Brownfields site.

**City of Tampa, FL.** Mr. Bayne supported the City of Tampa with management and completion of a contamination assessment plan and subsequent contamination assessment report for the 12<sup>th</sup> Street Maintenance Yard Brownfields site.

**City of Sarasota, FL.** Mr. Bayne supports the City of Sarasota with groundwater monitoring and soil investigations at Lift Stations #16 and #40; he recently completed a source removal and interim source removal report for Lift Station #16.

**Environmental Site Assessments (ESA), Various Locations.** He has prepared Phase I ESAs and limited Phase II site assessments for various commercial and government clients at facilities in Charlotte, Citrus, Palm Beach, Polk, Pinellas, Hillsborough, Manatee, Sarasota, and Broward counties in Florida and in Folkston, Georgia. Mr. Bayne has completed numerous Phase I ESAs and pipeline corridor studies for Florida Gas Transmission.

**Bradley Bayne, PG**  
Environmental engineering

**Florida Department of Environmental Protection (FDEP).** Mr. Bayne performed field work and document preparation support for the following targeted Brownfields assessments projects under contract with FDEP:

- 12<sup>th</sup> Street Maintenance Yard, Hillsborough County
- Sadler Drum site, Mulberry, Polk County
- South Gifford Road Landfill, Indian River County
- Former Automotive Electronics, Sarasota, Sarasota County
- Former Ridge Fertilizer, Lake Wales, Polk County
- Phoenix Place, Delray Beach, Palm Beach County
- Carver Square, Delray Beach, Palm Beach County
- Former Meisener Marine and St. Pete Beach City Hall, St. Pete Beach, Pinellas County

**Shooting Range Facility at Sawgrass Lake Water Management Area, Petersburg, FL.** Mr. Bayne managed the additional contamination assessment activities and completed a remedial action plan for the shooting range facility at the Sawgrass Lake Water Management Area in St. Petersburg.

Mr. Bayne's work assignments prior to joining Atkins involved the following:

- Managed field work, performed groundwater and soil sampling, and prepared a contamination assessment report and remedial action plan for the Hernando County Department of Public Works fleet maintenance compound. Contamination assessment activities included sampling more than 50 soil borings and installation and sampling of six groundwater wells. Potential contaminants included petroleum compounds, metals, volatile organic compounds (VOC), and semi-volatile compounds. The assessment confirmed that all but one of the areas of concern were eligible for no further action; the remaining area required the remedial action plan.
- Prepared a contamination assessment report and provided geologic cross sections and response to FDEP comments on the proposal for a monitoring only plan (MOP) for the former Frontier Recycling facility in St. Petersburg, Florida. Conducted well installation and groundwater sampling, along with preparing quarterly monitoring reports for the site. Contamination at the site included VOCs from an off-site source.
- Oversaw document preparation, managed subcontractor activities, and participated in field work associated with the Pinellas Plant 4.5-acre site remedial action plan. Activities emphasized the following: location of the site groundwater plume, screening and selection of preferred remedial alternatives, detailed system designs for the preferred remedial action, and schedule and cost estimates for remedial action implementation. Additional technical activities supporting the remedial action plan included site characterization (Geoprobe groundwater sampling), step-drawdown testing, aquifer testing, risk assessment, and groundwater modeling.
- Supervised groundwater well installation, performed groundwater sampling, and prepared a contamination assessment report addendum for the Yates Cleaners facility (Facility ID #52-9400747), which is enrolled in the FDEP state-funded Petroleum Cleanup Program. This leaking underground storage tank (UST) site had free product and dissolved hydrocarbon contamination in the groundwater from leaking gasoline and diesel fuel tanks that had been removed.
- Performed contamination assessment, including well installation and groundwater sampling for metals and sulfate contamination, and prepared a contamination assessment report addendum for the former Echol Chemical site (Indigo Land property) in Lakeland, Florida. The report proposed an MOP for the site.
- Managed and prepared numerous American Society for Testing and Materials (ASTM) 1527-97 Phase I ESA, ASTM 1528-97 environmental site inspections, environmental risk screenings, and property condition assessments in Florida. Environmental assessments included site inspection, environmental records review, aerial photograph review, historical data analysis, and analysis of environmental impacts to site. File review involved extensive research of FDEP leaking UST sites.
- Performed Phase II soil sampling, groundwater sampling, and report preparation for various sites in Florida.



## Roberto Mantecon, PSM

### Surveying

#### Registrations/licenses

Professional Surveyor and Mapper (PSM):

Florida LS4431, 1988

Professional Land Surveyor (PLS):

Virgin Islands 325573, 2004

#### Professional affiliations

Florida Surveying and Mapping Society

#### Software

STARNet

GNSS Solutions

Civil 3D

#### Professional development

Land Surveying Program, Miami-Dade Community College

Provides in-house training on GPS for Atkins survey personnel

Roberto Mantecon has 36 years of extensive experience in conducting and managing projects for transportation facilities and infrastructure, performing beach profiles, boundary, geographic information systems (GIS), construction layout, geodetic control, hydrographic, right-of-way, route, sectional, cadastral, and topographic surveys in the Florida Keys, throughout Florida, and the Caribbean. He also has in-depth knowledge of computer-aided design (CAD) and global positioning systems (GPS) surveys.

Mr. Mantecon's project experience includes:

**PortMiami Micro-Tunnel, Miami, FL.** Mr. Mantecon served as principal surveyor for the Miami-Dade Water and Sewer Department micro-tunnel located 100 feet below the PortMiami Government Cut shipping channel that intervenes Miami Beach and Fisher Island. This project presented challenging survey requirements, as the tunnels coming south from Miami Beach and north from Fisher Island had to meet center on an intersection seal with approximately 1-inch tolerance. The Atkins team dropped precise control and guided the tunnel boring machine to a successful breakthrough. Upon completion, detailed as-built surveys were conducted, and survey maps conforming to Department specifications were provided to the client.

**Beach Renourishment, Key West, FL.** As principal-in-charge, Mr. Mantecon directed the survey engagement for the continuous renourishment of Smathers, Rest, and Dog Beaches. Services include the placement of geodetic control, beach transects location, collection of beach cross-sections, bathymetric surveys of the water sides for the transects, and the computation of quantities and plan development. All work was performed using the latest Trimble R10 receivers and Leica Total Stations.

**Florida Department of Transportation (FDOT) District Six Districtwide Additional Highway System Right-of-Way Maps, FDOT District Six, FL.** As project manager and senior surveyor, he led, what initially began as a 5-year miscellaneous survey services contract, for 23 years. He has completed hundreds of miles of route surveys, along with associated geodetic control, data collection, boundary surveys, topographic surveys, corridor maps, hydrographic surveys, and parcel mapping; and has served as an extension of District Six staff as a trusted advisor in complex technical matters including right-of-way and route surveys along North and South Roosevelt Road in the City of Key West. In addition, as part of the new reselection process, he took on the task of updating the District's vertical control network to the North American Vertical Datum of 1988 (NAVD88) and has recently completed GIS databases for Monroe and Miami-Dade counties to assist the District's survey staff in maintaining their project control information.

**High-Water Marks Location for Hurricane Katrina, Mississippi and Alabama.** As survey team leader, Mr. Mantecon was responsible for managing field and office efforts to map high-water marks established during Hurricane Katrina over the coast of Mississippi and Alabama using advanced GPS techniques and conventional survey methods. Atkins was tasked by another firm to survey the flagged high-water marks as a result of the coastal flooding of Hurricane Katrina. The project limits stretched from the Florida Panhandle to the western boundary of the Mississippi coast. This data was to be used to accurately document the flooding and help the Federal Emergency Management Agency (FEMA) update flood maps and prepare for future disasters.

**High-Water Marks Location for Hurricane Wilma, Florida Keys.** As survey team leader, Mr. Mantecon was responsible for managing field and office efforts to map high-water marks established during Hurricane Wilma, using advanced GPS techniques and conventional survey methods. Atkins was tasked by another firm to survey the flagged high-water marks as a result of the coastal flooding of Hurricane Wilma. The project limits stretched from Key Largo throughout the Florida Keys including the City of Key West. This data was to be used to accurately document the flooding and help FEMA update flood maps and prepare for future disasters.

**Roberto Mantecon,**  
**PSM**  
 Surveying

**Ferry Terminal, Isla Culebra, PR.** Mr. Mantecon conducted topographic and bathymetric surveys and obtained beach profiles for the construction of a passenger ferry terminal.

**City of Miami Beach, Department of Recreation, Parks and Culture, Miami Beach, FL.** As senior surveyor, Mr. Mantecon was responsible for mapping park boundaries, topographic surveying, coordination of aerial photography for planimetric purposes, and final map products as presented to the City for final disposition.

**South Pointe Park Pier, Miami Beach, FL.** As principal surveyor, Mr. Mantecon directed topographic and bathymetric surveys for the design of a new pier facility for the South Pointe Park facility fronting the Government Cut shipping channel that serves PortMiami.

**South Florida Water Management District Hillsboro Canal Bank Stabilization, FL.** Served as surveyor. This project involved stabilizing and erosion control of the Hillsboro Canal's banks to maintain design capacity conveyance of stormwater from Structure S-39 to Structure G-56, a total of 10.6 miles. Extensive amounts of data to be analyzed for rainfall events, water level records, and hurricane wind records were required. The study and design included dredging, repair, restoration, and stabilization of the Hillsboro Canal and its banks.

**University of Miami Surveying Services (1989–Present), Coral Gables, FL.** Serves as senior surveyor. This continuing services contract with the University of Miami involves comprehensive survey and mapping services for the ongoing expansion of the university's main campus in Coral Gables. Typical services provided include boundary and topographic surveys, construction layout, as-built surveys, mapping, utility route surveys, and specific-purpose surveys. These services have been provided for assignments for the University Village, Hecht athletic center complex, intramural practice fields, School of Music library and technology center, and convocation center.

**Marathon Marina, Water's Edge Marina, LLC, Marathon, FL.** As the surveyor in responsible charge, Mr. Mantecon conducted a comprehensive boundary, topographic, and mean high water line survey of this large facility located in the Florida Keys for a major real estate transaction. Later, the client engaged Mr. Mantecon to perform a bathymetric survey of the entrance channel as well as additional topographic mapping for renovation of the slip areas. This project also included the mapping of seagrass beds and preparation of maps and legal descriptions for submerged land lease agreements between the owner and the State of Florida.

**Mangrove Marina, Summit Tavernier, LLC, Town of Tavernier, Key Largo, FL.** The Mangrove Marina property comprises a full marina with wet slips, docks, dry boat storage, and commercial facilities. As the property is a consolidation of upland residential lots and leased bottom areas of Florida Bay, Mr. Mantecon was responsible for conducting a boundary and topographic survey taking into account current boundary occupation and the title history of record. Additional services have included the preparation of ALTA/ACSM Land Title Surveys for refinancing as well as the creation of descriptions for additional submerged land lease agreements with the State of Florida.

**Publications**

Mantecon, Roberto D., and Thomas J. Schweitzer, "Shoring Up Levees," *Professional Surveyor Magazine*, Vol. 29, No. 10, October 2009, pp.14–16.



## Michael Ryan, PE, PMP

### Bidding and construction administration

#### Education

M.E., Project Management,  
University of Maryland (UMD),  
2012

B.S., Civil Engineering, U.S. Air  
Force Academy, 2000

#### Registrations/licenses

Professional Engineer:  
Florida 68358, 2008

#### Certifications

Project Management  
Professional, 1203762, 2008

FDOT Advanced Maintenance  
of Traffic

CTQP Quality Control Manager  
(completed course and exam)

CTQP Earthwork Construction  
Inspection – Levels I

FDOT Critical Structures  
Construction Issues Course

FDEP Stormwater, Erosion  
and Sedimentation Control  
Inspector

#### Professional affiliations

Project Management Institute

Armed Forces Communications  
and Electronics Association

#### Professional development

FDOT Construction Academy,  
2010

Cost Engineering and Control,  
UMD

Project Administration, UMD

Introduction to Advanced  
Scheduling, UMD

Legal Aspects of Engineering,  
Design, and Construction,  
UMD

Management of Project Teams,  
UMD

Introduction to Project  
Management, UMD

Project Cost Accounting and  
Finance, UMD

Michael Ryan has 14 years of construction oversight, program and project management, and facility operations management experience. His current duties with Atkins include managing conventional engineering projects involving various elements such as right-of-way surveys; regulatory approvals and permits; mitigation plans; cost estimating; scheduling; and construction phase services. He organizes field observation and monitoring of contractors' substantial compliance with contracts so that project quality, cost control, and established completion schedule are met by the contractor.

Mr. Ryan's project experience includes:

#### **Construction Engineering and Inspection (CEI) and Related Services, US 41 and SR/CR 951 Intersection Improvements and 3R Improvements to SR 951.**

Senior project engineer responsible for overseeing CEI services, constructability review, value engineering, contract administration, inspection, and materials sampling and testing. This Florida Department of Transportation (FDOT) joint participation agreement (JPA) project grouping included the widening and realignment of the US 41/SR 951 intersection, an 8-lane intersection and one of Collier County's busiest locations. Major work activities included pond excavation, closed and open drainage improvements, water main, force main, and reuse main utility replacement, replacement of the intersection signalization, gravity wall, sidewalk, lighting, guardrail, and soundwall. The resurfacing (3R) project includes resurfacing approximately 3 miles of 4-lane rural roadway, conversion of the existing span wire signal system to mast arms at two intersections, striped and signed bike lanes throughout the project, and bus stop enhancements at Manatee Road (northbound and southbound), with bus bays.

#### **Broad Causeway (SR 922) All-Electronic Toll Conversion, Town of Bay Harbor Islands, FL.**

Senior project engineer responsible for contract oversight, coordination of lab and material testing, estimate review, and field documentation. This project consists of converting the existing cash toll collection system to all-electronic tolling. Activities include overhead truss fabrication and installation, modification of travel lanes to facilitate all-electronic tolling, modification of drainage network, and demolition of existing canopies and structures over and within the travel lanes.

**Lee County Port Authority (LCPA), South Road Realignment.** Senior project engineer and project administrator responsible for contract administration, supervision of inspection staff, and coordination with LCPA, Lee County Utilities, and several private utilities. This project includes the removal of the existing roadway and new alignment for 3,400 linear feet of roadway. Construction activities include the installation of force main, water main, gravity sewer, a sanitary sewer lift station, street lighting, constructing a 2-lane rural roadway, a closed drainage system, landscaping, and irrigation.

#### **CEI Services for Collier Boulevard from Davis Boulevard to Golden Gate Canal and Davis Boulevard from Collier Boulevard to West of Radio Road, Collier County, FL.**

Senior project engineer responsible for contract administration, supervision of field inspection staff, and coordination with FDOT, Collier County, multiple engineers of record, several private utility owners, and two adjoining FDOT projects. This project is a JPA between FDOT District One and Collier County and consists of seven separately tracked funding sources and four engineers of record. This 2-mile project involves widening Collier Boulevard (SR 951) from 4 to 6 lanes and widening Davis Boulevard (SR 84) from 2 to 4 lanes. Additional components include the installation of a post-tension gravity wall under I-75; retaining wall; sound wall; pond blasting and excavation; 21,000 linear feet of closed drainage; 12,000 linear feet of water main, force main, and reuse main relocation; I-75 ramp improvements; sidewalk; guardrail; drilled shaft; signalization; lighting; landscaping; and bridge improvements.

**Michael Ryan, PE, PMP**  
Bidding and construction  
administration

**Professional development  
(continued)**

Essentials of Project  
Management, Villanova  
University

Mastering Project  
Management, Villanova  
University

Project Management "Golden  
Nuggets," RT Group

Leadership and  
Communication (Squadron  
Officer School), Air University

**FDOT District One, CEI Services for the Lee County Incident Management System, FPID 405462-4-52-01.** Senior project engineer responsible for contract administration services and supervision of field inspection staff and intelligent transportation system (ITS) staff for a full CEI team supporting FDOT Fort Myers Operations Center. This federally funded project is a design-build project involving CEI services for the design, installation, and integration of highway advisory radio stations, dynamic message signs with drilled shaft installation, dynamic trailblazers, closed-circuit television cameras, vehicle detection stations, road weather information stations, wireless communications, and bridge mounted and subsurface fiber-optic cable. Services provided include field testing verification, system testing and integration, validation of monthly and final estimates, preparation of daily reports, enforcement of maintenance of traffic, detailed constructability review of the Phases II, III, and IV plans, and coordination of monthly design meetings and bi-weekly construction status meetings.

**FDOT District One, CEI Services for US 27 (SR 25) from Stitt Ranch to Glades County Line, FPID 425224-1-62-01.** Senior project engineer responsible for contract administration services and supervision of field inspection staff for a full CEI team supporting FDOT Fort Myers Operations Center. This federally funded project involves CEI services for milling and resurfacing 4.4 miles of 4-lane divided roadway and the installation of a telemetered traffic monitoring site. Services provided include field testing verification, validation of monthly and final estimates, monitoring of environmental protection and permit compliance, preparation of daily reports, enforcement of maintenance of traffic, detailed constructability review of plans as needed, and coordination of bi-weekly work status meetings.

**Lely Manor West Outfall (North and South) CEI Services, Collier County, FL.** Senior project engineer responsible for contract administration services; supervision of field inspection staff; coordination among owners, design engineers, local and state permitting agencies, and contractors; and review of submittals, requests for information, change orders, and payment applications. This project involves CEI services for improvements to the Lely Manor West outfall (north and south). Services provided include field testing verification, validation of monthly and final estimates, monitoring of environmental protection and permit compliance, preparation of daily reports, enforcement of maintenance of traffic, detailed constructability review of plans as needed, and coordination of bi-weekly work status meetings.

**Lely Area Stormwater Improvement Project – Whitaker Road, Collier County, FL.** Served as project manager for the design of this stormwater improvement project. The project consists of developing plans for the construction of more than 7,200 linear feet of open channel and closed channel flow systems. Included in the design is 1,900 linear feet of box culvert, a weir, ditch block and inlet structures, as well as roadway shoulder improvements and maintenance roads. Additional requirements included acquiring an environmental resource permit modification and coordination with County contracted surveyor and geotechnical engineer.



## Matthew Starr

### Bidding and construction administration

#### Education

B.S., Marine Science, Coastal Carolina University, 2006

#### Registrations/licenses

U.S. Coast Guard 100-Ton Vessel Captain, #88206

Transportation Worker Identification Credential (TWIC), #06052479

#### Certifications

Self-Contained Underwater Breathing Apparatus (SCUBA)

FDEP Erosion, Sedimentation Control, and Stormwater Control Inspector, #29474

OSHA 10-Hour Construction Safety

#### Honors and awards

Coastal Carolina University's Dean's List

#### Professional affiliations

American Professional Captains Association

Florida Association of Environmental Professionals

Tampa Bay Association of Environmental Professionals

#### Software and instrumentation

GIS – ArcMap 10.1

AutoCAD Civil 3D

Ground Penetrating Radar

RTK-GPS

DGPS

Vibracores

Matthew Starr has 8 years of coastal engineering experience involving construction oversight, hydrographic surveys, data collection, vibracoring, water quality monitoring, ground-penetrating radar, and side scan sonar. Mr. Starr's current duties include geographic information systems (GIS) mapping (ArcMap 10.1), AutoCAD Civil 3D, construction and restoration plans, design calculations, data collection and analysis, construction bidding and contractor procurement, and field operations including all vessel operations.

Mr. Starr's project experience includes:

**Collier County Truck Haul Beach Renourishment, Naples, FL.** This project was initiated as a result of erosion sustained through Hurricane Isaac and Tropical Storm Debbie during the 2012 hurricane season by the Collier County Board of County Commissioners and consisted of hauling more than 225,00 cubic yards of sand from an upland mine more than 50 miles away from the project site using dump trucks. Mr. Starr's responsibilities included construction oversight, permit compliance, sediment analysis review, turbidity oversight, weekly contractor/client meetings, and as-built profile review.

**Sawgrass Lake Restoration, Southwest Florida Water Management District, St. Petersburg, FL.** Mr. Starr served as an environmental scientist and inspector providing field data collection services including hammer cores, sediment collection, and chemical analysis of lake sediment. The analysis was used as the basis for the engineering design related to lake dredging and volume calculations. Mr. Starr currently provides construction oversight services during the hydraulic dredging and handling of the dredge material at the project area.

**East Naples Bay Dredging Project Design and Permitting Services, City of Naples, FL.** This project for the City of Naples was to dredge 31 residential canals, dredging approximately 22,000 cubic yards of sediment and 2,000 cubic yards of rock. Mr. Starr's responsibilities on this project included assessment of existing data, permitting coordination with the Florida Department of Environmental Protection (FDEP) and U.S. Army Corps of Engineers (USACE), field operations including a hydrographic survey, rock probe investigation, sediment core boring analysis, assessment of natural resources, subsurface side scan sonar investigation, bidding and contractor selection, and full-time construction oversight.

**Haldeman Creek Dredging Project Construction Services, Naples, FL.** This project for Collier County involved design and permitting to improve stormwater conveyance in the East Naples area. Mr. Starr provided oversight and supervision during construction activities (dredging operations) as well as water quality monitoring. Following construction, Mr. Starr collected sediment samples from the disposal area to identify any contamination at the site.

**Clam Pass Maintenance Dredging, Naples, FL.** This project for Collier County involved obtaining state and federal permits for the purpose of dredging an inlet to enhance tidal flushing and mangrove habitats. Mr. Starr's responsibilities on this project included assessment of existing data; permitting coordination with regulatory agencies; and field operations including hydrographic surveys, sediment core boring analysis, assessment of natural resources, sediment sampling and analysis, deployment and recovery of tide/current gages, and vibracore investigation.

**Turkey Creek Dredging Support Services, Palm Bay, FL.** This project was an assignment under an Atkins 3-year contract with the City of Palm Bay that consisted of providing a broad range of consulting services on a work-order basis. Services provided include field surveys, bathymetric surveys, transportation planning, civil engineering design, structural engineering design, environmental engineering, ecological sciences, coastal sciences, traffic and transportation engineering, drainage and stormwater management, landscape architecture, project management, construction support, and regulatory permitting. This specific Turkey Creek project involves designing dredge templates and disposal sites. Mr. Starr served as coastal scientist responsible for permitting and design services.

**Matthew Starr**

Bidding and construction administration

**Bird Colony Island Shoreline Protection Services, Roberts Bay, Sarasota County, FL.**

This project for Sarasota County involved creating a breakwater to protect a vital wading bird rookery in Roberts Bay from erosion. The shore stabilization project includes provisions for stabilizing the shorelines of three mangrove islands that have been eroded over time due primarily to the influence of wakes from boat traffic in the Intracoastal Waterway. Roberts Bay is located south of Sarasota Bay and inland of northern Siesta Key. The islands are located south of the Siesta Drive bridge located at N 27° 18' 16", W 82° 32' 71". Mr. Starr has assisted Sarasota County as their coastal engineering consultant responsible for bathymetric surveys, geotechnical investigations, feasibility study drawings, volume calculations, construction plans, and construction oversight.

**Hillsborough Canals Dredge and Preventative Measures, Tampa, FL.** This project was an assignment under Atkins' miscellaneous professional engineering services (2003–2005) contract with Hillsborough County. This 2-year contract with Hillsborough County involved the provision of miscellaneous general/civil engineering services on an as-needed, task-order basis. Work entailed planning, program development, environmental permitting, design, and construction management for roads and transportation projects, as well as projects involving stormwater, solid waste, parks, site work, traffic analysis, landscaping, and water/wastewater. This specific project assignment involved the design of dredge templates for future operations. He served as coastal scientist responsible for sediment collection and analysis of data from field surveys.

**Florida Fish and Wildlife Conservation Commission (FWC) Statewide Derelict Vessel Removals, FL.** This project involved removing approximately 75 derelict vessels from state waters for FWC. The size of the vessels removed ranged from small fishing boats, houseboats, and sailboats to a large abandoned casino boat in the Florida Keys. Mr. Starr provided submerged resource mapping, state and federal permitting services, contractor procurement, and construction oversight services during the project.

**Matheny Creek Dredging, Sarasota, FL.** This contract with Sarasota County was for professional services in Matheny Creek in Sarasota. Mr. Starr's responsibilities included public/neighborhood communications, feasibility studies, technical analysis, cost estimates, permitting, engineering analysis, specification/bid document development, bid analysis, construction management and oversight, graphics support, general public and commission meeting support, and other miscellaneous services as directed pertaining to the Sarasota County Coastal Program.



## Janet Luce

### Bidding and construction administration

#### Education

B.S., Business Administration,  
State University of New York,  
1986

#### Certifications

Professional Association of  
Diving Instructors-Certified  
Open Water, Advanced, and  
Rescue Diver

Florida Master Naturalist –  
Coastal Systems

Janet Luce has more than 26 years of experience, which includes coastal flood studies, waterway management, disaster response operations, beach renourishment, derelict and at-risk vessels, waterway markers, vessel traffic studies, regulatory permitting, public outreach, and environmental impact analyses. Ms. Luce is involved in programs for community resiliency and climate adaptation. She is proficient in geographic information systems (GIS) and developing mobile-GIS applications for field collection of geospatial data. Ms. Luce is also a member of Atkins' scientific dive team.

Ms. Luce's project experience includes:

#### **Project Manager, Florida Fish and Wildlife Conservation Commission (FWC) Boating and Waterways, Management of Projects and Programs, Statewide, FL.**

Under a continuing program management contract in place since 2005, Ms. Luce has served as project manager on several task assignments across Florida. She has managed waterway marker projects in several Florida counties to more adequately post boating safety and manatee zones in state waters. These projects typically include conducting marker condition assessments, developing work plans and maps, regulatory permitting, contractor procurement, and construction inspection services. In coordination with Atkins' applied technologies group, Ms. Luce developed a web-based waterway marker asset management system (WAMS) for providing geospatial functionality and data analysis of the state's waterway marker assets. She coordinated the development of a mobile-GIS application to collect waterway marker condition assessment and inventory information, as well as an application to capture waterway features for vessel traffic studies. Ms. Luce is a first-line responder for FWC's waterway marker on-call response and emergency response programs, providing efforts to research, report, and remedy navigational hazards and repair FWC assets subsequent to marine incidents and disaster events. She managed a program to eradicate derelict vessels in state waterways including conducting environmental assessments, regulatory permitting, contractor procurement, and construction observation services. Ms. Luce has assisted FWC with grant funding and secured a grant from the Florida Department of Environmental Protection (FDEP) State Coastal Management Program for an at-risk vessel monitoring program. The program included the development of an at-risk vessel SQL server database, informational website, mapping feature, and outreach materials. Ms. Luce has developed media and public information materials including press releases, informational brochures, kiosk signage, and presentations. She prepared a guidelines document for local governments on behalf of FWC and the U.S. Fish and Wildlife Service for establishing and marking boating regulatory zones.

**Treasure Island/Long Key Beach Renourishment, Submerged Aquatic Resource Assessments, Weeks Marine, Inc.** Prior to the scientific survey of the four proposed pipeline corridors and an anchorage area associated with the dredging of beach fill material, Ms. Luce developed an application that would be used to validate the results of a side-scan sonar survey and to document the presence of benthic resources. The application included hydrographic survey information and proposed dive transects along the pipeline routes at varying intervals. Ms. Luce participated in the benthic resource assessments and assisted with the compilation of GIS data, which validated and augmented the sonar data with the identification of submerged aquatic resources and debris areas to be avoided.

**Post-Dredge Construction Anchor Impact Seagrass Survey, Jupiter Inlet/Intracoastal Waterway Maintenance Dredging, Jupiter, FL.** Ms. Luce developed a mobile-GIS application for use during the analysis of seagrass impacts from dredge operations in the Intracoastal Waterway, north of Jupiter Inlet. She and other members of the Atkins scientific dive team conducted an anchor impact assessment subsequent to construction activities and prepared GIS maps for the post-construction anchor impact survey report to the U.S. Army Corps of Engineers (USACE).

**Janet Luce**  
Bidding and construction  
administration

**Coastal Resource Assessments, Canaveral Port Authority, Port Canaveral, FL.** Under a continuing services contract for waterside engineering, Ms. Luce provided habitat and resource assessments and environmental impact analysis in the proposed Port Canaveral expansion areas. To determine the extent and nature of the possible impacts, possible minimization of impacts, and the amount of mitigation required to compensate for unavoidable impacts, mapping of seagrass and coastal shoreline habitats and a quantitative assessment of those habitats was needed. Ms. Luce assisted with data collection, data analysis, and mitigation alternatives.

**Nearshore Hardbottom Monitoring, St. Lucie Inlet Federal Navigation Project, Martin County, FL.** Ms. Luce has been involved in the physical and environmental monitoring of the inlet and coast of Martin County, all in coordination with state and federal agencies. She and other members of the Atkins scientific dive team perform annual monitoring of the nearshore hardbottom off the Hobe Sound National Wildlife Refuge in association with sand bypassing activities and regulatory reporting.

**Construction Observation, Smathers Beach, City of Key West, FL.** Provided construction monitoring of beach renourishment construction activities on Smathers Beach in Key West. In addition to tracking truck load ticket data, she conducted turbidity testing and lighting surveys for permit compliance, in addition to monitoring turtle nesting activity.

**Construction Observation, Sebastian Inlet District, Sebastian, FL.** Ms. Luce conducted water quality and turbidity monitoring during dredge construction of the tide pool and dredge material containment project located at the Sebastian Inlet State Park. She also provided construction observation on this project.

**Coastal Flood Study and Digital Flood Insurance Rate Maps (DFIRM), Federal Emergency Management Agency (FEMA) Region 5 (Lake Michigan and Lake St. Clair).** Ms. Luce developed a mobile-GIS ArcPad application to conduct field data collection of coastal shoreline features (transects) along Lake Michigan and Lake St. Clair. A data gathering effort was conducted of tabular and geospatial data in the discovery phase, and technical and public workshops were held throughout the region to relay and collect information pertinent to the coastal flood study. Ms. Luce prepared the coastal geodatabase in accordance with FEMA's guidelines and standards for flood hazard partners. Based on results of USACE's C-Shore modeling program, Ms. Luce is producing GIS shapefiles and mapping the Special Flood Hazard Areas (SFHA) and designated base flood elevations.

**Coastal Flood Study and DFIRM, FEMA Region 1 (Knox and Waldo Counties, ME).** Ms. Luce developed a mobile-GIS ArcPad application to conduct field data collection of coastal shoreline features (transects) in Knox and Waldo counties in Maine. Based on results of the ACES and CHAMP modeling, Ms. Luce produced GIS shapefiles and mapped the SFHAs and designated base flood elevations.

**GIS Mapping, FEMA Region 10.** Developed an ArcPad application to collect shoreline feature data for coastal flood analyses in Grays Harbor County and Pierce County, Washington. She participated in the data collection of coastal shoreline feature transect data in Pierce County and also drafted the SFHAs in Grays Harbor.

**Field Inspector, FDEP State Parks, North Palm Beach, FL.** Assisted FDEP with two derelict vessel removals at John D. MacArthur State Park in Palm Beach County. Conducted site evaluation and environmental assessments, prepared reports to assist with regulatory permitting, and provided construction inspection services to ensure environmentally sound vessel debris extraction.



### Professional development

Mechanical engineering

LPS certifications

### Professional affiliations

Environmental Assessment Association

NGWA, Member

## Robert Orlando

### Environmental engineering – geotechnical

Robert Orlando co-founded Earth Tech Drilling in 2002. His focus is building and maintaining client relationships and overall management of the company. Duties include handling contracts, permitting, insurance, and daily business operations.

Mr. Orlando's relevant experience includes:

**Earth Tech Drilling, Pompano Beach, FL (2002–Present).** As president/owner, duties include:

- Managing operations and development.
- Contracts and permitting.
- Staffing and personnel.
- Accounts receivable/payable.
- Insurance.
- Safety procedures.

**Brother International (1981–2002).** As senior director of national sales and Latin America accounts, duties included:

- Problem solving and troubleshooting.
- Supporting sales representatives in opening new accounts and upgrading existing equipment.
- Quickly and effectively solving client challenges.
- Maintaining quality control/satisfaction records.

### **Singer, Elizabeth, NJ (1970–1981)**

- Industrial sewing machine design



### Certifications

Florida Water Well Contractor  
License, No. 11225

### Professional development

API and LPS Certified

40-Hour HAZWOPER and  
8-Hour Refresher

OSHA 40-Hour Supervisor

Heavy Equipment Operator

## Michael Orlando

### Environmental engineering – geotechnical

Michael Orlando co-founded Earth Tech Drilling in 2002 and has 16 years of experience in the environmental/geotechnical drilling field as well as multiple types of drilling projects, services, field supervision, and quality assurance. His accomplishments include high-profile projects throughout Florida.

Mr. Orlando's relevant experience includes:

#### **Earth Tech Drilling, Pompano Beach, FL (2002–Present)**

- Partner/vice president
- Senior driller
- Crew supervisor
- Health and safety
- Equipment maintenance

#### **GFA International, Boca Raton, FL (1997–2002)**

- Driller
- Air and mud rotary
- Geotechnical/environmental/direct push technology
- Daily tailgate, health and safety, and JSA



### Education

B.A., Biology, University of South Florida, 1981

B.S., Geology, University of South Florida, 1983

M.S., Geology, University of South Florida, 1987

### Registrations/licenses

Professional Geologist:  
Florida PG1222, 1991

### Certifications

Pollutant Storage Systems  
Specialty Contractor, No.  
PCC056782, 1996

### Professional development

OSHA Annual HAZWOPER  
Supervisor/Management  
Refresher, No. 103389, 2013

## Timothy Dehen, PG

### Environmental engineering – UST removal and remediation construction

Prior to forming Ecotech Environmental Services, Inc., Timothy Dehen worked for three large environmental consulting/contracting firms and two environmental drilling companies in Florida. The valuable experience gained at these companies included site assessments, transactional audits, tank/source removals, dewatering projects, fate and transport analysis, various drilling technologies, remedial construction management, and negotiations with regulatory agencies. Some of the clients for which Mr. Dehen directly performed environmental services include Florida Department of Environmental Protection (FDEP), Florida Department of Transportation (FDOT), Department of Defense, Mobil Oil Company, Phillips Petroleum, AMOCO, BP Oil Company, El Paso Energy, General Development Company, and GE Capital.

Highlights include:

- Years of Florida petroleum cleanup experience: 22 years
- Years of environmental site investigation experience: 26 years
- Total environmental site investigation sites: More than 500 sites
- Years of active environmental remediation experience: 24 years
- Total active environmental remediation sites: More than 100

Mr. Dehen's relevant experience includes:

**The FGS Group (2008–2012).** Mr. Dehen was regional manager in the south Florida office. In this position, he managed assessment and remediation projects for two of the largest private petroleum marketers in Florida, and directly for FDEP as statewide cleanup program contractor. Some of the projects involved risk-based closures with alternate target cleanup levels, and institutional/engineering controls. FGS also performed several performance-based cleanup projects for FDEP that enabled a quicker response with remedial technologies than with the traditional pre-approval program.

**Handex Environmental, Inc. (1994–2008).** Mr. Dehen worked as general manager for Handex Environmental, Inc., and was vice president of a joint venture between Handex and large real estate development company. Experience included assessment and remediation projects for three major oil companies, two FDOT regional contracts, and the Port Everglades Bulk Storage Terminal. Conducted fate and transport analyses of petroleum contaminants, funnel and gate analyses on solvent-contaminated properties, and supervised the remediation of hydrocarbon impacted sites using pump and treat, AS/SVE, chemical oxidation technologies. He was responsible for oversight of all project managers, geologists, and engineers, including final review of all cost estimates, reports, and SRCO proposals.

**Groundwater Protection, Inc. and Layne Environmental (1991–1994).** Mr. Dehen managed two environmental drilling companies in Florida. Both companies performed drilling services for most of the large environmental consulting firms throughout Florida. Much of this work involved the installation of monitoring wells and recovery wells in the FDEP Early Detection Incentive Program. He also gained valuable experience conducting deep contamination assessment projects at three Navy Air Station properties in Jacksonville, where petroleum contaminants were being analyzed in aerobic and anaerobic environments.

**Environmental Science & Engineering (1987–1991).** Started as a hydrogeologist but was promoted to project manager prior to leaving the company. Responsible for field work and site assessment report generation including monitoring well drilling, soil/groundwater sampling, surveying, potentiometric surface mapping, data reduction, and table preparation. Representative projects included contamination assessments on four FDOT Turnpike Plazas; a large assessment at the Phillips Petroleum Refinery in Guayama, Puerto Rico; and several pre-construction assessments of General Development Company properties in Jacksonville, North Port, and Port Malabar, Florida.



## Hiram Aguiar

### Environmental engineering – industrial hygiene

#### Education

Miami Dade College, Business,  
1988–1990

#### Certifications

Asbestos Abatement  
Supervisor

AHERA Asbestos Inspector

NIOSH 582 Equivalent (Method  
7400)

NITON X-ray Fluorescence MAP  
Spectrum Analyzer

Hazardous Waste Operations  
and Emergency Response

Confined Space Entry

Environmental Site  
Assessments

EPA Lead-Based Paint Risk  
Assessor # FL-I-9781-2

Hiram Aguiar has 20 years of experience as project manager for several large environmental projects including public and private educational facilities, government and military facilities, hospitals and medical facilities, private construction, and commercial development. His duties include but are not limited to the following:

- Develop management plans for hazardous materials in buildings
- Develop removal and clean-up plans for hazardous materials
- Delineate work areas
- Manage health and safety at construction sites
- Coordinate and manage hazardous waste emergency response actions
- Train workers to wear personal protection equipment
- Supervise asbestos and lead abatement projects
- Inspect facilities for asbestos-containing materials and for lead-based paint

Mr. Aguiar has inspected hundreds of facilities for asbestos-containing materials and for lead-based paint. These facilities ranged from a few hundred square feet to hundreds of thousands of square feet in area. He has supervised numerous asbestos and lead abatement projects. These projects range from a few days up to a year in length. Mr. Aguiar has been directly involved with the coordination and management of hazardous waste emergency response actions.

Mr. Aguiar's relevant experience includes:

- Team leader for industrial hygiene air monitoring of the World Trade Center Disaster Relief project at the Fresh Kills Landfill in Staten Island, New York.
- Member of the Emergency Response Team during Hurricane Fran in 1996.
- Supervised the installation of the ECOS database for several key clients. The ECOS database permits the client to manage and track hazardous material inventory, including asbestos and lead-based paint concerns.
- Responsible for NESHAP asbestos surveys, lead-based paint testing, indoor air quality studies, and technical reports for Baptist Health South Florida (Baptist Hospital, South Miami Hospital, and Doctor's Hospital), Florida International University, Monroe County Schools, and hundreds of private clients.



## Mark Skweres

### Environmental engineering – industrial hygiene

#### Education

B.S., Geology/Marine Science,  
University of Miami, 1989

#### Certifications

AHERA Asbestos Inspector  
Training

Asbestos Abatement Project  
Supervision

NIOSH 582 Equivalent

SCITEC X-Ray Fluorescence  
MAP Spectrum Analyzer

Hazardous Waste Operations  
and Emergency Response  
Supervisor

First Responder Operations  
Level

Assessment and Remediation  
of Mold in Buildings

American Red Cross Standard  
First Aid

American Red Cross Adult CPR

Mark Skweres has more than 15 years of experience managing environmental projects. He has been responsible for oversight on emergency response projects involving third-party liability reduction and environmental health and safety. Mr. Skweres has conducted hundreds of indoor air quality assessments involving occupant complaints and physical water-related and humidity-driven concerns relating to mold, as well as building pressurization issues.

Mr. Skweres' relevant experience includes:

- Managed large mold remediation project in 32-story, 340-unit condominium in the Miami area. While under construction, building was impacted by a water intrusion event during a large storm and subsequently required remediation of mold-impacted drywall.
- Managed large mold remediation project in 42-story condominium and 8-story hotel complex in the Miami area. While under construction, the buildings were impacted by six water intrusion events and subsequently required remediation of mold-impacted drywall.
- Managed projects for large developer throughout south Florida associated with mold-related concerns in new construction related to direct-water intrusion, humidity-driven, and building pressurization sources of moisture. Project sizes included high-rise buildings, mixed-use building complexes, and multi-building, garden-style apartment complexes. Project tasks included assessment, remediation oversight of impacted building materials, and post-construction engineering solution implementation.
- Managed large contract of School Board of Broward County. The scope of work included assessing building envelop, managing envelop repairs, assessing interior mold impacts, managing mold remediation, and assessing, designing, and managing repairs to the air conditioning systems at approximately 70 schools.
- Served as member of initial response team for the World Trade Center-Staten Island Landfill project. The project involved engineering support services for debris hauling and sorting operations at Staten Island Landfill in Staten Island, New York. Mr. Skweres played an integral part in establishing and implementing project infrastructure during the initial staffing and organization of the project. EE&G was responsible for developing and implementing an overall, multi-agency, comprehensive site health and safety plan; developing and implementing an industrial hygiene monitoring program including asbestos, metals, total particulates, silica, and other parameters of concern; providing health and safety training that included conducting health and safety indoctrination sessions, two shifts/300 people per shift; and providing general engineering services including structural, chemical, and landfill engineering.
- Served as deputy incident commander for an emergency response involving an east coast railroad. Project included monitoring all environmental, health, and safety concerns for more than 75 people involved in the neutralization and remediation of a ruptured 24,000-gallon vinyl chloride tanker car. In addition to monitoring on-site personnel concerns, EE&G also monitored potential exposures of two towns adjacent to the cleanup area. Mr. Skweres served as emergency response coordinator for this client.
- Responded to small spills involving quantities less than 100 gallons. Responsibilities included stabilizing situation, interviewing affected personnel, cleaning up spill, and performing all environmental, health, and safety operations required during and after the cleanup.

**Mark Skweres**  
Environmental engineering  
– industrial hygiene

- Served as emergency response coordinator for Hurricane Fran incineration sites in Raleigh, North Carolina. As first onsite, responsible for establishing project infrastructure. Mr. Skweres worked closely with the general contractor, U.S. Army Corps of Engineers, Federal Emergency Management Agency, Environmental Protection Agency (EPA), North Carolina OSHA, North Carolina Department of Environmental Health and Natural Resources, and local agencies to assure the safe clean-up and reduction of storm debris. The project included due diligence for land acquisitions, design-build of air curtain debris incinerators, temporary roads, erosion control, debris staging areas, ash storage areas, equipment wash down facilities, temporary fueling areas, decontamination facilities, temporary office facilities, and equipment storage areas. Environmental work associated with construction activities included drafting a site-specific health and safety plan, implementing a respiratory protection program for workers exposed to hazardous environments, conducting lighting and luminescence surveys, implementing a hearing conservation plan, designating exclusion zones based on test data, communicating hazards to workers, and training employees in the use of personnel protective equipment, controlling vehicular traffic, and inspecting heavy equipment.
- Experienced in all aspects of asbestos abatement, design, project management, and surveys. Past responsibilities include design and oversight of technically complex abatement projects and surveys to initiate abatement; and design of project for removal of spray-applied asbestos-containing fireproofing in an occupied condominium with an estimated value of \$400,000.
- Involved in development of contingency plans in accordance with EPA's new "The National Response Team's Integrated Contingency Plan Guide," which incorporates RCRA, Oil Pollution Prevention, USCG-RFRP, DOT/RSPFRP, OSHA ER and HAZWOPER, and CAA RMP.
- Designed, developed, and implemented database program to manage environmental-related data. Program was developed in Microsoft Access and was used to manage asbestos-related data by several of EE&G's larger clients. Currently, it serves as the cornerstone of a large east coast railroad's asbestos management program. This client uses the program to manage asbestos-related data in more than 6,000 structures throughout the east coast.
- Performed Phase II environmental site assessments throughout south Florida for polychlorinated biphenyls, chlorinated solvents, and petroleum compounds.
- Managed and completed tank closure assessment reports associated with the removal, abandonment, and upgrading of underground storage tanks.
- Managed and supervised the removal of an arsenic-impacted clay layer at a large site proposed for development. Project involved assessing lateral extents, surgically removing impacted clay layer, disposing of impacted clay, and sampling to assess the effectiveness of the project.



## Jay Sall, CIH, LAC

### Environmental engineering – industrial hygiene

#### Education

B.S., Biochemistry, Syracuse University

M.P.H., Industrial Hygiene, University of South Florida

#### Certifications

Certified Industrial Hygienist, #5610

Florida Licensed Mold Assessor, #MRSA118

ACAC-Certified Indoor Environmental Consultant (CIEC), #1104012

Licensed Asbestos Consultant, #AX-0000011 Florida

AHERA Accredited Asbestos Inspector/Management Planner/Project Designer

NIOSH 7400

#### Professional affiliations

American Industrial Hygiene Association (AIHA)

Jay Sall has more than 27 years of experience in the recognition, evaluation, and control of hazards in the workplace. He is a recognized expert in industrial hygiene including exposure to various physical and chemical agents with emphasis on indoor air quality and microbial remediation.

Mr. Sall's relevant experience includes:

- Registered professional of record for environmental health and safety aspects of recovery in Orleans Parish, Louisiana, following Hurricane Katrina. The project was conducted under contract through the U.S. Army Corps of Engineers (USACE) and included establishing an industrial hygiene program to protect a workforce of more than 5,000 employees who were engaged in debris removal over a 50-square-mile area in New Orleans. The project involved developing and implementing the health and safety program to include general worker safety, training, exposure monitoring, as well as drafting various programs for review and approval by multiple governmental agencies.
- Project director for the environmental risk management, and health and safety consulting services project for USACE during the Hurricane Katrina debris cleanup project in Orleans Parish, New Orleans. EE&G was tasked with developing and implementing an industrial hygiene monitoring program for approximately 2,000 workers for heavy metals, asbestos, silica, and noise. Additionally, the project included conducting approximately 800 asbestos surveys of public and private buildings that were impacted by the hurricane.
- Mr. Sall was the professional of record for the development and implementation of a health and safety plan for The World Trade Center Recovery effort at The Staten Island Land Fill. Responsibilities included the initial assessment of operations, development of a site-specific industrial hygiene monitoring program for site workers, review of all monitoring data, and presentation of data to NYPD, FDNY, FBI, and EPA. Mr. Sall maintained oversight of a team of 10–15 industrial hygiene technicians who collected data on a 24-hour/7-days-a-week basis for a workforce of approximately 4,000 employees for a variety of agents including but not limited to heavy metals, asbestos, silica, dust, noise, temperature extremes, and ionizing radiation.
- Expert witness in several legal cases involving chemical and biological exposures. These projects included review of existing documents, conducting field investigations, development of reports, depositions, and expert testimony. Data collection used state-of-the-art methods based on current literature references and were often presented in multimedia formats for trial.
- Conducted more than 1,000 asbestos assessments dating from 1987. Responsible for the design of companywide assessment procedures for asbestos relating to compliance with the Asbestos Hazard Emergency Response Act (AHERA) as well as National Emissions Standards for Hazardous Air Pollutants (NESHAP). Assessments directed and conducted were in schools, residential dwellings, commercial offices as well as industrial locations. Typical projects included testing materials, developing hazard assessments based on condition, and drafting abatement protocols.
- Designed and conducted asbestos training classes as mandated by EPA regulations as well as required by OSHA. Classes included those for abatement workers, maintenance staff, and specialty trades.
- Developed and conducted various assessments for the presence of lead and other heavy metals in paint and other applied coatings. Projects included traditional lead-based paint inspections and risk assessments as per HUD protocols as well as application of XRF technology to industrial settings to protect workers performing torch cutting of coated surfaces.
- Conducted more than 1,000 investigations for microbial growth following the release of water within a structure. Services included the assessment of mold growth, identification of likely causes, and development of a written scope of work describing remedial actions. Projects often included oversight of the remediation contractor and collection of final air data to document the effectiveness of the remedial actions. This work was typically performed for building owners, insurance companies, or their designated adjusters.

**Jay Sall, CIH, LAC**  
Environmental engineering  
– industrial hygiene

- Project manager for more than 500 indoor air quality investigations for public and private clients. Projects included air monitoring, interviewing building occupants, review of building documents, interfacing with other professionals (engineers and physicians), and presenting results to building occupants and clients. Projects typically included the design and implementation of remedial plans to improve the quality of air in the buildings.
- Project director for the comprehensive indoor air quality evaluation of a 50,000-square-foot public building. Managed a team of engineers, architects, and industrial hygienists to develop a feasibility study for remediation of the building while upgrading various aspects of the building envelope and mechanical system. Supervised all aspects of the building repairs and microbial remediation and conducted a recommissioning of the building following construction activities.
- Project director for health and safety issues involved with the clean-up and disposal of storm-related debris from Hurricane Fran. EE&G was retained by a private contractor working for USACE that maintained overall responsibility for the clean-up. The project included development of a comprehensive site health and safety plan (as per USACE specifications), implementation of supplied air respiratory protection for work crews, and continuous air monitoring for emissions from several burn pit operations.
- Project manager and principal investigator for a comprehensive industrial hygiene survey of a U.S. Naval Station. The project involved the collection and analysis of more than 50 samples for various chemical and physical agents including organic solvents, asbestos, formaldehyde, heavy metals, heat, noise, and non-ionizing radiation.
- Project director for the overall management of the indoor air quality program for Broward County Schools. Project included the management of all aspects of work for building repairs and microbial remediation of 125 schools with a total construction budget in excess of \$10 million. Responsibilities included the development of scope of work, management of technical reviews of bid, construction management for building envelope repairs, mechanical systems upgrade, and microbial remediations following construction. Managed the recommissioning of buildings with respect to indoor air quality.



## Matthew Blomberg

### Surveying

With 18 years of land surveying and construction project management experience, Matthew Blomberg has an extensive background in all aspects of land surveying. He has a thorough knowledge of boundary surveys, topographic surveys, construction layouts, house stakeouts, subdivision stakeouts, ALTA surveys, and general construction practices. Mr. Blomberg has experience with AutoCAD, Land Desktop, Carlson Survey, and AutoCAD 2012 Civil 3D.

Mr. Blomberg's project experience includes:

- Staking, layout, and as-built survey of NASKW Sigsbee sewer project.
- Staking and layout of Steam Plant Condominium, Key West, FL.
- Staking, layout, and as-built survey of the Key West Courthouse Complex.
- Staking, layout, and as-built survey of Key Cove Landing Subdivision, Key West, FL.
- Staking, layout, and as-built survey of Key West International Airport T-hangar expansion, taxiway expansion, and wetlands revitalization.
- Staking, layout, and as-built survey for the Florida Keys Aqueduct Authority sewer and water line project, Big Coppitt Key, FL.
- Boundary survey, staking, layout, and as-built survey for the Florida Keys Aqueduct Authority reverse osmosis plant, Key West, FL.
- Design survey, staking, layout, and as-built survey for Keys Energy Services tie line replacement project, Key West to Big Coppitt Key, FL.
- Staking, layout, and final platting of new subdivisions around metro Atlanta, GA.
- Boundary surveys, elevation certificates, site plans, and as-built surveys for the City of Galveston, Texas, hurricane disaster response contract.
- Mapping of wetlands and environmentally sensitive areas in Lower Keys, including out islands off the coast of the Florida Keys.
- Staking, topographic surveys, and as-built surveys for the current mitigation and airfield conversion projects at NASKW-Boca Chica.
- 5<sup>th</sup> Street topographic survey for City of Key West Engineering Services.
- Boundary survey of the 700 block of Amelia Street for City of Key West Engineering Services.
- Key Haven Estates water line as-built survey.
- Numerous mortgage, boundary surveys in the Florida Keys, Georgia, South Carolina, and Texas.



## Eric Isaacs, PSM

### Surveying

#### Education

A.S., Surveying Technology,  
Tulsa Community College,  
2004

#### Registrations/licenses

Professional Surveyor and  
Mapper:  
Florida 6783

Professional Land Surveyor:  
Oklahoma 1631

#### Certifications

PADI Assistant Instructor,  
179848

#### Professional development

Trimble – Advance RTK  
Procedures

#### Professional affiliations

Florida Surveying and Mapping  
Society

Oklahoma Society of Land  
Surveyors

Professional Association of  
Diving Instructors

Eric Isaacs has been involved in the land surveying industry for 22 years and is dual licensed as a professional surveyor and mapper in Florida as well as a professional land surveyor in Oklahoma. He has a thorough knowledge of all aspects of the land surveying industry including boundary surveys, topographic surveys, construction layouts, house stakeouts, subdivision stakeouts, ALTA surveys, and general construction practices. Mr. Isaacs is certified by Trimble for Advance RTK procedures and additionally has extensive experience with Robotic Total Stations, GPS/GNSS, AutoCAD Civil 3D, Trimble Geomatics Office, Trimble Access, and Tripod Data Systems – Survey Pro.

Mr. Isaacs' project experience includes:

- U.S. Army Corps of Engineers right-of-way acquisition, Oklahoma.
- Six miles of new highway alignment for the Gilcrease Expressway, including design survey, alignment survey, and boundary surveys including 12 full section breakdowns, mapping wetlands, and environmental hazard areas, Oklahoma.
- Numerous Oklahoma Department of Transportation bridge projects, including right-of-way acquisition and design surveys of historical structures, Oklahoma.
- Contracted by Williams Corporation staking fuel containment systems across the United States
- Staking, layout, and as-built survey for the Florida Keys Aqueduct Authority sewer and water line project, Big Coppitt Key, FL.
- Indigenous Park topographic survey, including wetlands mapping, Key West, FL.
- Staking for the widening of US Highway 1 project, Big Coppitt Key, FL.
- Habitat mapping of Tom's Harbor Islands (out islands off the coast of the Florida Keys).
- As-built surveys of beach restoration projects (Rest Beach, Dog Beach, and South Beach), Key West, FL.
- Staking, layout, as-built survey, and elevation certificates of Monroe County Fire Station #8, Key West, FL.
- Mapping of wetlands and environmentally sensitive areas in Lower Keys, including out islands off the coast of the Florida Keys.
- Staking, topographic surveys, and as-built surveys for the current mitigation and airfield conversion projects at NASKW-Boca Chica.
- Staking and as-built surveys for new sidewalk improvements (Atlantic Boulevard, Duck Avenue, Leon Street, Virginia Street, and College Road), Key West, FL.
- Hydrological elevation data over entire island of Boca Chica Key for engineering design of water flow.
- Staking and as-built survey of old House Boat Row mitigation project, Key West, FL.
- Staking Florida Keys Overseas Heritage Trail (MM5.2-MM11.0, MM14.9-MM15.7, took over MM16.5-MM25.5).
- Numerous mortgage and boundary surveys in the Florida Keys and Oklahoma.



**CITY OF KEY WEST  
3126 Flagler Avenue  
Key West, FL 33040**

**ADDENDUM NO. 1 – RFQ Environmental Engineering/ ITB 14-004**

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

**RFI Questions Submitted:**

1.) Does the bid require that respondents be a licensed PE?

**Yes, you should include a Licensed PE on your team.**

2.) Can a Prime submit as a sub to another firm? Also, can a sub-contractor submit with more than one firm?

**Yes.**

3.) Please confirm the attached (46 pages) is the complete PDF for the subject submittal. Page 1 of the PDF states that the document is 47 pages in length. It also states that the “Request for Qualifications” section is 10 pages in length. However, per the attached, the section is 8 pages. I just want to be sure there are no missing pages.

**Yes there are 46 pages and there are only 8 pages in the RFQ section.**

4.) Under the “Scope of Work” section on page 7 of the RFQ, services from a Resident Project Representative would be required. Would a RPR differ from the Engineer of Record in this instance?

**Yes, the RPR is the on-site staff providing daily (or other agreed on frequency) oversight (e.g., inspection)**

5.) May firms only submit for one discipline or would a sub-consultant be needed to satisfy all service requirements per submission?

**Must submit for all, using a sub-consultant as necessary.**

6.) Will there be any page number limitations for any part of the qualification package?

**Unless otherwise so stated in the RFQ, no limit**

7.) Is there an incumbent? If so, can you provide the company name?

**There is not an “incumbent” relative to an Environmental-specific General Services RFQ.**

8.) Just to clarify the RFQ instructions, please advise: Put COPY Response and CD-ROM in envelope, seal it, mark it COPY and place inside of Envelope with ORIGINAL Response and CD-ROM, then seal that envelope? One envelope inside of another, correct?

**Correct.**

9.) Signed certifications are required by prime and subs, or just prime?

**Just prime**

10.) Please confirm that the required forms (Anti-Kickback Affidavit, Public Entity Crimes Certification, Equal Benefits for Domestic Partners Affidavit, and Cone of Silence Affidavit) are to be completed by the prime consultant only.

**Correct.**

11.) Are insurance certificates required to be provided at the time qualifications packages are submitted?

**Yes**

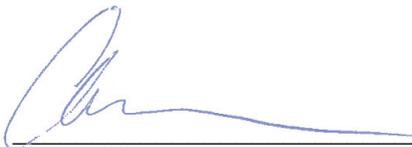
12.) Is a “description of the contractor's employee benefits plan” (page 17 of the RFQ) required to be included with the executed Equal Benefits for Domestic Partners Affidavit?

**No**

13.) Please confirm that electronic signatures are acceptable as originals.

**Electronic signatures are acceptable**

All Bidders 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.



Atkins North America, Inc.

Signature

Name of Business

Charlotte A. Maddox, PE, DWRE, CFM, PMP, F.NSPE  
Senior Vice President



**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. RFQ No. 14-004 for Environmental Engineering Services
  
2. This sworn statement is submitted by Atkins North America, Inc.  
(Name of entity submitting sworn statement)  
  
whose business address is 2001 Northwest 107th Avenue  
Miami, Florida 33172 and (if applicable) its Federal  
Employer Identification Number (FEIN) is 59-0896138 (If the entity has no FEIN,  
include the Social Security Number of the individual signing this sworn statement.)
  
3. My name is Charlotte A. Maddox, PE, DWRE, CFM, PMP, F.NSPE and my relationship to  
(Please print name of individual signing)  
  
the entity named above is Senior Vice President.
  
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(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of 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 the 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.)

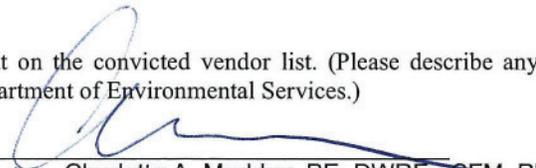
Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 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. There has been a subsequent proceeding before a hearing officer of the State 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 Environmental Services.)

  
(Signature) Charlotte A. Maddox, PE, DWRE, CFM, PMP, F.NSPE  
6/17/14 Senior Vice President  
(Date)

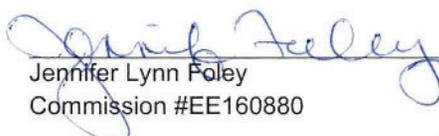
STATE OF Florida

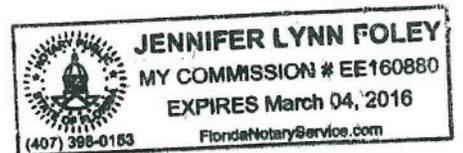
COUNTY OF Hillsborough

PERSONALLY APPEARED BEFORE ME, the undersigned authority,  
Charlotte A. Maddox, PE, DWRE,  
CFM, PMP, F.NSPE, Senior VP who, after first being sworn by me, affixed his/her signature in the  
(Name of individual signing)

space provided above on this 17 day of June, 2014.

My commission expires: March 4, 2016  
NOTARY PUBLIC

  
Jennifer Lynn Foley  
Commission #EE160880







## Insurance


**CERTIFICATE OF LIABILITY INSURANCE** Page 1 of 2
DATE (MM/DD/YYYY)  
06/09/2014

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  Willis of New York, Inc. c/o 26 Century Blvd. P. O. Box 305191 Nashville, TN 37230-5191	CONTACT NAME:		
	PHONE (A/C, NO, EXT):	877-945-7378	FAX (A/C, NO): 888-467-2378
	E-MAIL ADDRESS:	certificates@willis.com	
	INSURER(S) AFFORDING COVERAGE	NAIC#	
INSURED  Atkins North America, Inc. 2001 NW 107th Avenue Miami, FL 33172-2507	INSURER A:	Greenwich Insurance Company	
	INSURER B:	Underwriter's at Lloyds	
	INSURER C:		
	INSURER D:		
	INSURER E:		
	INSURER F:		

## COVERAGES

CERTIFICATE NUMBER: 21686560

REVISION NUMBER:

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

INSR LTR	TYPE OF INSURANCE	ADD'L NSRD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liability GEN'L AGGREGATE LIMIT APPLIES PER: POLICY <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC	Y		CGG740901603	4/1/2014	4/1/2015	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input checked="" type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS SCHEDULED AUTOS NON-OWNED AUTOS UMBRELLA LIAB OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION \$	Y		CAH740901703	4/1/2014	4/1/2015	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ EACH OCCURRENCE \$ AGGREGATE \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/ MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y	N/A	CWG740901503	4/1/2014	4/1/2015	<input checked="" type="checkbox"/> WC STATUTORY LIMITS OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	Professional Liability-Claims Made			B080111209P14	4/1/2014	4/1/2015	\$1,000,000 Each Claim & \$1,000,000 Annual Aggregate 11/11/1961 Retrodate

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach Acord 101, Additional Remarks Schedule, if more space is required)

RE: RFQ #14-004; Environmental Engineering Services

Greenwich Insurance Companies Best Rating A XV  
Underwriters at Lloyd's London AM Best Rating: A XV.

Professional Liability policy written on claims-made basis.

**There are no Deductibles or Self-Insured Retentions on the General Liability, Automobile Liability**

## CERTIFICATE HOLDER

## CANCELLATION

City of Key West, FL 3126 Flagler Avenue Key West, FL 33040	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 

Call: 4434921 Tpl: 1788128 Cert: 21686560 © 1988-2010 ACORD CORPORATION. All rights reserved.

ACORD 25 (2010/05)

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AGENCY CUSTOMER ID: 33004588

LOC#: \_\_\_\_\_



## ADDITIONAL REMARKS SCHEDULE

Page 2 of 2

AGENCY Willis of New York, Inc.		NAMED INSURED Atkins North America, Inc. 2001 NW 107th Avenue Miami, FL 33172-2507	
POLICY NUMBER See First Page		EFFECTIVE DATE: See First Page	
CARRIER See First Page	NAIC CODE		

### ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,  
 FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

and Workers Compensation coverages.

The City of Key West, all Departments, Agencies, Boards, Contractor and Commissions, its officers, agents, servants and employees are included as Additional Insureds as respects to General Liability and Automobile Liability.

General Liability policy shall be Primary and Non-Contributory with any other insurance in force for or which may be purchased by Additional Insureds.

Waiver of Subrogation applies in favor of Additional Insureds with respects to Workers Compensation, as permitted by law.

ACORD 101 (2008/01)

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POLICY NUMBER: CGG740901603

COMMERCIAL GENERAL LIABILITY  
CG 20 10 07 04**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.****ADDITIONAL INSURED – OWNERS, LESSEES OR  
CONTRACTORS – SCHEDULED PERSON OR  
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**SCHEDULE**

<b>Name Of Additional Insured Person(s) Or Organization(s):</b>	<b>Location(s) Of Covered Operations</b>
ANY PERSON OR ORGANIZATION WITH WHOM YOU HAVE AGREED, THROUGH WRITTEN CONTRACT, AGREEMENT OR PERMIT, EXECUTED PRIOR TO THE LOSS, TO PROVIDE ADDITIONAL INSURED COVERAGE.	VARIOUS AS REQUIRED PER WRITTEN CONTRACT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

**A. Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

**B.** With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.



POLICY NUMBER:CGG740901603

COMMERCIAL GENERAL LIABILITY  
CG 2037 07 04

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED- OWNERS, LESSEES OR  
CONTRACTORS- COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location And Description Of Completed Operations
ANY PERSON OR ORGANIZATION WITH WHOM YOU HAVE AGREED, THROUGH WRITTEN CONTRACT, AGREEMENT OR PERMIT, EXECUTED PRIOR TO THE LOSS, TO PROVIDE ADDITIONAL INSURED COVERAGE.	VARIOUS AS REQUIRED PER WRITTEN CONTRACT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".



POLICY NUMBER: CAH740901703

XIC4111007

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**AUTOMATIC ADDITIONAL INSURED**

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM  
 GARAGE COVERAGE FORM  
 MOTOR CARRIER COVERAGE FORM  
 TRUCKERS COVERAGE FORM  
 BUSINESS AUTO PHYSICAL DAMAGE COVERAGE FORM

A. LIABILITY COVERAGE, Who Is An Insured, is amended to include as an "insured" any person or organization you are required in a written contract to name as an additional insured, but only for "bodily injury" or "property damage" otherwise covered under this Policy caused, in whole or in part, by the negligent acts or omissions of:

1. You, while using a covered "auto"; or
2. Any other person, except the additional insured or any employee or agent of the additional insured, operating a covered "auto" with your permission;

Provided that:

- a. The written contract is in effect during the policy period of this Policy;
  - b. The written contract was signed by you and executed prior to the "accident" causing "bodily injury" or "property damage" for which liability coverage is sought; and
  - c. Such person or organization is an "insured" solely to the extent required by the contract, but in no event if such person or organization is solely negligent.
- B. The Limits of Insurance provided for the Additional Insured shall not be greater than those required by contract and, in no event shall the Limits of Insurance set forth in this Policy be increased by the contract.
- C. General Conditions, Other Insurance is amended as follows:

Any coverage provided hereunder shall be excess over any other valid and collectible insurance available to the additional insured whether such insurance is primary, excess, contingent or on any other basis unless the contract specifically requires that this Policy be primary.

All terms, conditions, exclusions and limitations of this Policy shall apply to the liability coverage provided to any additional insured, and in no event shall such coverage be enlarged or expanded by reason of the contract.



All other terms and conditions of this policy remain unchanged.

\_\_\_\_\_  
 (Authorized Representative)

XIC 411 1007

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Page 1 of 1

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WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY WC 00 0313  
{Ed. 4-84}

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit any one not named in the Schedule.

Schedule

As required by written contract

This endorsement changes the policy to which it is attached effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparation of the policy)

Endorsement No.	Effective Policy No. CWG740901503	Endorsement Premium
Insured Atkins North America, Inc.		
Insurance Company Greenwich Insurance Company		



WC000313  
{Ed. 4/84}

1983 National Council on Compensation Insurance

POLICY NUMBER: CGG740901603

**COMMERCIAL GENERAL LIABILITY**  
**CG 02 2410 93**

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **EARLIER NOTICE OF CANCELLATION PROVIDED BY US**

This endorsement modifies insurance provided under the following:

- COMMERCIAL GENERAL LIABILITY COVERAGE PART
- LIQUOR LIABILITY COVERAGE PART
- POLLUTION LIABILITY COVERAGE PART
- PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

### **SCHEDULE**

Number of Days' Notice 90

(If no entry appears above, information required to complete this Schedule will be shown in the Declarations as applicable to this endorsement.)

For any statutorily permitted reason other than nonpayment of premium, the number of days required for notice of cancellation, as provided in paragraph 2. of either the CANCELLATION Common

Policy Condition or as amended by an applicable state cancellation endorsement, is increased to the number of days shown in the Schedule above.



**CG022410 93**

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POLICY NUMBER: CAH740901703

XIC4051007

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**CANCELLATION BY US**

This endorsement modifies insurance provided under the following:

- BUSINESS AUTO COVERAGE FORM
- GARAGE COVERAGE FORM
- MOTOR CARRIER COVERAGE FORM
- TRUCKERS COVERAGE FORM
- BUSINESS AUTO PHYSICAL DAMAGE COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

**Changes In Conditions**

The number of days required for notice of cancellation by us for any reason other than nonpayment of premium, as provided in either paragraph 2. of the CANCELLATION Common Policy condition or as amended by an applicable state cancellation endorsement, is extended to the number of days shown in the Schedule below:

**SCHEDULE**

Number of Days' Notice: 90



All other terms and conditions of this policy remain unchanged.

\_\_\_\_\_  
(Authorized Representative)

WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY

we 99 0110

(Ed. 1/08)

THIS ENDORSEMENT CHANGES THE POLICY\_ PLEASE READ IT CAREFULLY.

EARLIER NOTICE OF CANCELLATION PROVIDED BY US ENDORSEMENT

This endorsement modifies insurance provided under the following:

WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY INSURANCE POLICY

Number of Days Notice:90

(If no entry appears above, information required to complete this Schedule will be shown in the Declarations as applicable to this endorsement)

For any statutorily permitted reason other than nonpayment of premium, the number of days required for notice of cancellation, as provided in PART SIX "" CONDITIONS, D. Cancelation of the Workers' Compensation and Employers' Liability Insurance Policy or as amended by an applicable state cancellation endorsement, is increased to the number of days shown in the Schedule above.

All other terms and conditions remain the same.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The informatlon below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective April 1, 2014

Policy No. CWG740901503

Endorsement No.

Insured ATKINS US HOLDINGS INC.

Insurance Company Greenwich Insurance Company

Countersigned by \_\_\_\_\_

WE 99 0110  
Ed. 1/08

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Willis Limited  
FINEX Global



CONTRACT ENDORSEMENT

INSURED: WS Atkins Plc  
and as more fully defined in the contract

PERIOD: 1 April 2014 to 31 March 2015

TYPE: Insurance of  
UK PI Generic Primary

UNIQUE MARKET REFERENCE: B080111209P14

ENDORSEMENT REFERENCE: 0002

EFFECTIVE DATE: 1 April 2014 local standard time at the address of the Insured.

It is hereby noted and agreed that with effect from the effective date above the following General Condition is added to the policy:

"If INSURERS cancel this policy prior to its expiry date by notice to the INSURED for any reason, INSURERS will send written notice of cancellation to the persons or organizations listed in the schedule to be created and maintained by the INSURED (the "Cancellation Notice Schedule") at least 30 days prior to the cancellation date applicable to the policy. This notice will be in addition to any notice to the INSURED.

The INSURED will provide an updated copy of the Cancellation Notice Schedule to Insurers on a monthly basis.

The notice referenced in this endorsement is intended only to be a courtesy notification to the person(s) or organization(s) named in the Cancellation Notice Schedule in the event of a pending cancellation of coverage. INSURERS have no legal obligation of any kind to any such person(s) or organization(s). Any failure to provide advance notice of cancellation to the person(s) or organization(s) named in the Cancellation Notice Schedule will impose no obligation or liability of any kind upon INSURERS, will not extend any policy cancellation date and will not negate any cancellation of the policy.

INSURERS are not responsible for verifying any information in any Cancellation Notice Schedule, nor are INSURERS responsible for any incorrect information that the INSURED may use."

All other terms and conditions remain unaltered.

Willis Limited  
WUv10811  
Willis Internal Ref: 0002

**Atkins**

# *State of Florida Department of State*

I certify from the records of this office that ATKINS NORTH AMERICA, INC. is a corporation organized under the laws of the State of Florida, filed on February 29, 1960.

The document number of this corporation is 233840.

I further certify that said corporation has paid all fees due this office through December 31, 2014, that its most recent annual report/uniform business report was filed on January 15, 2014, and its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

*Given under my hand and the  
Great Seal of the State of Florida  
at Tallahassee, the Capital, this  
the Fifteenth day of January, 2014*



*Ken Detzner*  
**Secretary of State**

Authentication ID: CC2724529913

To authenticate this certificate, visit the following site, enter this ID, and then follow the instructions displayed.

<https://efile.sunbiz.org/certauthver.html>

Engineering

**State of Florida**  
 Board of Professional Engineers  
 Attests that  
**Atkins North America, Inc.**

**is authorized under the provisions of Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes.**

Expiration: 2/28/2015  
 Audit No: 228201503309

**Certificate of Authorization**

CA Lic. No:  
24

Architecture

STATE OF FLORIDA  
 DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
 BOARD OF ARCHITECTURE & INTERIOR DESIGN

<b>LICENSE NUMBER</b>	
AAC000723	

The ARCHITECT CORPORATION  
 Named below IS CERTIFIED  
 Under the provisions of Chapter 481 FS.  
 Expiration date: FEB 28, 2015

ATKINS NORTH AMERICA INC  
 4030 W. BOY SCOUT BOULEVARD  
 SUITE 700  
 TAMPA FL 33607

RICK SCOTT GOVERNOR      ISSUED: 01/08/2013    SEQ # L1301080000552      KEN LAWSON SECRETARY  
 DISPLAY AS REQUIRED BY LAW

Surveying

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.: **LB24**  
 Expiration Date: February 28, 2015

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

ATKINS NORTH AMERICA, INC.  
 ATTN: LEGAL DEPT. 4030 W BOY SCOUT BLVD STE 700  
 TAMPA, FL 33607-5713

ADAM H. PUTNAM  
 COMMISSIONER OF AGRICULTURE

Landscape Architecture

RICK SCOTT, GOVERNOR      STATE OF FLORIDA      KEN LAWSON, SECRETARY  
 DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
 BOARD OF LANDSCAPE ARCHITECTURE

<b>LICENSE NUMBER</b>	
LCC000052	

The LANDSCAPE ARCHITECT BUSINESS  
 Named below HAS REGISTERED  
 Under the provisions of Chapter 481 FS.  
 Expiration date: NOV 30, 2015

ATKINS NORTH AMERICA, INC  
 HEATHER MADONNA  
 4030 W BOY SCOUT BLVD STE 700  
 TAMPA FL 33607

ISSUED: 11/14/2013    SEQ # L1311140001019      KEN LAWSON SECRETARY  
 DISPLAY AS REQUIRED BY LAW



**ADAM R. GELBER**



Diver No. 12080M4269  
 BirthDate 12-Aug-1979  
 Cert.Date 25-Aug-2012  
 Instr.No. MI-164111  
**DAVID D. HOUSER**  
 12337  
**DIVERS SUPPLY**  
 2225 ST JOHNS BLUFF RD SOUTH  
 JACKSONVILLE, FL 32216  
 904 646-3828

This diver has satisfactorily met the standards for this certification level as set forth by: PADI, 30151 Tomas Street, RSM, CA 92688-2125 www.padi.com

**ADAM R. GELBER**



Diver No. 12080M3600  
 BirthDate 12-Aug-1979  
 Cert.Date 25-Aug-2012  
 Instr.No. MSDT-239722  
**KIM H. FAIR**  
 12337  
**DIVERS SUPPLY**  
 2225 ST JOHNS BLUFF RD SOUTH  
 JACKSONVILLE, FL 32216  
 904 646-3828

This diver has satisfactorily met the standards for this certification level as set forth by: PADI, 30151 Tomas Street, RSM, CA 92688-2125 www.padi.com

**ADAM R. GELBER**



Diver No. 82179044  
 BirthDate 12-Jun-1970  
 Cert.Date 18-Jun-1985  
 Instr.No. OWSI-13869  
**RONALD J. SIMMONS**

This qualification meets ISO 24801-2: Diver Level 2 – Autonomous Diver Standard  
 This diver has satisfactorily met the standards for this certification level as set forth by: PADI, 30151 Tomas Street, RSM, CA 92688-2125 www.padi.com

**ADAM GELBER**



Diver No. 0809004394  
 Birthdate 12 JUN 1970  
 Cert.Date 07 SEP 2008  
 Instr.No. MSDT-234253  
**ALEXANDER NUNEZ**  
 18869  
**SOUTH BEACH DIVERS**  
 850 WASHINGTON AVE  
 MIAMI BEACH, FL 33139  
 (305) 531-6110

This diver has satisfactorily met the standards for this certification level as set forth by: PADI, 30151 Tomas Street, RSM, CA 92688-2125 www.padi.com

American  
Red Cross



This recognizes that  
**Adam Gelber**  
has completed the requirements for  
**Adult CPR**  
conducted by  
**South Beach Divers**  
Date completed: **10/19/2012**  
The American Red Cross recognizes  
this certificate is valid from  
completion date for: **2 Years**

American  
Red Cross



This recognizes that  
**Adam Gelber**  
has completed the requirements for  
**Adult First Aid/CPR/AED**  
conducted by  
**South Beach Divers**  
Date completed: **10/19/2012**  
The American Red Cross recognizes  
this certificate is valid from  
completion date for: **2 Years**

American  
Red Cross

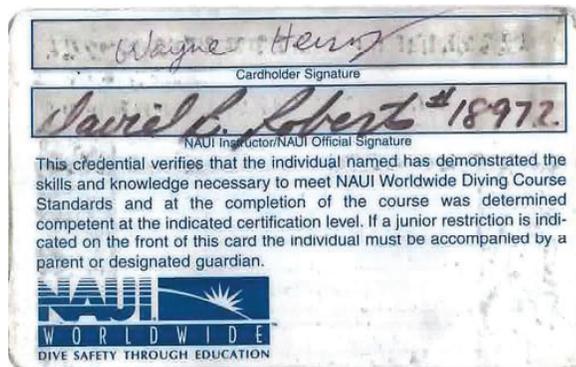
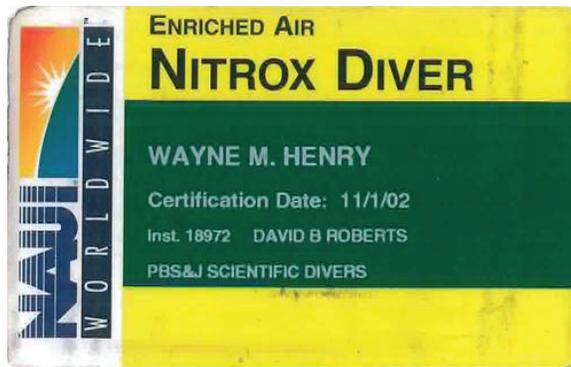
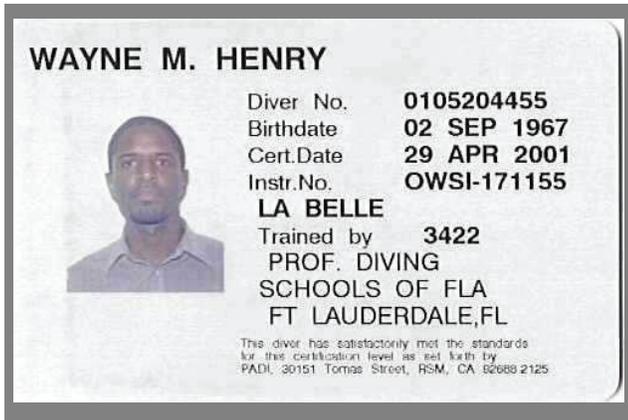
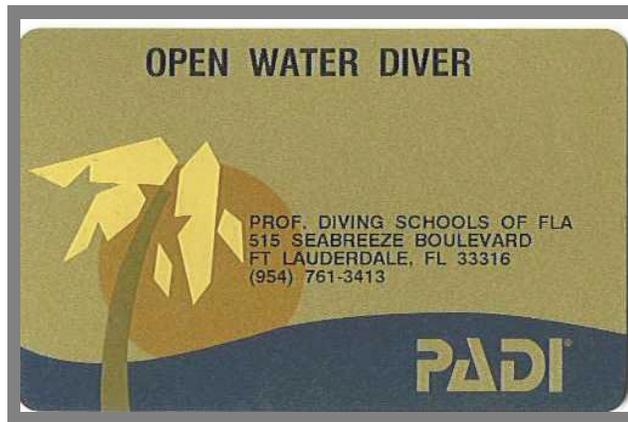


This recognizes that  
**Adam Gelber**  
has completed the requirements for  
**AED-Adult**  
conducted by  
**South Beach Divers**  
Date completed: **10/19/2012**  
The American Red Cross recognizes  
this certificate is valid from  
completion date for: **2 Years**

American  
Red Cross



This recognizes that  
**Adam Gelber**  
has completed the requirements for  
**First Aid**  
conducted by  
**South Beach Divers**  
Date completed: **10/19/2012**  
The American Red Cross recognizes  
this certificate is valid from  
completion date for: **2 Years**



# Florida Atlantic University

Open University & Continuing Education  
Safety Science Program

## Certificate of Achievement

Certificate #200068  
Presented to

*Wayne Henry*

having completed the required forty hours of training and  
having passed the comprehensive examination for the  
**Accredited Program for Construction Safety**  
is hereby awarded 4.0 Continuing Education Units  
On this Twenty Second Day of September, Two Thousand

*B. Ray Holman*  
Dean, Open University & Continuing Education



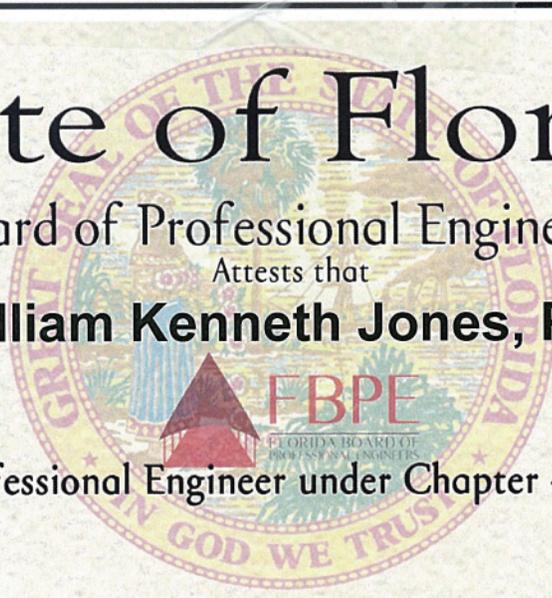
*Benjamin Roger Kidder*  
Benjamin Roger Kidder CHMM  
OSHA Trainer # 3424  
*[Signature]*  
Program Director

# State of Florida

Board of Professional Engineers

Attests that

**William Kenneth Jones, P.E.**



Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2015

Audit No: 228201525460

P.E. Lic. No:

39523

## THE ACADEMY OF BOARD CERTIFIED ENVIRONMENTAL PROFESSIONALS

ATTESTS THAT

**DONALD DEIS**

IS HEREBY DECLARED TO BE A

CERTIFIED ENVIRONMENTAL PROFESSIONAL

IN

**ASSESSMENT**

BY THE CERTIFICATION REVIEW BOARD

ACTING UNDER THE AUTHORITY OF THE BOARD OF TRUSTEES

EXPIRATION DATE: DECEMBER 31, 2014

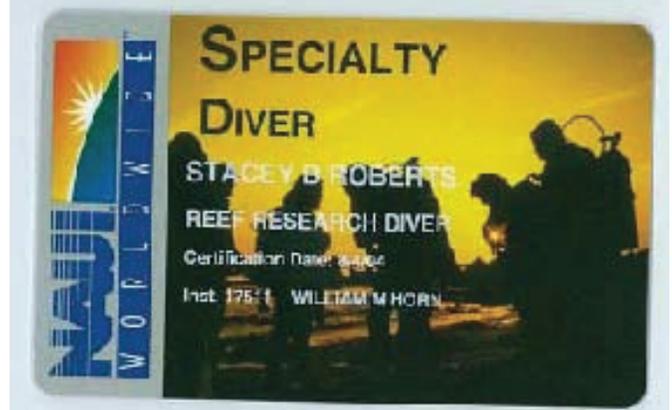
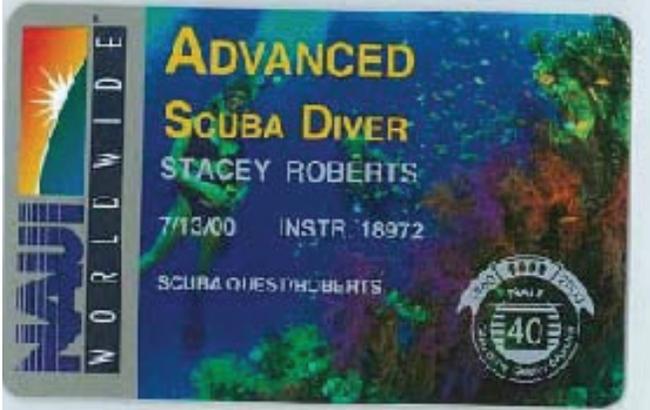
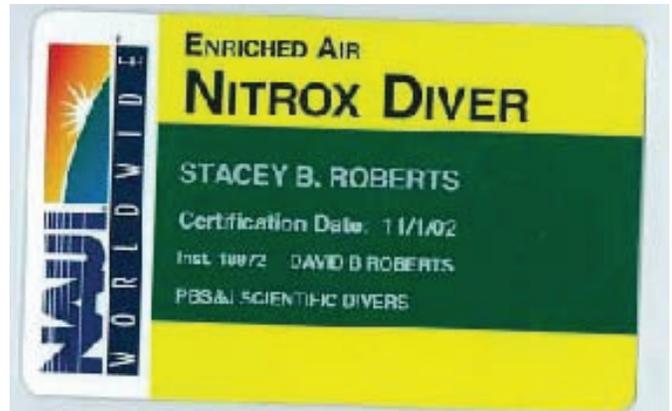
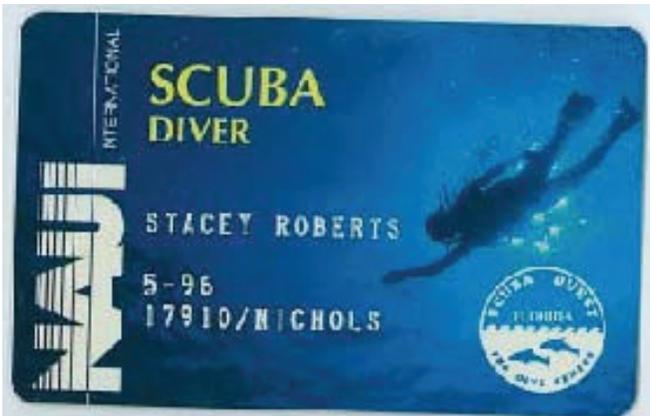
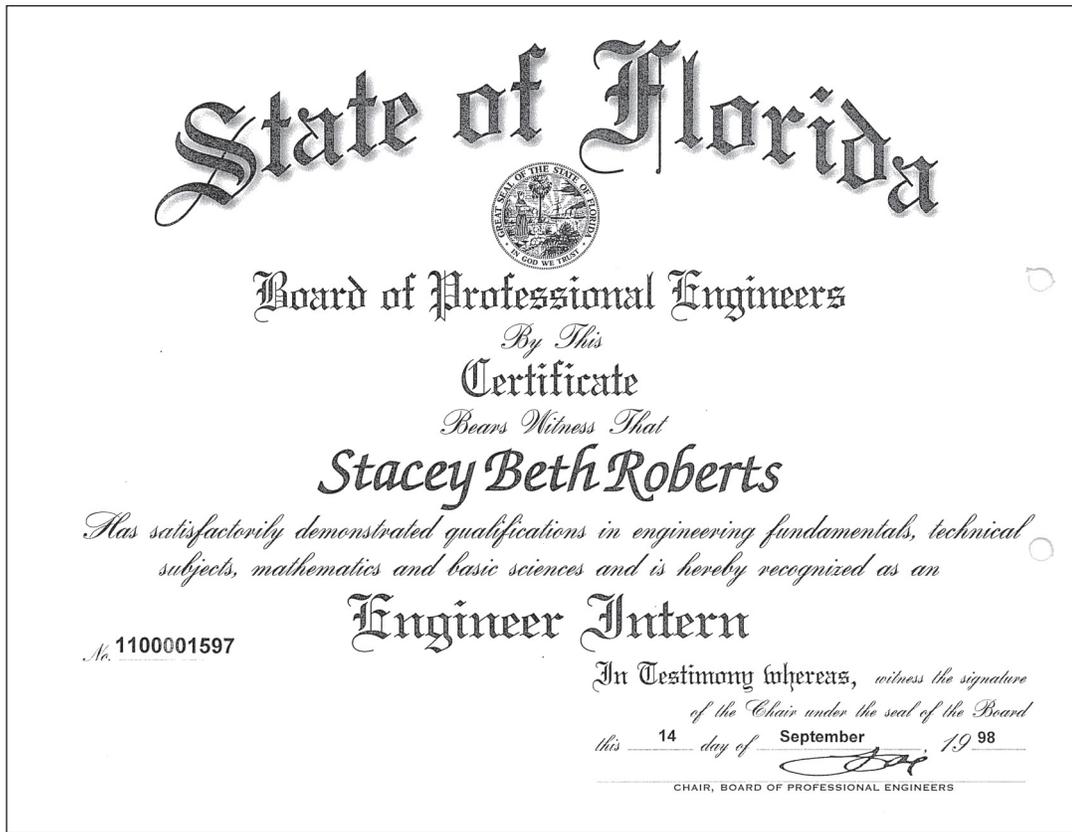
PRESIDENT, ABCEP



CHAIRPERSON, CERTIFICATION REVIEW BOARD

CERTIFICATION NUMBER: 91032285







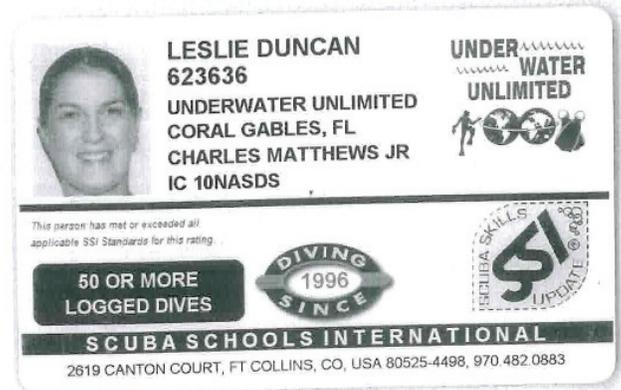
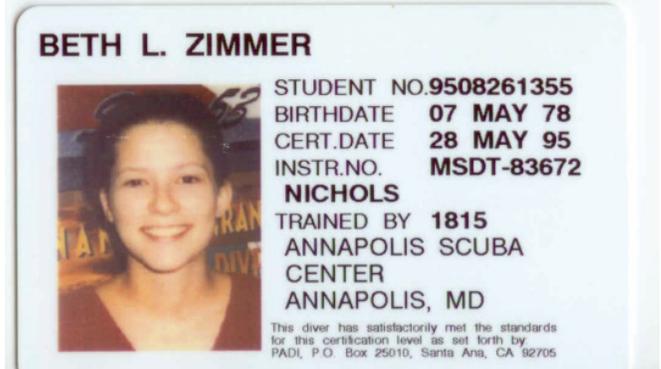
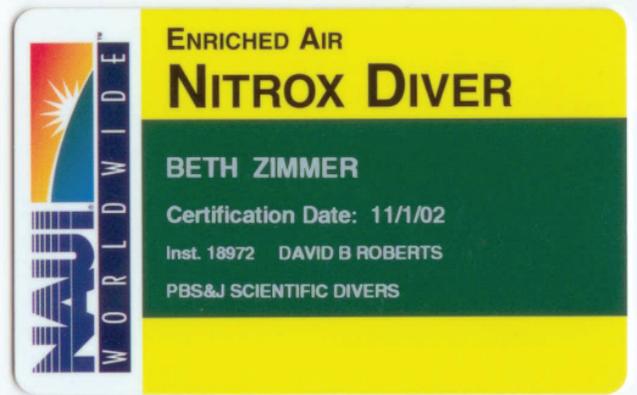
This recognizes that  
**Beth Zimmer**  
 has completed the requirements for  
**Adult CPR**  
 conducted by  
**South Beach Divers**  
 Date completed: **10/19/2012**  
 The American Red Cross recognizes  
 this certificate is valid from  
 completion date for: **2 Years**



This recognizes that  
**Beth Zimmer**  
 has completed the requirements for  
**AED-Adult**  
 conducted by  
**South Beach Divers**  
 Date completed: **10/19/2012**  
 The American Red Cross recognizes  
 this certificate is valid from  
 completion date for: **2 Years**



This recognizes that  
**Beth Zimmer**  
 has completed the requirements for  
**First Aid**  
 conducted by  
**South Beach Divers**  
 Date completed: **10/19/2012**  
 The American Red Cross recognizes  
 this certificate is valid from  
 completion date for: **2 Years**



Please note that the above certifications are for Leslie Manzello.

# State of Florida

Board of Professional Engineers

Attests that

**Bryan David Flynn, P.E.**

Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2015

Audit No: 228201529735

P.E. Lic. No:

70856

# State of Florida

Board of Professional Engineers

Attests that

**Todd Jeffrey Demunda, P.E.**

Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2015

Audit No: 228201505852

P.E. Lic. No:

71585

**State of Florida**  
 Board of Professional Engineers  
 Attests that  
**William Paul Pitcher, P.E.**

  
 FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Is licensed as a Professional Engineer under Chapter 471, Florida Statutes  
 Expiration: 2/28/2015  
 Audit No: 228201520946

P.E. Lic. No:  
 31852

**State of Florida**  
 Board of Professional Engineers  
 Attests that  
**Samuel Joseph Smith, P.E.**

  
 FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Is licensed as a Professional Engineer under Chapter 471, Florida Statutes  
 Expiration: 2/28/2015  
 Audit No: 228201502091

P.E. Lic. No:  
 73430

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**AC# 6222813** **STATE OF FLORIDA**

**DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
 BOARD OF PROFESSIONAL GEOLOGISTS**

**SEQ# L12072301611**

DATE	BATCH NUMBER	LICENSE NBR
07/23/2012	120037328	PG1733

The PROFESSIONAL GEOLOGIST  
 Named below IS LICENSED  
 Under the provisions of Chapter 492 FS.  
 Expiration date: JUL 31, 2014

**BAYNE, BRADLEY JOHN**  
 111 EVELYN AVENUE  
 CLEARWATER FL 337654304

**RICK SCOTT**  
GOVERNOR**KEN LAWSON**  
SECRETARY

DISPLAY AS REQUIRED BY LAW



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

License No.: **LS4431**  
Expiration Date: February 28, 2015

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

**ROBERTO MANTECON**  
14011 SW 85TH AVE  
PALMETTO BAY, FL 33158-1035

A handwritten signature in black ink, appearing to read "Adam H. Putnam".

ADAM H. PUTNAM  
COMMISSIONER OF AGRICULTURE

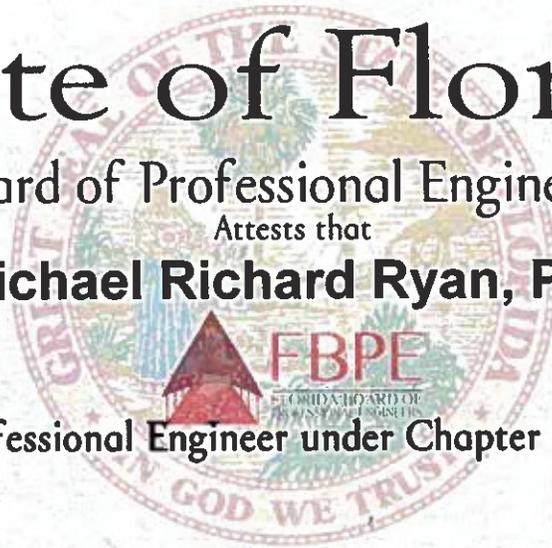
This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.

# State of Florida

Board of Professional Engineers

Attests that

**Michael Richard Ryan, P.E.**



Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2015

Audit No: 228201531437

P.E. Lic. No:

68358

# Project Management Institute

THIS IS TO CERTIFY THAT

**Michael R. Ryan**

HAS BEEN FORMALLY EVALUATED FOR DEMONSTRATED EXPERIENCE, KNOWLEDGE AND PERFORMANCE IN ACHIEVING AN ORGANIZATIONAL OBJECTIVE THROUGH DEFINING AND OVERSEEING PROJECTS AND RESOURCES AND IS HEREBY BESTOWED THE GLOBAL CREDENTIAL

**Project Management Professional**

IN TESTIMONY WHEREOF, WE HAVE SUBSCRIBED OUR SIGNATURES UNDER THE SEAL OF THE INSTITUTE

Deanna Landers • Chair, Board of Directors

Mark A. Langley • President and Chief Executive Officer



PMP® Number 1203762

PMP® Original Grant Date 18 August 2008

PMP® Expiration Date 17 August 2014



## Earth Tech Drilling

FLORIDA DEPARTMENT OF STATE  
DIVISION OF CORPORATIONS



### Detail by Entity Name

#### Florida Profit Corporation

EARTH TECH DRILLING, INC.

#### Filing Information

<b>Document Number</b>	P02000041518
<b>FEI/EIN Number</b>	043643895
<b>Date Filed</b>	04/17/2002
<b>State</b>	FL
<b>Status</b>	ACTIVE
<b>Last Event</b>	NAME CHANGE AMENDMENT
<b>Event Date Filed</b>	11/19/2009
<b>Event Effective Date</b>	NONE

#### Principal Address

2703 NW 19TH STREET  
POMPANO BEACH, FL 33069

Changed: 04/05/2005

#### Mailing Address

19263 REDBERRY COURT  
BOCA RATON, FL 33498

#### Registered Agent Name & Address

BRUCE JAY REINGOLD, P.A.  
7015 BERACASA WAY  
SUITE 208  
BOCA RATON, FL 33433

Name Changed: 04/05/2005

Address Changed: 02/22/2008

#### Officer/Director Detail

##### **Name & Address**

Title P

ORLANDO, ROBERT  
19263 REDBERRY COURT  
BOCA RATON, FL 33498

#### Annual Reports

<http://search.sunbiz.org/Inquiry/CorporationSearch/SearchResultDetail/EntityName/domp-...> 6/24/2014

Report Year	Filed Date
2012	02/16/2012
2013	02/14/2013
2014	02/23/2014

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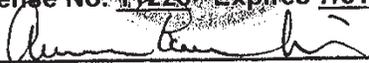
<a href="#">02/23/2014 -- ANNUAL REPORT</a>	View image in PDF format
<a href="#">02/14/2013 -- ANNUAL REPORT</a>	View image in PDF format
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<a href="#">11/19/2009 -- Name Change</a>	View image in PDF format
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<a href="#">02/22/2008 -- ANNUAL REPORT</a>	View image in PDF format
<a href="#">01/12/2007 -- ANNUAL REPORT</a>	View image in PDF format
<a href="#">03/08/2006 -- ANNUAL REPORT</a>	View image in PDF format
<a href="#">04/05/2005 -- ANNUAL REPORT</a>	View image in PDF format
<a href="#">07/22/2004 -- Amendment</a>	View image in PDF format
<a href="#">01/16/2004 -- ANNUAL REPORT</a>	View image in PDF format
<a href="#">03/24/2003 -- ANNUAL REPORT</a>	View image in PDF format
<a href="#">09/04/2002 -- Amendment</a>	View image in PDF format
<a href="#">04/29/2002 -- Amendment</a>	View image in PDF format
<a href="#">04/17/2002 -- Domestic Profit</a>	View image in PDF format

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 State of Florida, Department of State

http://search.sunbiz.org/Inquiry/CorporationSearch/SearchResultDetail/EntityName/domp... 6/24/2014

**STATE OF FLORIDA**  
**WATER WELL CONTRACTOR LICENSE**  
 Issued to  
**MICHAEL ORLANDO**

License No. **11225** Expires **7/31/2015**

  
**DISTRICT CERTIFICATION OFFICER**

## Ecotech

FLORIDA DEPARTMENT OF STATE  
DIVISION OF CORPORATIONS



### Detail by Entity Name

#### Florida Profit Corporation

ECOTECH ENVIRONMENTAL SERVICES, INC.

#### Filing Information

<b>Document Number</b>	P12000079750
<b>FEI/EIN Number</b>	46-1062249
<b>Date Filed</b>	09/19/2012
<b>State</b>	FL
<b>Status</b>	ACTIVE
<b>Last Event</b>	AMENDMENT
<b>Event Date Filed</b>	11/30/2012
<b>Event Effective Date</b>	NONE

#### Principal Address

3260 NW 23RD AVENUE - STE. 1400-E  
POMPANO BEACH, FL 33069-1060

Changed: 11/30/2012

#### Mailing Address

2201 EDISON AVENUE  
JACKSONVILLE, FL 32204

Changed: 11/30/2012

#### Registered Agent Name & Address

NUNN, JR., DANIEL B.  
50 NORTH LAURA STREET STE 2800  
JACKSONVILLE, FL 32202

Name Changed: 02/08/2013

#### Officer/Director Detail

##### **Name & Address**

Title P

DEHEN, TIMOTHY L  
2201 EDISON AVENUE  
JACKSONVILLE, FL 32204

Title VP

<http://search.sunbiz.org/Inquiry/CorporationSearch/SearchResultDetail/EntityName/domp-...> 6/24/2014

NORRIS, WILLIAM V  
2201 EDISON AVENUE  
JACKSONVILLE, FL 32204

Title VP

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EDGE, AUBREY L  
2201 Edison Avenue  
JACKSONVILLE, FL 32204

Title VP

RAY, JR., JAMES G.  
2201 Edison Avenue  
JACKSONVILLE, FL 32204

Title S

MILLER, DONNA A.  
2201 EDISON AVENUE  
JACKSONVILLE, FL 32204

#### Annual Reports

Report Year	Filed Date
2013	02/08/2013
2013	02/13/2013
2014	03/25/2014

#### Document Images

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[02/13/2013 -- AMENDED ANNUAL REPORT](#)

View image in PDF format

[02/08/2013 -- ANNUAL REPORT](#)

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[11/30/2012 -- Amendment](#)

View image in PDF format

[09/19/2012 -- Domestic Profit](#)

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State of Florida, Department of State

<http://search.sunbiz.org/Inquiry/CorporationSearch/SearchResultDetail/EntityName/domp...> 6/24/2014



## STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

BOARD OF PROFESSIONAL GEOLOGISTS  
 1940 NORTH MONROE STREET  
 TALLAHASSEE FL 32399-0783

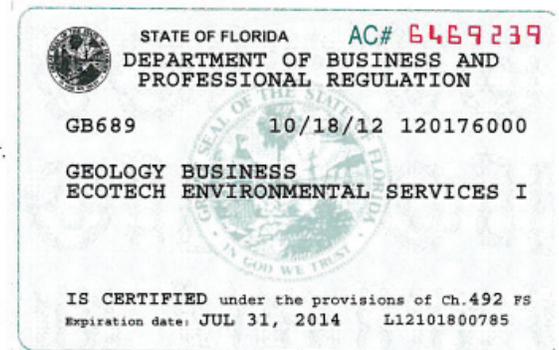
(850) 487-1395

ECOTECH ENVIRONMENTAL SERVICES INC  
 3260 NW 23RD AVE SUITE 3-1400  
 POMPANO BEACH FL 33069

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto [www.myfloridalicense.com](http://www.myfloridalicense.com). There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!



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AC# 6469239 STATE OF FLORIDA  
 DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
 BOARD OF PROFESSIONAL GEOLOGISTS SEQ# L12101800785

DATE	BATCH NUMBER	LICENSE NBR
10/18/2012	120176000	GB689

The GEOLOGY BUSINESS  
 Named below IS CERTIFIED  
 Under the provisions of Chapter 492 FS.  
 Expiration date: JUL 31, 2014

ECOTECH ENVIRONMENTAL SERVICES INC  
 3260 NW 23RD AVE SUITE 3-1400  
 POMPANO BEACH FL 33069

RICK SCOTT GOVERNOR  
 KEN LAWSON SECRETARY  
 DISPLAY AS REQUIRED BY LAW



**STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**

**BOARD OF PROFESSIONAL GEOLOGISTS  
1940 NORTH MONROE STREET  
TALLAHASSEE FL 32399-0783**

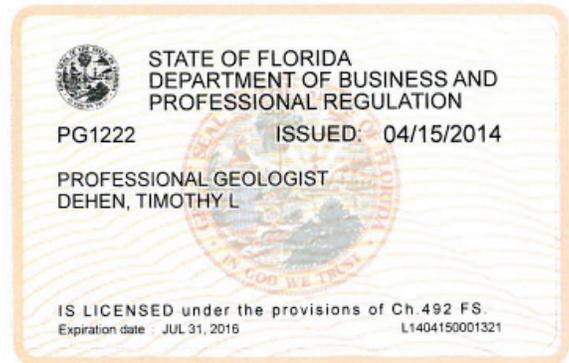
**(850) 487-1395**

DEHEN, TIMOTHY L  
3910 WHITE PEACOCK LN  
COCONUT CREEK FL 33073

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto [www.myfloridalicense.com](http://www.myfloridalicense.com). There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!



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RICK SCOTT, GOVERNOR

KEN LAWSON, SECRETARY

**STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
BOARD OF PROFESSIONAL GEOLOGISTS**

<b>LICENSE NUMBER</b>	
PG1222	

The PROFESSIONAL GEOLOGIST  
Named below IS LICENSED  
Under the provisions of Chapter 492 FS.  
Expiration date: JUL 31, 2016

DEHEN, TIMOTHY L  
3910 WHITE PEACOCK LN  
COCONUT CREEK FL 33073

ISSUED: 04/15/2014

DISPLAY AS REQUIRED BY LAW

SEQ # L1404150001321



**STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**

**CONSTRUCTION INDUSTRY LICENSING BOARD**  
1940 NORTH MONROE STREET  
TALLAHASSEE FL 32399-0783

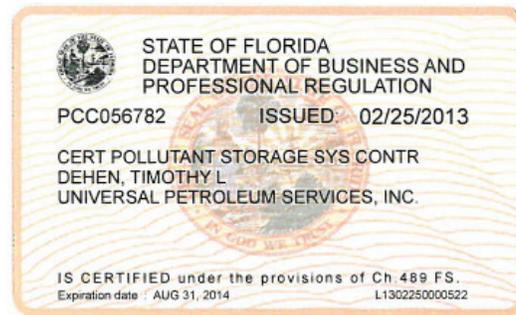
(850) 487-1395

DEHEN, TIMOTHY L  
UNIVERSAL PETROLEUM SERVICES, INC.  
3910 WHITE PEACOCK LANE  
COCONUT CREEK FL 33073

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

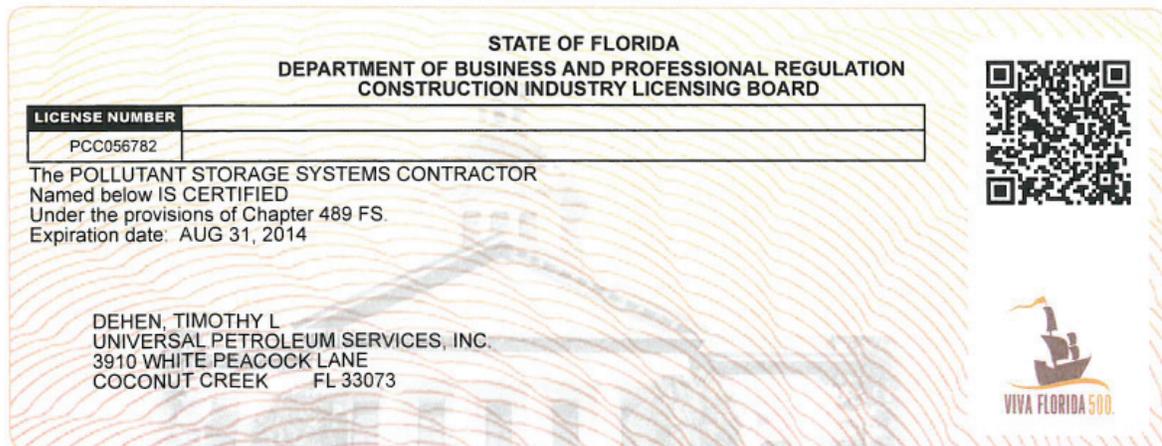
Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto [www.myfloridalicense.com](http://www.myfloridalicense.com). There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!



The Department of State is leading the commemoration of Florida's 500th anniversary in 2013. For more information, please go to [www.VivaFlorida.org](http://www.VivaFlorida.org).

DETACH HERE



RICK SCOTT  
GOVERNOR

ISSUED: 02/25/2013 SEQ # L1302250000522  
DISPLAY AS REQUIRED BY LAW

KEN LAWSON  
SECRETARY

Note: Ecotech has common ownership with three other sister companies and shares accounting, human resources, and insurance functions with those companies. Universal Petroleum Services, Inc. (UPSI) is one of those sister companies. Because UPSI maintains the equipment and personnel to perform storage tank system installations and closures, all permits and projects involving storage tank systems are generally run through UPSI as a subcontractor to Ecotech. Timothy Dehen, PG, is president of Ecotech, but qualifies UPSI with his pollutant storage systems specialty contractor license.

# *State of Florida*

## *Department of State*

I certify from the records of this office that EE&G ENVIRONMENTAL SERVICES, LLC, is a limited liability company organized under the laws of the State of Florida, filed on May 24, 2004.

The document number of this company is L04000039225.

I further certify that said company has paid all fees due this office through December 31, 2014, that its most recent annual report was filed on January 7, 2014, and its status is active.

*Given under my hand and the  
Great Seal of the State of Florida  
at Tallahassee, the Capital, this  
the Seventh day of January, 2014*



*Ken Detzner*  
**Secretary of State**

Authentication ID: CC6403164073

To authenticate this certificate, visit the following site, enter this ID, and then follow the instructions displayed.

<https://efile.sunbiz.org/certauthver.html>

**STATE OF FLORIDA**  
**DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**  
**ASBESTOS LICENSING UNIT**

<b>LICENSE NUMBER</b>	
ZA344	



The ASBESTOS BUSINESS ORGANIZATION  
 Named below IS LICENSED  
 Under the provisions of Chapter 469 FS.  
 Expiration date: NOV 30, 2015

EE & G ENVIRONMENTAL SERVICES LLC  
 JAY W SALL  
 5751 MIAMI LAKES DRIVE EAST  
 MIAMI LAKES FL 33014



RICK SCOTT                      ISSUED: 09/11/2013      SEQ # 11309110004020                      KEN LAWSON

## CITY OF KEY WEST, FLORIDA

### Business Tax Receipt

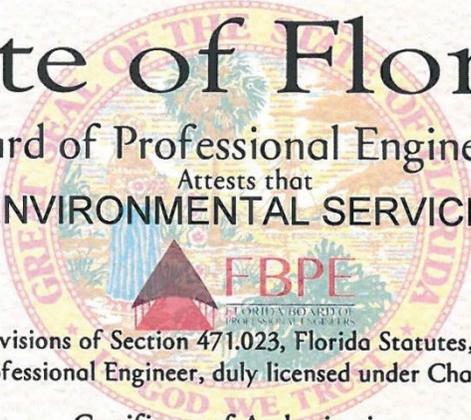
This Document is a business tax receipt  
 Holder must meet all City zoning and use provisions.  
 P.O. Box 1409, Key West, Florida 33040 (305) 809-3955

Business Name	EE&G ENVIRONMENTAL SERVICES LL	CtlNbr:0023110	
Location Addr	6810 FRONT ST		
Lic NBR/Class	14-00028522 CONTRACTOR - CERT GENERAL CONTRACTOR		
Issue Date:	September 26, 2013 <b>Expiration Date:</b> September 30, 2014		
License Fee	\$309.75		
Add. Charges	\$0.00		
Penalty	\$0.00		
Total	\$309.75		
Comments:	Oper: CWALKER      Type: OC    Drawer: 1 Date: 9/27/13 51      Receipt no: 118741 2014      28522 OR      LIC OCCUPATIONAL RENEWAL 1.00      \$309.75 Trans number:      2970079 5058      \$309.75 Trans date: 9/26/13      time: 16:39:05		

This document must be prominently displayed.

EE&G ENVIRONMENTAL SERVICES LL  
 5751 MIAMI LAKES DR  
 MIAMI LAKES FL 33014

**State of Florida**  
 Board of Professional Engineers  
 Attests that  
**EE&G ENVIRONMENTAL SERVICES , LLC**



is authorized under the provisions of Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes.  
 Expiration: 2/28/2015  
 Audit No: 228201502923

**Certificate of Authorization**

CA Lic. No:  
26192

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**AC# 6157570** **STATE OF FLORIDA**

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
 BOARD OF PROFESSIONAL GEOLOGISTS **SEQ# L12060801265**

DATE	BATCH NUMBER	LICENSE NBR
06/08/2012	110421355	GB483

The GEOLOGY BUSINESS  
 Named below IS CERTIFIED  
 Under the provisions of Chapter 492 FS.  
 Expiration date: JUL 31, 2014

EE & G ENVIRONMENTAL SERVICES LLC  
 5751 MIAMI LAKES DRIVE EAST  
 MIAMI LAKES FL 33014

RICK SCOTT  
GOVERNOR
KEN LAWSON  
SECRETARY

DISPLAY AS REQUIRED BY LAW

DISPLAY THE REGISTRATION BELOW IN A LOCATION READILY VIEWABLE BY THE PUBLIC

STATE OF FLORIDA		DEPARTMENT OF HEALTH		BUREAU OF RADIATION CONTROL	
INDUSTRIAL FACILITY					
RADIATION MACHINE REGISTRATION					
THE REGISTRANT NAMED BELOW IS AUTHORIZED TO POSSESS 2 RADIATION MACHINES DURING THE TIME INDICATED. POSSESSION OF UNREGISTERED MACHINES OR USE OF MACHINES WITH AN EXPIRED REGISTRATION IS A VIOLATION OF 64E-5.511, FLORIDA ADMINISTRATIVE CODE AND PUNISHABLE UNDER THE PROVISIONS OF CHAPTER 404, FLORIDA STATUTES.					
REGISTRATION NO.	INITIAL DATE	EXPIRATION DATE	BATCH NO.	RECEIPT NO.	AMOUNT
JR 46103000	10/16/2013	10/28/2014	14094	1189152	\$70.00
E E & G ENVIRONMENTAL SERVICES LLC 5751 MIAMI LAKES DR MIAMI LAKES, FL 33014					
421003					
FOR QUESTIONS CONTACT: RADIATION MACHINE PROGRAM, 705 WELLS RD STE 300, ORANGE PARK, FL 32073					

STATE OF FLORIDA		DEPARTMENT OF HEALTH	
		551125	
Division of Disease Control and Health Protection		Audit Control No.	
Bureau of Epidemiology, Radon Program		Duplicate - Customer	
4052 Bald Cypress Way, Bin A12			
Tallahassee, FL 32399-1720			
Under the provisions of Chapter 404, Florida Statutes, this business is certified to provide indoor RADON MEASUREMENT SERVICES.			
EE&G Environmental Services, LLC		Certification No. RB1092	
5751 Miami Lakes Drive East		Issue Date: September 29, 2013	
Miami Lakes, FL 33014		Certification Automatically Expires On: September 28, 2014	

**United States Environmental Protection Agency**

This is to certify that

EE&G Environmental Services, L.L.C.

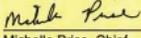
has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226

**In the Jurisdiction of:**

Florida

This certification is valid from the date of issuance and expires September 22, 2016

FL-10142-4  
Certification #  
September 20, 2013  
Issued On

  
Michelle Price, Chief  
Lead, Heavy Metals, and Inorganics Branch



United States Department of Commerce  
National Institute of Standards and Technology



---

## Certificate of Accreditation to ISO/IEC 17025:2005

---

NVLAP LAB CODE: 101775-0

**American Asbestos Laboratories, Inc.**  
Tampa, FL

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

### **BULK ASBESTOS FIBER ANALYSIS**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2014-04-01 through 2015-03-31

*Effective dates*



A handwritten signature in black ink, appearing to read "Mark R. M...".

*For the National Institute of Standards and Technology*

NVLAP-01C (REV. 2009-01-28)

*EE&G maintains an in-house laboratory facility, American Asbestos Laboratories, Inc., which is an affiliated company of EE&G, providing analysis of bulk samples by polarized light microscopy and analysis of air samples by phase contrast microscopy.*

# United States Environmental Protection Agency

This is to certify that

Hiram Andres Aguiar

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as a:

Risk Assessor

In the Jurisdiction of:

Florida

This certification is valid from the date of issuance and expires August 1, 2017

FL-R-9781-2

Certification #

MAR 17 2014

Issued On



*Anthony G. Toney*

Anthony G. Toney, Chief

Pesticides and Toxic Substances Branch

**Asbestos Consulting & Training Systems**  
 40271.5689CERT/BIR 900 N.W. 5TH Avenue, Fort Lauderdale, Florida 33311 (954) 524-7208

**This is to Certify that**  
**Hiram Aguiar**

Processed By:  
**Seagull**  
 To Authenticate Certificate  
 www.seagulltraining.com  
 1-800-966-9933

11042 NW 59th Pl. Hialeah, FL 33012

**has successfully completed an English**  
**Asbestos Building Inspection Refresher**  
 4-Apr-14 TO 4-Apr-14

Meets state requirements of FL49-0001020/CN-0008273 and UT (6.0 core).  
 NDAAC Provider #451 Trainer(s): Mark Knick  
 Training Address: 900 NW 5 AV, Fort Lauderdale, FL, 33311  
 Successful course completion based on exam score on: 04/04/14

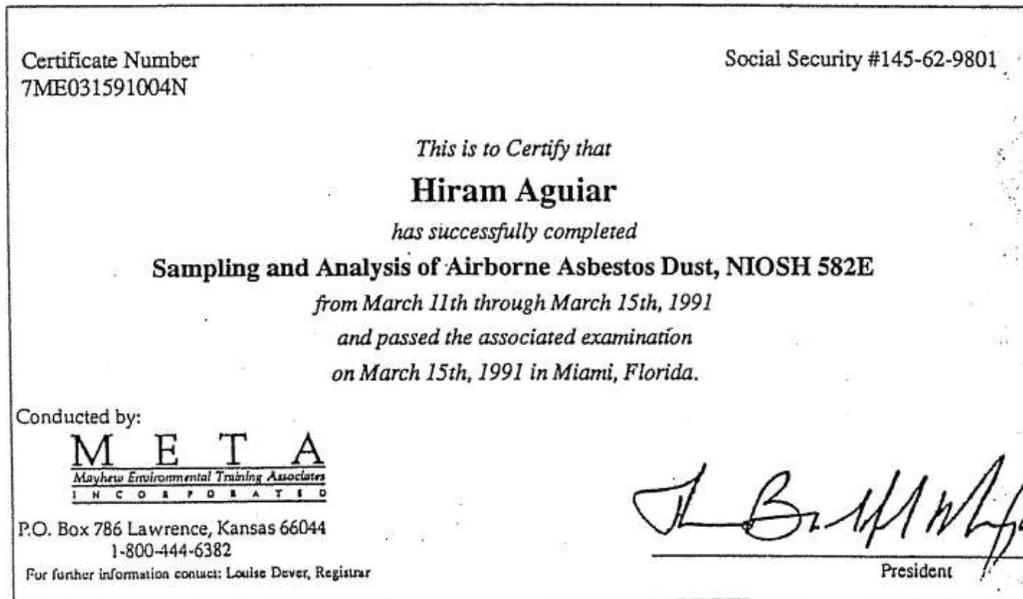
**This Certificate Expires:**  
 4-Apr-15

James F. Stump, Course Sponsor  
 Certificate Number..... 160063  
 Course Number SE1414

FEDERAL AND CRIMINAL PENALTIES OF LAW FOR MAKING OR SUBMISSION OF FALSE OR FRAUDULENT STATEMENTS OR REPRESENTATIONS (18 USC 1001) AND 18 USC 1011. I CERTIFY THAT THIS TRAINING COMPLETION IS IN ALL APPLICABLE RESPECTS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND STATE REQUIREMENTS AND REGULATIONS.



## Mayhew Environmental Training Associates



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**AC# 6159192** **STATE OF FLORIDA**

**DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**  
**MOLD-RELATED SERVICES LICENSING PROGRAM** **SEQ# L12061101105**

DATE	BATCH NUMBER	LICENSE NBR
06/11/2012	110422536	MRSR1871

The MOLD REMEDIATOR  
Named below IS CERTIFIED  
Under the provisions of Chapter 468 FS.  
Expiration date: JUL 31, 2014

SKWERES, MARK ANDREW  
5751 MIAMI LAKES DRIVE EAST  
MIAMI LAKES FL 33014

RICK SCOTT KEN LAWSON  
GOVERNOR SECRETARY

DISPLAY AS REQUIRED BY LAW

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**AC# 6159181** **STATE OF FLORIDA**

**DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**  
**MOLD-RELATED SERVICES LICENSING PROGRAM** **SEQ# L12061101094**

DATE	BATCH NUMBER	LICENSE NBR
06/11/2012	110422543	MRSA1216

The MOLD ASSESSOR  
Named below IS CERTIFIED  
Under the provisions of Chapter 468 FS.  
Expiration date: JUL 31, 2014

SKWERES, MARK ANDREW  
5751 MIAMI LAKES DRIVE EAST  
MIAMI LAKES FL 33014

RICK SCOTT KEN LAWSON  
GOVERNOR SECRETARY

DISPLAY AS REQUIRED BY LAW



## American Council for Accredited Certification

hereby certifies that

**Mark A. Skweres**

has met all the specific standards and qualifications of the re-certification process,  
including continued professional development, and is hereby re-certified as a

**CIEC**

Council-certified  
Indoor Environmental Consultant

This certificate expires on April 30, 2015.

*Charles F. Wiles*  
Charles F. Wiles, Executive Director

1104013

Certificate Number

This certificate remains the property of the American Council for Accredited Certification.

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**AC#690170** **STATE OF FLORIDA**

**DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**  
**ASBESTOS LICENSING UNIT** **SEQ# L12113002073**

DATE	BATCH NUMBER	LICENSE NBR
11/30/2012	120122431	AX0000011

The ASBESTOS CONSULTANT  
Named below IS LICENSED  
Under the provisions of Chapter 469 FS.  
Expiration date: NOV 30, 2014

**SALL, JAY WALTER**  
EE & G ENVIRONMENTAL SERVICES, LLC  
2922 FLAMINGO DRIVE  
MIAMI BEACH FL 33140

**RICK SCOTT** **KEN LAWSON**  
GOVERNOR SECRETARY

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**AC# 6161752** **STATE OF FLORIDA**

**DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**  
**MOLD-RELATED SERVICES LICENSING PROGRAM** **SEQ# L12061301018**

DATE	BATCH NUMBER	LICENSE NBR
06/13/2012	110421796	MRSA118

The MOLD ASSESSOR  
Named below IS CERTIFIED  
Under the provisions of Chapter 468 FS.  
Expiration date: JUL 31, 2014

**SALL, JAY WALTER**  
5751 MIAMI LAKES DRIVE  
MIAMI LAKES FL 33014

**RICK SCOTT** **KEN LAWSON**  
GOVERNOR SECRETARY

DISPLAY AS REQUIRED BY LAW



# ABIH<sup>®</sup>

american board of industrial hygiene<sup>®</sup>

organized to improve the practice of industrial hygiene  
proclaims that

*Jay W. Sall*

having met all requirements of  
education, experience and examination, and  
ongoing maintenance,  
is hereby certified in the

**COMPREHENSIVE PRACTICE**  
of  
**INDUSTRIAL HYGIENE**

and has the right to use the designations

**CERTIFIED INDUSTRIAL HYGIENIST**

**CIH**

Certificate Number    **5610 CP**  
Awarded:                    **July 15, 1992**  
Expiration Date:         **December 1, 2018**



*Mark S. Lewis*  
Chair ABIH

*Lynn C. O'Sonnell*  
Executive Director ABIH

## Florida Keys Land Surveying

# *State of Florida Department of State*

I certify from the records of this office that FLORIDA KEYS LAND SURVEYING, LLC, is a limited liability company organized under the laws of the State of Florida, filed on July 1, 2013.

The document number of this company is L13000094771.

I further certify that said company has paid all fees due this office through December 31, 2014, that its most recent annual report was filed on March 25, 2014, and its status is active.

*Given under my hand and the  
Great Seal of the State of Florida  
at Tallahassee, the Capital, this  
the Sixteenth day of June, 2014*



*Ken Detjen*  
**Secretary of State**

Authentication ID: CU5486224024

To authenticate this certificate, visit the following site, enter this ID, and then follow the instructions displayed.

<https://efile.sunbiz.org/certauthver.html>



Florida Department of Agriculture and Consumer Services  
Division of Consumer Services  
Board of Professional Surveyors and Mappers  
2005 Apalachee Pkway Tallahassee, Florida 32399-6500  
800HELPFLA(435-7352) or (850) 488-2221

March 27, 2014

FLORIDA KEYS LAND SURVEYING LLC  
PO BOX 1547  
KEY WEST, FL 33041-1547

SUBJECT: Professional Surveyor and Mapper Business Certificate # LB7847

Your application / renewal as a professional surveyor and mapper business as required by Chapter 472, Florida Statutes, has been received and processed.

The license appears below and is valid through February 28, 2015.

You are required to keep your information with the Board current. Please visit our website at [www.800helpfla.com/psm](http://www.800helpfla.com/psm) to create your online account. If you have already created your online account, you can use the website to maintain your license. You can also find other valuable information on the website.

If you have any questions, please do not hesitate to call the Division of Consumer Services, Board of Professional Surveyors and Mappers at 800-435-7352 or 850-488-2221.

Detach Here



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.: **LB7847**  
Expiration Date February 28, 2015

**Professional Surveyor and Mapper Business License**

Under the provisions of Chapter 472, Florida Statutes

FLORIDA KEYS LAND SURVEYING LLC  
19960 OVERSEAS HWY  
SUGARLOAF KEY, FL 33042-3166

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.

# CITY OF KEY WEST, FLORIDA

## Business Tax Receipt

This Document is a business tax receipt  
 Holder must meet all City zoning and use provisions.  
 P.O. Box 1409, Key West, Florida 33040 (305) 809-3955

Business Name FLORIDA KEYS LAND SURVEYING LL CtlNbr:0021874  
 Location Addr 19960 OVERSEAS HWY  
 Lic NBR/Class 14-00026984 SERVICE - PROFESSIONAL  
 Issue Date: December 16, 2013 Expiration Date: September 30, 2014  
 License Fee \$371.70  
 Add. Charges \$0.00  
 Penalty \$61.95  
 Total \$371.70  
 Comments: LAND SURVEYOR

Oper: CWALKER Type: OC Drawer: 1  
 Date: 12/23/13 51 Receipt no: 13201  
 2014 26984

OR LIC OCCUPATIONAL RENEWAL  
 1.00 \$371.70  
 2988618  
 CWALKER 1874 \$371.70

This document must be prominently displayed.

FLORIDA KEYS LAND SURVEYING LL  
 POB 1547

Trans date: 12/23/13 Time: 12:25:57

KEY WEST FL 33041



Florida Department of Agriculture and Consumer Services  
Division of Consumer Services  
Board of Professional Surveyors and Mappers  
2005 Apalachee Pkway Tallahassee, Florida 32399-6500  
800HELPFLA(435-7352) or (850) 488-2221

January 17, 2013

ERIC ADLAI ISAACS  
PO BOX 1547  
KEY WEST, FL 33041-1547

SUBJECT: Professional Surveyor and Mapper License # LS6783

Your application / renewal as a professional surveyor and mapper as required by Chapter 472, Florida Statutes, has been received and processed.

The license appears below and is valid through February 28, 2015.

You are required to keep your information with the Board current. Please visit our website at [www.800helpfla.com/psm](http://www.800helpfla.com/psm) to create your online account. If you have already created your online account, you can use the website to maintain your license. You can also find other valuable information on the website.

If you have any questions, please do not hesitate to call the Division of Consumer Services, Board of Professional Surveyors and Mappers at 800-435-7352 or 850-488-2221.

Detach Here



Florida Department of Agriculture  
and Consumer Services  
Board of Professional Surveyors  
and Mappers

LS6783

Professional Surveyor and Mapper  
ERIC ADLAI ISAACS

IS LICENSED under the provisions of Ch. 472 FS  
Expiration date: February 28, 2015

Detach Here



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.: **LS6783**  
Expiration Date: February 28, 2015

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

ERIC ADLAI ISAACS  
PO BOX 1547  
KEY WEST, FL 33041-1547

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.

[www.atkinsglobal.com/northamerica](http://www.atkinsglobal.com/northamerica)

