LANGAN

RFQ-4427-14-IS for Environment Engineering Services

Submitted to:
City of Hollywood, Florida

August 19, 2014

Environmental

Geotechnical

Site/Civil

Earthquake/Seismic

Surveying/Mapping

Traffic/Transportation

Landscape Architecture + Planning

Natural Resources/Permitting

Sustainable Design

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LANGAN

Technical Excellence
Practical Experience
Client Responsiveness

19 August 2014

Office of the City Clerk
City of Hollywood
City Hall
2600 Hollywood Boulevard
Room 221
Hollywood, Florida 33020

Re: The City of Hollywood Solicitation # RFQ-4427-14-IS for Environment Engineering Services

To Whom It May Concern:

Langan Engineering and Environmental Services, Inc. welcomes the opportunity to respond to this Request for Qualifications (RFQ) for Environment Engineering Services for the City of Hollywood (City). We have reviewed the RFQ and in response present the requested qualification information. Our submittal includes one original, seven copies, and one digital copy of our RFQ response.

Langan's South Florida operations were founded in 1974. Today, we have offices in Miami Lakes and Fort Lauderdale and more than 35 professionals providing environmental, geotechnical, and site/civil engineering services across Florida, the Southeast, the Caribbean, and Latin America. In addition to the local expertise and regional knowledge that is vital to project success, Langan provides clients with the depth and breadth of experience of a nationwide network of 850 seasoned professionals.

We strongly believe that our clients are better served when we work together to deliver an integrated suite of services and produce proven solutions that ensure project success. As such, the Langan team is encouraged to regularly draw upon the knowledge and experience of the firm and its staff. This collaborative environment is sustained through frequent inter- and cross-department training sessions and workshops as well as robust on-line sharing platforms such as our intranet.

The Langan team offers the City unsurpassed environmental engineering capabilities. Our team has been called upon by numerous government and private-sector clients and we have long-term relationships with counties, cities, and government agencies. We work with quality and qualified environmental laboratories, water well drillers, direct-push drillers, and specialty contractors (geophysical surveyors, public land surveyors, waste disposal firms, etc.), whom we can bring in as needed.

The integration and coordination of our services is particularly beneficial for evaluating redevelopment options for the ash landfill site. We can provide estimates of the level of effort required to achieve unconditional closure, conditional closure, or a combination of both types of closure, depending on the intended land use or uses.

Our environmental engineers and geologists can evaluate development options in the context of the specific kinds of contamination in the soil and groundwater, using a risk-based approach. Our geotechnical engineers can develop costs for ground improvement programs, pre-loading programs, and foundation types. Our civil engineers can estimate the costs of drainage systems for contaminated sites.

We appreciate the opportunity to submit our qualifications and look forward to working with the City of Hollywood. If you have questions or concerns, please contact me at 786.264.7214 or by e-mail at vyarina@langan.com.

Sincerely,

Langan Engineering and Environmental Services, Inc.

Vincent D. Yarina, PG, CEM
Senior Associate/Vice President

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Consultant Profile

SECTION ONE: CONSULTANT PROFILE

Corporate Summary

Integrated Solutions. Measurable Value.

Langan provides an integrated mix of engineering and environmental consulting services in support of land development projects, corporate real estate portfolios, and the oil and gas industry. Our clients include developers, property owners, public agencies, corporations, institutions, and energy companies around the world.

Founded in 1970, Langan employs more than 850 professionals in its Elmwood Park, NJ headquarters and among regional offices in:

- Miami, FL
- Fort Lauderdale, FL
- New York City, NY
- White Plains, NY
- Trenton, NJ
- Philadelphia, PA
- Bethlehem, PA
- Doylestown, PA
- Pittsburgh, PA
- New Haven, CT
- Arlington, VA
- San Francisco, CA
- Oakland, CA
- Sacramento, CA
- San Jose, CA
- Irvine, CA
- Bismarck, ND
- Akron, OH
- Houston, TX

Langan International, the firm's wholly owned subsidiary headquartered in New York City, provides all firm services for projects in the Middle East, Eastern Europe, Latin America, and the Caribbean. Langan International regional locations are in:

- Abu Dhabi
- Athens
- Doha
- Dubai
- Istanbul

Langan's broad range of services includes the following:

- Environmental Engineering
- Natural Resources Assessments & Permitting
- Geotechnical Engineering
- Foundation Design
- Site/Civil Engineering
- Earthquake/Seismic
- Surveying
- 3D Laser Scanning
- Building Information Modeling (BIM)
- Landscape Architecture + Planning
- Transportation/Traffic Engineering
- GIS/Data Management Services
- Asbestos, LBP, Indoor Air Quality/Mold Consulting
- Demolition Engineering

Office Locations

Global Presence. Local Expertise.

Langan has provided environmental engineering services for hundreds of projects across South Florida since 1974. Our professionals have worked on some of the largest projects in South Florida and with some of the most difficult ground conditions in the area. The South Florida team has been called upon by numerous local governments and developers throughout the years, resulting in the establishment of many long-term relationships with local cities and communities.

It is the firm's goal to provide the City of Hollywood with the highest level of technical and professional excellence throughout the project.

Langan's Miami Lakes office will be the primary resource for the execution of this contract. Our South Florida team offers more than 35 technical engineers and scientists. Additionally, over half of our technical staff are environmental and geotechnical professionals proficient in the provision of engineering services across the South Florida.

Should Langan be selected to provide services to the City of Hollywood, we are prepared to allocate the resources necessary to meet the City's needs from our satellite office in Fort Lauderdale.

Lead Contact	Vince Yarina, PG, CEM vyarina@langan.com
Primary Office	Langan Engineering and Environmental Services, Inc. 15150 NW 79 Court, Suite 200 Miami Lakes, FL 33016 T: 786.264.7214 | F: 786.264.7201 *Distance to project: 15.5 miles*
Satellite Office	110 E. Broward Boulevard, Suite 1700 Fort Lauderdale, FL 33301 *Distance to project: 11.2 miles*
License Number	6601

Landfill Remediation & Redevelopment

Capping, Cleaning, and Re-Creating Communities

Florida's growing population and limited developable land have led to more interest in landfills, but few local firms possess the in-house capabilities or experience of Langan.

40 years in business has forged our reputation as a "developer's consultant," instilling confidence in Langan among the developer community as the choice for landfill remediation and redevelopment. During those decades, Langan has established the respect of the Florida Department of Environmental Protection as a trustworthy technical consultant that understands the regulations and cares about community.

We continue to help property owners, developers, and municipalities overcome the challenges associated with capping or redeveloping landfills throughout Florida and beyond. Development options for landfills range from recreational to renewable energy to commercial projects, as well as residential projects. Langan experts have seen and handled virtually every aspect related to a landfill project, including comprehensive sub-surface investigations, baseline ecological evaluations, methane venting and leachate conveyance systems, ground improvement programs, and site planning and permitting.

Langan Landfill Remediation Services:

- Capping and closure design and engineering
- Subsurface containment / cut-off walls
- Slope stabilization
- Leachate collection and treatment
- Landfill Disruption Permitting
- Closure Plans and regulatory approval
- Green capping, including phytoremediation and habitat restoration
- NPDES Permitting
- Wetlands and Waterfront Development Permitting

Environmental

Technical and Regulatory Knowledge

Langan works with project teams to provide leading-edge, focused, streamlined investigations and risk-based remediation. We excel in promoting and gaining regulatory acceptance of risk based strategies to obtain cost effective site closures. Langan possesses expertise in a wide variety of projects including state Voluntary Programs, Brownfields, RCRA, State and Federal Superfund, Manufactured Gas Plants (MGP) and Storage Tank programs.

Langan Environmental Services:

- Risk-Based Corrective Action
- Brownfields
- Storage Tank Management
- Due Diligence Support
- Environmental Assessments
- Site Characterization
- Permitting/Regulatory Approvals
- Remediation Design/ Oversight
- Water Resources/Supply
- Hydrological Investigations
- Wastewater and Stormwater Permitting
- Air Modeling
- GIS/Database Management
- Environmental Impact Statements (EIS)
- Manufactured Gas Plant Remediation Services
- Asbestos/Lead-Based Paint Abatement
- Management of PCB-Containing Materials
- Indoor Air Quality/Mold
- Demolition
- Waste Management
- Compliance Auditing
- Ecological Risk Assessment
- Human Health Risk Assessment
- Site Feasibility Studies
- Remediation by Natural Attenuation
- Expert Witness
- Exposure Assessments
- Free Product Volume and Mobility Modeling

Geotechnical

Foundations You Can Trust

Langan was founded as a geotechnical consulting company in 1970, and geotechnical engineering remains a core discipline at Langan today. We work closely with our clients and the design and construction team to engineer cost-effective geotechnical solutions appropriate for proposed structures and the governing site conditions.

Our reputation as a premier geotechnical consultant has been earned by managing hundreds of projects involving complex, technically challenging sites where highly specialized site preparation, foundations, and fast-track engineering solutions are required.

Langan Geotechnical Services:

- Subsurface Investigations
- Foundation Design
- Materials Analysis
- Soil and Rock Mechanics
- Retaining Structures
- Slope Stabilization
- Soil Improvement/ Ground Modification
- Dewatering Design and Permitting
- Subsurface Structure Design
- Excavation Support and Underpinning Design
- Earthquake/Seismic
- Geological Mapping of Rock Slopes
- Mine Investigations/ Studies
- Hydrogeology
- Earth and Rock Fill Dams
- Tunnels/Microtunneling
- Seawalls, Piers and Bulkheads
- Dredging
- Vibration Monitoring
- Pre-Construction Conditions Surveys
- Value Engineering
- Construction Documents
- Contractor Support Services
- Engineering Services During Construction
- Forensic Engineering/ Expert Testimony
- Cost Estimates

Site/Civil

Responsiveness that Delivers Results

As an integral component of the design team, Langan works closely with the owner to develop conceptual site plans and realistic cost estimates. Our deadline-oriented professionals are available to our clients 24/7 to ensure timely approvals and permits to advance projects toward construction, occupancy, and ultimately revenue. Langan also supports projects with construction inspection and overall project management.

Langan Site/Civil Services:

- Project Management
- Site Feasibility Studies
- Conceptual Planning
- Site Engineering & Planning
- Grading & Drainage Design
- Stormwater Management Design
- Value Engineering
- Sanitary Treatment Plant Design
- Utility Infrastructure Design
- Water Supply/Hydrological Investigations
- Permitting/Regulatory Compliance
- Wetland Delineation/ Mitigation
- Landscape Architecture
- Regulatory Negotiation
- Survey-Boundary/ Topographical/GPS
- Traffic/Transportation Engineering
- Waterfront Systems Design
- Property Acquisition Support
- Conceptual Reuse Planning
- Funding Identification/Grant Assistance
- Regulatory Coordination/ Compliance
- Decommissioning/ Demolition Design
- Construction Management
- Construction Inspection
- CADD/GIS/Computer Animations
- SITEOPS® Optimization Services

Sustainable Design

LEEDing the Way

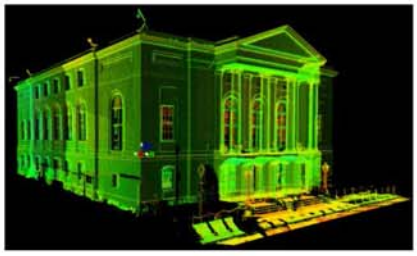
With more than **100 LEED APs** on staff, sustainable design weaves through all Langan services. Our diverse portfolio of intelligent site planning, design, and engineering coupled with our Brownfield and site remediation expertise places us at the forefront of the sustainable design movement.

Langan has been an instrumental player on dozens of Leadership in Energy and Environmental Design (LEED) and sustainable design projects. Our expertise allows us to make significant contributions in developing sustainable sites with an emphasis on stormwater management, low impact landscapes, brownfield redevelopment, materials recycling, energy conservation, and renewable energy design.

Langan Sustainable Design Services:

- LEED Site Feasibility Analysis
- Air Quality Assessments
- Asbestos Assessment and Abatement
- Lead-based Paint and Mold Removal
- Ecological Wastewater Treatment Design
- Low Impact Stormwater Design / Master Planning
- Brownfield Redevelopment
- Green Roof Design
- High Efficiency Site Lighting and Irrigation Design
- Streambank Restoration and Bioengineering Design
- Baseline Ecological Evaluations
- Wildlife and Habitat Evaluations
- Wetland Delineation, Design and Mitigation
- Urban Design and Regeneration Planning
- Geothermal Feasibility Studies and System Design Support

Surveying/Mapping



Accuracy and Efficiency

Langan's survey group provides rapid response times and flexible schedules to meet client needs and maintain schedules for fast-track projects. Our field crews utilize state-of-the-art surveying equipment including electronic data collectors, global positioning systems (GPS), robotic and prismless total stations, and BIM-compatible 3D Laser Scanning.

Equipped with Internet-enabled laptops, field crews accommodate design changes in real time and download data into Langan's network where it is edited, adjusted, analyzed and plotted. This allows for mapping that accurately reflects existing site conditions and boundary/legal issues, which could reveal potential problems early in a project's development.

Such technology, coupled with the seamless integration with other firm technical disciplines, enables Langan's survey group to save time and money for our clients.

Langan Survey/Mapping Services:

- Boundary Surveys
- ALTA/ACSM Land Title Surveys
- Topographic Surveys
- GPS
- GIS/LIS Data Acquisition
- Deformation/Monitoring Surveys
- Wetlands Location Surveys
- Utility Surveys
- Subdivisions
- 3D Laser Scanning
- Construction Stakeout
- Hydrographic/Bathymetric Surveys
- Environmental Surveys
- As-Built Surveys
- Photogrammetric Control
- Riparian Surveys
- Highway/Route Surveys
- Geographical Information Systems

Natural Resources/ Permitting

Navigating Policy and Nature

Langan has developed strong relationships with federal, state and local regulators through our experience in more than 1,000 wetland and permitting projects. Our Natural Resource staff consists of certified professional wetland scientists, ecologists and wildlife biologists with extensive experience throughout the United States. Our federal and state permitting specialists work closely with our engineers to design a "permittable" project while providing the most economic return to our clients. Our ability to identify critical natural resource issues early in the design process and our in-depth understanding of regulatory programs and policies result in an expedited application and approval process.

Langan Natural Resources/Permitting Services:

- Wetland Delineation
- Army Corps of Engineers Section 10/404 Permit Applications
- State Permit Applications to Agencies, including SEQR
- Environmental Assessments / Environmental Impact Statements (EIS)
- NEPA Environmental Review Documents
- Alternatives Analysis
- Wetland Mitigation Design (Creation, Restoration, Enhancement)
- Wetland Mitigation Banking
- Coastal/Waterfront Development Permitting and Planning
- Dredge – Cut / Fill Analysis
- Wildlife Surveys and Habitat Assessments
- Threatened and Endangered Species Surveys and Habitat Assessments
- Essential Fish Habitat Assessments
- Baseline Ecological Evaluations (BEE)
- Natural Resource Damages Assessments
- Ecological Risk Assessment
- Wetland Functional Assessments
- Streambank Restoration / Bioengineering

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Technical Approach

SECTION TWO: TECHNICAL APPROACH

Capabilities and Expertise

The Request for Qualifications (RFQ) states that the city intends:

> "to enter into a contract with an Environmental Engineering Firm to provide a full spectrum of environmental and engineering services in order to facilitate the redevelopment of the site. Specifically, the City seeks to obtain a cost estimate for the remediation of the site. These environmental and engineering services will result in an efficient and effective Geotechnical Investigation Report with follow-up sampling and testing program and protocols as may be required by the appropriate regulatory authority."

The City wants to evaluate redevelopment options for approximately 22 acres of the 32-acre Hollywood Incinerator Ash Dump (HIAD) site. Those 22 acres comprise the northern parcel (Parcel No. 5142-20-00-0040, 14.8 acres) and a portion of the middle parcel (Parcel No. 5142-20-00-0140, 10.4 acres). Previous environmental assessments have identified contaminants of concern (COCs) in soil (benzo(a)pyrene toxic equivalents, arsenic, lead, and dioxins) and in groundwater (arsenic) at concentrations above cleanup target levels.

Conditional closure of a contaminated site is under the authority of Chapter 62-780.680, Florida Administrative Code (FAC), which is administered by the Florida Department of Environmental Protection (FDEP) and the Broward County Environmental Protection Department (EPD). The process leading to site closure includes determining the kind and extent of contamination in soil and groundwater, and monitoring contaminated groundwater to verify that it is not migrating off site. Because the contamination will remain on site, it has to be managed in a way that protects the users of the land. This management is codified in a restrictive covenant that runs with the land, and that specifies the kinds of institutional and engineering controls the property owner will maintain for as long as the contamination remains.

As a kind of contaminated site, a landfill poses particular challenges for redevelopment, especially in regard to subsurface conditions, building foundations and settlement, and landfill gas (methane) mitigation. Langan has extensive experience in helping to redevelop landfills for private and public use.

The first step in a risk-based approach to landfill closure is to understand the nature, distribution, and range of concentrations of contaminants of concern (COCs). Chapter 62-780.680, FAC contains protocols and methodologies for evaluating COCs, including minimum numbers of samples, maximum allowable COC concentrations, and calculating average concentrations. Developing an assessment strategy in partnership with FDEP and EPD, and maintaining that partnership during the closure process, is critical to minimizing the closure timeframe.

When we understand the contamination, we can evaluate the cost implications of different development scenarios. Each scenario entails specific costs related to, among other things, remediation, ground improvement, stormwater drainage design, and regulatory obligations. The financial incentives available to this site as a Brownfield should be taken into account when evaluating cost.

As evidenced throughout this response to the City's RFQ, our team has worked on multiple landfill redevelopment projects in Florida and across the United States. The selected projects provided at the end of this section offer an overview of the range of services provided by our firmwide resources in the context of approaches to landfill redevelopment engineering services including:

- Soil and groundwater assessment;
- Evaluation of remedial options;
- Evaluation of ground improvement and foundation options;
- Evaluation of stormwater, wastewater, and water infrastructure options;
- Permitting and cost implications of different development scenarios;
- Design, permitting, and operation and maintenance of remedial and mitigation systems;
- Engineering observation during construction;
- Advocating before regulatory agencies on behalf of the property owner; and
- Preparation of restrictive covenants in accordance with the FDEP *Institutional Controls Procedures Guidance* (June 2012).

Langan also has a range of field equipment at its disposal: soil sampling equipment, water quality meters, groundwater pumps, survey equipment, nuclear densitometers, field tablets, organic vapor analyzers, and water level meters. Furthermore, we have in excess of 60 software packages to facilitate land development engineering tasks including ArcGIS, AutoCAD, EquIS, gINT, SITEOPS, Autodesk Map, Land Desktop, Civil 3D, Rockworks, GMS, EVS.

Langan's proven technical approaches and methodologies have supported the successful completion of myriad projects. While we understand that all sites are unique, we are confident that by adhering to best practices and using our vast pool of technological resources and relevant experience we will deliver the most appropriate solutions tailored to the specific site conditions and anticipated end-use for the property.

LANGAN

AMERICAN STANDARD FORMER TRENTON POTTERY
REMEDIAL INVESTIGATION/REMEDIAL ACTION

SERVICES:

- *Site / Remedial Investigations*
- *Historic / Clean Fill Determinations*
- *Remedial Action*
- *Engineering Evaluation / Cost Analysis*
- *Integrated Remediation and Reuse*
- *NJDEP Regulatory Negotiations*

LOCATION:

Hamilton Township, New Jersey

CLIENT:

American Standard

AWARDS:

ACEC NJ Engineering Excellence Award

The American Metro Center opened its newly renovated office building, which was the nearly century old former American Standard Trenton Pottery in September 2004. This redevelopment project is the cornerstone in the 1000-acre Hamilton Township Redevelopment Zone, which incorporates the site of the former American Standard Trenton Pottery as well as the adjacent Hamilton Township NJ TRANSIT Station.

Langan's specialized expertise in environmental and geotechnical engineering prepared the former Trenton Pottery for redevelopment by designing innovative remedial measures to transform areas impacted by former operations into features that could be integrated into a future site redevelopment plan. These environmental activities began with the closure of several areas containing barium clay spoils and also included former wastewater lagoons. Over 27,000 cubic yards of these materials were consolidated into an on-site landfill by incorporating geotextile reinforcement to increase the capacity of the landfill.

Additional innovative engineering solutions included stabilizing soft sediments in the former lagoons by incorporating geotextile grids. Chemical stabilization of barium carbonate was performed using gypsum to create barium sulfate to satisfy regulatory requirements. The area of these former lagoons was incorporated into the redevelopment as newly constructed parking lots. During the final phase of site environmental remediation activities, over 50,000 cubic yards of discarded pottery was crushed and consolidated beneath paved and landscaped areas.

By completing these environmental remedial activities using innovative techniques, practical solutions were developed to ensure that this important former manufacturing facility could be returned to productive use through redevelopment.

LANGAN

CELADON

SERVICES:

- ***Site/Civil Engineering***
- ***Geotechnical Engineering***
- ***Environmental Engineering***
- ***Traffic Engineering***
- ***Survey and Mapping***
- ***Natural Resources Permitting***

LOCATION:

Elizabeth, New Jersey

CLIENT:

Tem Landing Development, LLC

ARCHITECTS:

Vijay Kale Architects, PC
Metropolitan United Studio, PLLC

Langan is providing full engineering site design, environmental, and natural resources permitting services for the Celadon redevelopment project in Elizabeth, Union County, NJ. The redevelopment project proposes to construct 5 to 7 million SF of mixed-use development within low, mid, and high-rise buildings on a 31-acre former municipal landfill adjacent to the Newark Bay. The new community is part of the prestigious LEED pilot program for Neighborhood Development. This landmark project will incorporate a number of sustainable design elements including on-site renewable energy sources and numerous green roofs with innovative greywater recycling systems, along with strong connections to multiple modes of transit including a proposed 36-slip marina and a high-speed ferry terminal to New York City. It represents a major brownfield redevelopment in a dense, urban waterfront setting.

Significant site constraints include poor subsurface conditions associated with a 30-foot-thick layer of refuse and compressible soils below the refuse stratum along with corrosive materials in these subsurface layers. The site has a significant number of NJDEP-regulated areas and buffers that constrained the development footprint and challenged the design team in the development of the waterfront esplanade and ferry terminal and marina. To meet these challenges, Langan is implementing such solutions as flexible building connections, rock anchors and tie-backs, epoxy-coated utilities, and soil surcharging coupled with deep dynamic compaction.

LANGAN

COMBE FILL LANDFILL REDEVELOPMENT

SERVICES:

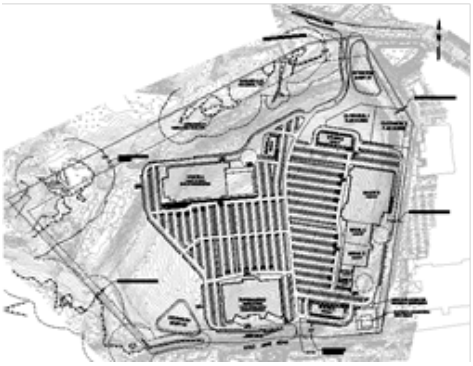
- *Site/Civil Engineering*
- *Geotechnical Engineering*
- *Environmental Engineering*
- *Natural Resources Permitting*

LOCATION:

Mount Olive, New Jersey

CLIENT:

RG Goldmine, LLC



Langan is providing site/civil and geotechnical engineering, environmental, and permitting services for the Combe Fill North redevelopment project in Mount Olive, Morris County, New Jersey. The redevelopment project consists of approximately 500,000 SF of retail development on a 102-acre former municipal landfill.

Langan provided full engineering services during the due diligence phase of the project including a review of site permitting and design issues, preliminary earthwork analyses, utility availability and capacities, preliminary geotechnical recommendations, natural resources permitting, and environmental remediation recommendations. As part of due diligence efforts, Langan is working with the Office of Smart Growth to revise the site's State Planning Area and Sewer Service Area designation.

During the site design phase, Langan is providing full engineering and environmental design services including site layout, grading and utility layout, natural resources permitting, foundation and site preparation recommendations, and landfill engineering services.

Significant site design and construction constraints include:

- Closed municipal landfill across the site
- Compressible soils below the landfill stratum
- NJDEP-regulated areas and buffers
- Corrosive subsurface conditions

Innovative design and construction solutions include:

- Flexible building connections
- Epoxy-coated utilities
- Deep foundation systems

LANGAN

FORMER LANDFILL SITE

SERVICES:

- *Phase I Environmental Site Assessment (ESA)*
- *Phase II Environmental Site Assessment (ESA)*
- *Soil-Gas Survey*
- *Exploratory Trenching*
- *Health and Safety Plan Preparation*

LOCATION:

North Miami, Florida

CLIENT:

Kimley-Horn and Associates, Inc. on behalf of Wal-Mart Stores, Inc.

As part of a Phase I and Phase II Environmental Site Assessment conducted by Langan at this former 12-acre landfill site, soil and groundwater samples were collected and analyzed for a comprehensive suite of chemical and physical constituents that included priority pollutant compounds and other parameters typically encountered at landfill sites.

Additionally, a soil-gas survey was conducted to investigate the presence of methane gas in the subsurface. Soil-gas readings were collected at 127 soil-gas points using the landfill gas analyzer and a flame ionization detector. The landfill gas analyzer measured the composition of the soil-gas and provided the percent concentration by volume (% by volume), for methane (CH_4), carbon dioxide (CO_2), and oxygen (O_2).

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FORMER LANDFILL – COLLEGE POINT RETAIL CENTER

SERVICES:

- *Geotechnical Engineering*
- *Subsurface Investigation*
- *Site/Civil Engineering*
- *Infrastructure Design*
- *Environmental Engineering*
- *Preload Design*
- *Contract Drawings*
- *Agency Approvals*
- *Special Inspections*
- *Construciton Support Services*
- *Ultra Fast-Track Project Management*

LOCATION:

College Point, Queens, New York

CLIENT:

The Related Companies

The Related Companies retained Lagan to perform a wide range of engineering services on a 25-acre former landfill site adjacent to the College Point Industrial Park. The new complex is comprised of three buildings, including more than 300,000 SF of retail space, a 6,000 SF restaurant out-parcel and 1,600 parking spaces.

Numerous large subsurface obstructions exist within the fill and soft organic deposits. Langan evaluated several foundation alternatives and recommended using 80-ton capacity steel pipe piles driven into the bearing stratum below the organics. Building loads were supported by over 2,000 piles averaging over 100 feet long. Piles were also needed to support portions of the utilities. To minimize costs, a combination of preloading and a design to accommodate long-term utility settlement was developed.

Langan's site design services included: preparation of the New York City Department of Environmental Protection (NYCDEP) Drainage Plans and Private Water Permits; site development, stormwater management and builders pavement plans; US Army Corps of Engineers Jurisdictional Determination; design of pile supported sewer lines, regulatory permitting for site work activities and landscape design. Contract drawings were also prepared including full site and civil engineering plans.

Langan also provided engineering services during construction, including: review of contractor's shop drawing and submittals; pile load test monitoring and evaluations; addressing various construction issues; and providing full-time on-site inspection for pile driving, earthwork, utility and parking lot construction activities.

The project was done on an ultra-fast track schedule. The buildings were opened to the public only 10 months after the start of pile driving activities.

LANGAN

FORMER MUNICIPAL LANDFILL – COSTCO RETAIL STORE

SERVICES:

- *Geotechnical Investigation*
- *Alternatives Analysis*
- *Value Engineering*
- *Construction Documents*
- *Field Supervision*

LOCATION:

Ocean Township, New Jersey

CLIENT:

Costco Wholesale

Langan was retained to evaluate alternative foundation designs for a Costco Wholesale store to be located on the site of a former municipal landfill. The landfill materials had been in place for 30± years but were still in an extremely soft and compressible state. The landfill materials were as much as 25 feet thick in a large portion of the building area.

Langan was retained after preliminary design of the building had been completed. The contemplated pile supported structure and structural floor created a severe cost penalty for the development and alternatives were to be evaluated.

Langan's final design consisted of the utilization of an intensive dynamic compaction procedure to compact the landfill materials to the extent possible followed by the construction of a geotextile reinforced soil mat beneath the entire building. Conventional spread footings and slab-on-grade floor slabs were then utilized. This design had the advantage of a significantly lower cost, and it was easy to implement. Construction was continuous without an additional delay for design of complicated pile supported structures.

As the building was completed, a subsurface evaluation was performed to verify that the anticipated results had been achieved. As construction proceeded, monitoring points were established on the building structure so that long term performance could be projected. The building was completed and opened in accordance with the required schedules and acceptable performance has been achieved.

LANGAN

GATEWAY CENTER

SERVICES:

- *Site/Civil Engineering*
- *Geotechnical Engineering*
- *Subsurface Investigation*
- *Tidal and Freshwater Marsh Restoration*
- *Waterfront Park*
- *Environmental Engineering*
- *Contract Drawings*
- *Agency Approvals*
- *Special Inspection*
- *Construction Support Services*
- *Fast-Track Project Management*

LOCATION:

Brooklyn, New York

CLIENT:

The Related Companies

STRATEGIC PARTNER:

Abel Bainnson Butz, LLP

AWARDS:

NY ACE Engineering Excellence Award

Langan was retained by the developer to perform various services for the former NYC solid waste landfill. The Gateway Center is now comprised of a 48-acre retail center, 15-acre public park and the Erskine Street Interchange to the Shore/Belt Parkway.

The retail complex has 13 buildings encompassing 648,000 SF of retail and restaurant space with 2,800 parking spaces. The public park contains a cricket pitch, 3.5 acre freshwater and a 1.0 acre tidal wetland mitigation, bike and pedestrian paths. Langan worked in collaboration with the landscape architect, Abel Bainnson Butz, LLP on the park work.

Subsurface soils consist of up to 20 feet of hydraulically placed fill and up to 5 feet of soft organic deposits overlying the native sands. Numerous subsurface large obstructions existed in the former landfill site. Langan evaluated several foundation alternatives and recommended using 50 feet long, 25-ton capacity timber piles driven into the bearing stratum below the organics. Piles were also needed to support portions of the utilities. Steel piles were used to support the bridge abutment. To minimize costs, a combination of preloading and a design to accommodate long-term utility settlement was developed.

Contract drawings were prepared for sewer, water, stormwater management, Amended Drainage Plan, Private Sewer Plan, Methane Venting and other regulatory permits. Full site/civil engineering plans were provided, including lighting design using point-by-point photometric analysis. Langan also provided engineering services during construction, including:

- Review of contractor's shop drawings and submittals;
- Pile load test monitoring and evaluations;
- Addressing various construction issues; and
- Providing full-time on-site Special Inspections for pile driving, dynamic compaction, earthwork, utility and parking lot construction activities.

LANGAN TREADWELL ROLLO

HAY ROAD LANDFILL

SERVICES:

- *Reviewed Geotechnical Aspects*
- *Provided Technical Memorandum for Incorporation*
- *Geotechnical Engineering Services*

LOCATION:

Solano County, California

CLIENT:

Environmental Science Associates

The Hay Road Landfill, formerly known as the B&J Drop Box Sanitary Landfill, is a Class II landfill facility located approximately 12 miles south of Dixon in Solano County, California and is owned and operated by Norcal Waste Systems Hay Road Landfill, Inc.

An updated Preliminary Closure and Postclosure Maintenance Plan (PCPMP) was prepared by the landfill and was submitted to satisfy their Waste Discharge Requirements. Modifications to the PCPMP relevant to geotechnical engineering issues included:

- revised closure cover system components to reduce potential infiltration into the waste
- revised final contours and grades of the landfill

Langan reviewed the geotechnical aspects of the PCPMP and provided a technical memorandum for incorporation into the environmental impact report. Our geotechnical engineering services included reviewing:

- revised final cover components
- hydraulic performance of the proposed cover
- revised final grades
- erosional impacts to the proposed final cover
- effects of settlement on the revised cover, and
- static and dynamic slope stability

LANGAN

JERSEY GARDENS MALL – URBAN LANDFILL REDEVELOPMENT

SERVICES:

- *Site/Civil Engineering*
- *Geotechnical Engineering*
- *Stormwater Management Design*
- *Construction Management*
- *Construction Inspection*
- *Surveying*
- *Quality Control*
- *Quality Assurance*

LOCATION:

Elizabeth, New Jersey

CLIENT:

Glimcher Development Corporation

AWARD:

CEC NJ Engineering Excellence Award

The Jersey Gardens project transformed an abandoned urban landfill into a thriving 1.5 million SF retail center.

Langan's contributions to the project included site/civil engineering, geotechnical consulting, construction management, surveying services, and quality assurance/ quality control inspections.

Engineering Jersey Gardens posed many difficulties since the development included capping the landfill with up to 20 feet of treated dredged material from nearby bays, which created a corrosive subsurface environment and large anticipated differential settlements.

Notable site improvements included 5500 parking stalls serviced by nearly 3.5 miles of internal access roads. Drainage features included over three miles of storm pipe ranging from 6 to 60 inches, two dry stormwater management detention basins and one wet basin that also functions as a water feature. On-site utilities include six external pump stations and over four miles of water and sanitary pipe.

Langan's scope of services included design of six external pump stations and ancillary forcemains. The following is the design summary of the six pump stations:

Pump Station #1 222 gpm @ 25 ft head
Pump Station #2 155 gpm @ 25 ft head
Pump Station #3 163 gpm @ 25 ft head
Pump Station #4 203 gpm @ 20ft head
Pump Station #5 230 gpm @ 20 ft head
Pump Station #6 110 gpm @29 ft head

Langan provided the mechanical and electrical design of the pump stations along with the design of the force mains. Langan prepared the application package (which included the relevant TWA forms, drawings and specification) to obtain the NJDEP Treatment Works Approval permit.

LANGAN

KEYPORT LANDFILL REDEVELOPMENT

SERVICES:

- *Site/Civil Engineering*
- *Geotechnical Engineering*
- *Natural Resources Permitting*
- *Environmental Engineering*

LOCATION:

Keyport, New Jersey

CLIENT:

Tarragon Development Corporation

Langan provided site/civil, geotechnical, environmental, and permitting due diligence services for the Keyport Landfill redevelopment project in Keyport, New Jersey. The redevelopment project proposed a mixed-use residential and retail development on a 62-acre site adjacent to the Raritan Bay. A majority of the redevelopment site incorporates Keyport's former 42-acre municipal landfill which has received numerous NJDEP citations regarding the inadequate closure and shoreline stabilization measures.

Langan provided full due diligence services including a review of environmental and site permitting issues. In addition, a detailed utility service analysis and geotechnical, environmental, and natural resources assessments were conducted.

Some of the significant site constraints and issues encountered included the following:

- The presence of a municipal landfill in need of remediation
- Extensive NJDEP-regulated areas and buffers
- Corrosive subsurface conditions
- Inadequate shoreline stabilization
- High levels of methane gas emissions
- NJ Office of Smart Growth Planning Area Re-Designation

LANGAN

LANDFILL CLOSURE

SERVICES:

- *Evaluation of RI/FS*
- *Subsurface Investigation*
- *Hydrogeology*
- *Closure Design*
- *Wetland Permitting*
- *Wetland Mitigation Design*

LOCATION:

Naugatuck, Connecticut

CLIENT:

Laurel Park Coalition

Langan provided hydrogeologic and environmental geotechnical engineering expertise to the Laurel Park PRP Coalition to modify a CERCLA-mandated site mitigation program. The modifications entailed design changes to the cap, leachate collection system, and groundwater monitoring pumping systems at this former municipal landfill in Naugatuck, Connecticut. The modifications more appropriately reflected geologic conditions and potential migration/exposure pathways than the designs specified in the original Record of Decision.

In the Pre-Design Stage, Langan geologists re-evaluated the structural geology of the site and surrounding region to define groundwater flow in the underlying bedrock aquifer. This detailed evaluation, in concert with our understanding of the groundwater quality and hydraulic monitoring systems, resulted in a re-definition of the local and regional groundwater flow systems. This has resulted in a savings to the coalition of several million dollars.

Langan designed the final cap, including modifying the existing leachate collection system. The modifications provide for the same degree of protection, but are tailored to the actual geologic conditions and potential exposures.

Langan also was responsible for demonstrating compliance with the Federal Section 404 Regulatory Program, applying for local wetland approvals and designing a mitigation plan to offset wetland impacts.

LANGAN

LYNDHURST SPORTS AND RECREATION CENTER

SERVICES:

- *Site/Civil Engineering*
- *Geotechnical Engineering*
- *Structural Engineering*
- *Site/Civil Permitting*

LOCATION:

Lyndhurst, New Jersey

CLIENT:

Cherokee Northeast and Encap Golf
East Rutherford, New Jersey

Langan provided design, permitting, and project management services for a sports and recreation center on a 20-acre closed landfill site located in Lyndhurst, New Jersey.

The athletics center consists of a baseball field, two softball fields, a synthetic-turf soccer field, and a concessions pavilion. In addition, an existing on-site structure and associated parking lot will be renovated into a field house and new parking facility. Drainage improvements and utility upgrades were designed to accommodate the renovation.

The project team encountered several design and permitting challenges that were successfully overcome during the design of this site. Examples of these challenges were:

- The complex analysis of light poles, scoreboard, and bleacher foundations designed to tolerate the potential differential settlements of the underlying closed landfill;
- Incorporating pedestrian access to the site from the west where steep (1H:1V) grades exist;
- Incorporating stormwater best management practices to satisfy the water quality requirements of the New Jersey Meadowlands Commission

LANGAN

MEADOWLANDS GOLF REDEVELOPMENT

SERVICES:

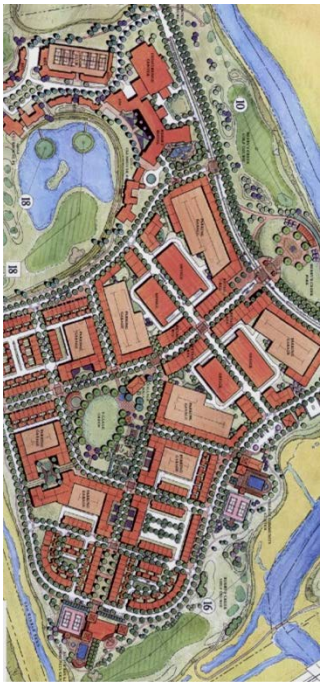
- *Due Diligence*
- *Site Feasibility Analysis*
- *Site/Civil Engineering*
- *Construction Cost Estimates*
- *Geotechnical Engineering*
- *Landfill Closure & Environmental Evaluation*
- *NJDEP Regulatory Coordination*

LOCATION:

Lyndhurst, Rutherford &
North Arlington, New Jersey

CLIENT:

Camden Living & Black Creek Capital



Langan performed extensive due diligence and fast track site feasibility analysis for this project. Our review included regional and site-specific subsurface investigation and laboratory testing data for the highly compressible landfill, marsh, and varved clay materials that extend to depths in excess of 200-feet below the site.

Ground improvement procedures, including dynamic compaction, wick drains, and surcharging were evaluated and time / cost evaluations were prepared for comparison to the planned development concept. Integrating the ground improvement program with the proposed development scheme resulted in buildings up to 4 stories tall to be supported on shallow foundations, with taller buildings supported on pile foundations. Langan developed a ground improvement pilot program to obtain in-place data to fine-tune the dynamic compaction and surcharge limits, to determine the viability of eliminating wick drains, and to identify if buildings taller than 4 stories could be supported on shallow foundations after performing the ground improvement.

Langan also assessed landfill closure issues, routing of site utilities and the environmental aspects of site development. The environmental work scope included the following items: an evaluation of the permits and approvals received from NJDEP and other regulatory agencies; an assessment of the proposed closure measures at they relate to landfill closure as well as future site development and use; an evaluation of the proposed performance monitoring of the closed landfills including long-term maintenance, particularly with regard to leachate and landfill gas; the identification of future liability and risk issues; and, the estimated financial obligation of the long-term operation and maintenance of the closed landfills.

LANGAN

MUNICIPAL LANDFILL CLOSURE

SERVICES:

- *Geotechnical/Environmental Evaluation*
- *Geotechnical Oversight*
- *Geotechnical Laboratory Testing*
- *Landfill Closure Certification*

LOCATION:

Mt. Holly, New Jersey

CLIENT:

Confidential

A 150-acre former municipal landfill ceased operations in 1986. Closure construction was completed in 1988. The final cover was applied to meet condition No. 17 of the landfill registration. The final cover included a minimum one-foot of compacted clay overlain by six inches of sand followed by six inches of top soil. A certification report prepared by a planning and surveying firm identified an area of approximately 4 acres as lacking or not meeting final cover requirements. Langan designed a system of testing for final cover requirements in the questionable area and provided oversight for the re-application of the final cover to meet the required specifications. Langan issued a certification report based on the test boring program, soil laboratory testing results and site surveying to establish final cover requirements.

LANGAN

NEW JERSEY MEADOWLANDS COMMISSION-1-A LANDFILL SOLAR ARRAY (NOW A SOLAR 4 ALL PROGRAM SITE)

SERVICES:

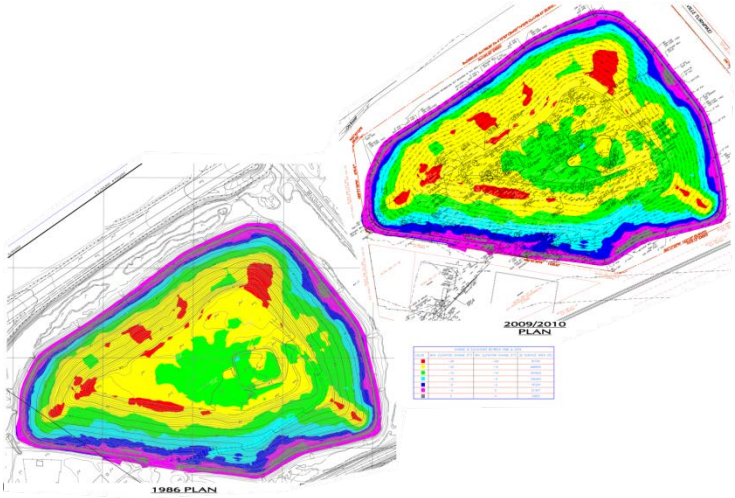
- *Site/Civil Engineering*
- *Surveying*
- *Environmental Engineering*
- *Geotechnical Engineering*
- *Land Use Planning and Permitting*
- *Natural Resources*

LOCATION:

Kearny, New Jersey

CLIENT:

SunDurance Energy
(Subsequently Purchased by PSE&G for Solar 4 All Program)



A ground-mounted 3MW solar array was constructed on the existing New Jersey Meadowlands Commission (NJMC) 1-A Landfill in Kearny, New Jersey. SunDurance was under contract with the NJMC to lease the property for purposes of constructing and operating the solar array. The existing closed landfill has a membrane (liner) one foot below grade that was required to be maintained in the post development condition. The solar array was constructed on approximately 14 acres on the top of the landfill and interconnected to the regional electrical distribution system located off site.

Langan was retained by SunDurance to perform geotechnical engineering evaluations of the existing landfill and the impacts of the proposed development, prepare topographic survey, assess natural resource impacts, prepare the site grading, stormwater drainage and utility layout design, obtain State, County and local permitting along with providing construction support services. Settlement analysis was performed to identify ranges of the rates of differential settlement that has occurred over the history of the life of the landfill and to assess future settlement issues for the design of the aboveground ballasted panel mounting system. Design elements utilized minimized penetrations through the existing liner. Land use, soil erosion and DEP landfill disruption permits were the key permits obtained from the regulatory agencies during a time of rapidly changing regulatory policies. Langan also assisting in obtaining alternate site access to the facility to improve long term operational logistics.

LANGAN

RESORTS AT MEADOW CREEK

SERVICES:

- *Site/Civil Engineering*
- *Landscape Architecture*
- *Permitting*
- *Stormwater Design*
- *Geotechnical Engineering*
- *Environmental Engineering*
- *Traffic Engineering*

LOCATION:

Rutherford, New Jersey

CLIENT:

Meadow Creek Vacation Homes, LLC

ARCHITECT:

William McDonough + Partners

Langan provided site design and landscape architecture services on this 2.8-acre capped landfill that will be transformed into high-end, luxury housing associated with the adjacent Meadowlands golf club.

The 300-unit building will contain a restaurant, health club and community room along with a number of sustainable elements. The project is being designed to a level suitable for achieving LEED Silver certification. The horizontal volume of the building and the vegetated walls at the lower levels help marry the building with the meadow landscape while the gently curved plan allows for many units with views of the New York skyline. A number of rooftop terraces and a paved esplanade at grade provide gathering places for residents with views of the meadows and surrounding landscape.

The principal challenge of this project was the preparation for building on the landfill. It was necessary to perform settlement calculations and to install piles at depths of 150-160 feet to support buildings and entrance areas.

LANGAN

SOLAR BAY

SERVICES:

- *Environmental Engineering*
- *Site/Civil Engineering*
- *Landscape Architecture*
- *Geotechnical Engineering*
- *Surveying*

LOCATION:

Wildwood, New Jersey

CLIENT:

City of Wildwood

Langan developed a master plan, concept plans and 3-D digital models as a consultant to the City of Wildwood for a new, 25-acre solar farm on a former landfill site on the bay at Post Creek Basin. The solar farm will produce three-megawatts of electricity for the city and will be developed following the capping and final closure of the open landfill site. The master plan includes 25-acres of new parkland, passive open space, recreational boating facilities along with recreational and fitness trails. In addition to these traditional resources, the park was also designed with interpretive elements that highlight sustainable and renewable energy resources.

Micro-turbine electrical generation units are set along major walkways in the park, solar powered lighting fixtures were utilized and historic fill materials were used to create a spiral landform that serves as an overlook to the solar farm, the bay and distant shore. The design calls for regionally native plants and sustainable materials and site furnishings to complete the low impact design for the site.

Langan is designing the closure and preparing the necessary permit modifications, preparing geotechnical reports and preparing the full landscape architecture and site/civil design package for the project.

LANGAN

TARGET STORE – PLYMOUTH MEETING

SERVICES:

- *Geotechnical Investigation and Design Recommendation*
- *Environmental Investigation and Design Recommendations*
- *Engineering Inspection During Construction*
- *Owner's Representative*

LOCATION:

Plymouth Township,
Montgomery County, Pennsylvania

CLIENT:

Target Stores

AWARDS:

CEC PA Engineering Excellence Award

Langan provided fast-track geotechnical and environmental services and acted as an Owner's representative for the construction of Plymouth Township's Target store.

During construction of this store, a large former quarry was discovered within a portion of the building footprint. The historic quarry was approximately 80 to 90-ft deep and had been filled with miscellaneous debris and trash. Langan conducted a historic land use survey and determined that the site had been used as a limestone and clay quarry for the manufacture of lime and bricks. The quarry was then filled with miscellaneous debris including construction debris, municipal waste and soil material. As the site is underlain by limestone, the subsurface is also prone to sinkhole development. Langan developed a site investigation to delineate the extents of the quarry and waste material, and determine the potential for sinkhole development within the building area.

A foundation system consisting of mini-pile supported grade beams within the quarry area and spread footings within the non-quarry area was developed. Langan recommended performing proof-drilling and grouting beneath footings to limit sinkhole development beneath a structural element. To control the infiltration of methane gas into the store, a sub-slab liner and collection system was designed and installed to collect the gas and vent it through roof stacks. Langan also provided full-time inspection during site preparation, foundation construction and liner installation. Axial and lateral load tests were also performed to assess the capacity of the piles and lateral load resistance of the waste material.

The real-time consulting services provided by Langan enabled Target to open their store on-time, just nine months after the start of the foundation construction.

LANGAN

WHITESTONE GOLF COMPLEX

SERVICES:

- *Geotechnical Investigation*
- *Alternatives Analysis*
- *Value Engineering*
- *Construction Documents*
- *Field Supervision*

LOCATION:

Bronx, New York

CLIENT:

Ferry Point Partners, LLC

A “World Class” golf complex including a Jack Nicholas designed course as well as associated banquet and club house facilities is proposed and is presently under construction on a former municipal landfill adjacent to the Whitestone Bridge in New York. Subsurface explorations indicated that the landfill materials were in various stages of decomposition and were extremely compressible under the new loads to be imposed by the required filling for the golf course.

Langan designed a preload program to be utilized in conjunction with the use of geotextile fabrics within compacted fills to be utilized in critical green and tee areas as well as in areas requiring utilities, roads and other infrastructure. These procedures are to be utilized to avoid critical differential settlements which will severely impact the usability of the course features as well as the associated infrastructure. Without these types of soil improvements, it was estimated that as much as two to three feet of settlement could occur within the first ten years of golf course operation.

LANGAN

WILDWOOD BAYSIDE REDEVELOPMENT PROJECT

SERVICES:

- *Landfill Disruption for Investigation Activities*
- *Remedial Investigation to Delineate and Characterize Landfill*
- *Baseline Ecological Evaluation*
- *Conceptual Landfill Gas Management System Design*
- *Conceptual Site Planning*
- *Remedial Action Workplan/Landfill Closure Plan Design (future)*

LOCATION:

Wildwood, New Jersey

CLIENT:

K. Hovnanian Companies Northeast

ARCHITECT:

Martin Architectural Group

STRATEGIC PARTNER:

K. Hovnanian Companies Northeast

K. Hovnanian was designated by the City of Wildwood as the redeveloper of the Wildwood Bayside Redevelopment Area. The site will be redeveloped for residential purposes and is expected to include a mix of single-family homes, townhouse and multi-story buildings.

Langan is performing a remedial investigation and developing the Remedial Action Workplan and Landfill Closure Plan for the site, which includes the former City of Wildwood landfill, existing public works garage, and several developed and undeveloped properties on the southern and eastern perimeter of the landfill. The redevelopment of this site is critical to the revitalization of the western portion of the City of Wildwood.

Langan has collected groundwater, surface water, sediment and landfill data as part of the evaluations of the site and is working closely with K. Hovnanian and its team of professionals to identify site constraints. These site constraints, which are related to environmental conditions, geotechnical conditions and land use regulatory constraints, have created significant challenges for K. Hovnanian for designing an economically viable project. However, Langan has is developing cost-effective remedial solutions, particularly related to landfill gas management that will provide the level of protection required and allow K. Hovnanian to proceed with further development of the conceptual site plan.

TRANSFORMING AN URBAN LANDFILL

FAST TRACK MULTI-DISCIPLINED ENGINEERING BRINGS PROSPERITY TO A BLIGHTED AREA BY DEVELOPING A DORMANT LANDFILL INTO A THRIVING RETAIL CENTER.

JERSEY GARDENS MALL
ELIZABETH, NEW JERSEY

ADDITIONAL WET DETENTION BASIN REDUCED SIZE AND LENGTH OF THE STORM DRAINAGE SYSTEM

MECHANICALLY STABILIZED FABRIC WRAPPED EARTH SLOPES ON A DYNAMICALLY COMPACTED SUBBASE PROVIDED COST SAVINGS

CONTINUITY STEEL INTERCONNECTS PILES TO MONITOR PILE CORROSION AND PROVIDES FOR FUTURE CATHODIC PROTECTION

EPOXY COATED TYPE V CONCRETE STRUCTURES PROVIDE CORROSION RESISTANCE

HIGH DENSITY HEAT-FUSED POLYETHYLENE PIPE PROVIDE CORROSION RESISTANCE AND REDUCES DIFFERENTIAL SETTLEMENT IMPACTS

SIX ON-SITE PUMP STATIONS ALLEVIATED THE IMPACT OF DIFFERENTIAL SETTLEMENT

FLEXIBLE EXPANSION FITTINGS TO PREVENT SHEARING OF UTILITY LINES AT RIGID BUILDING CONNECTIONS

Langan
Engineering and Environmental Services

OWNER AND DEVELOPER:	GLIMCHER DEVELOPMENT CORPORATION COLUMBUS, OHIO	**PROJECT ARCHITECT:**	KA INC., ARCHITECTURE COLUMBUS, OHIO
SITE / CIVIL ENGINEER:	LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES ELMWOOD PARK, NEW JERSEY	**CONSTRUCTION MANAGER:**	WHITING-TURNER CONTRACTING COMPANY BALTIMORE, MARYLAND

Consulting Engineers Council of New Jersey
Honor Award

AMERICAN CONSULTING ENGINEERS COUNCIL

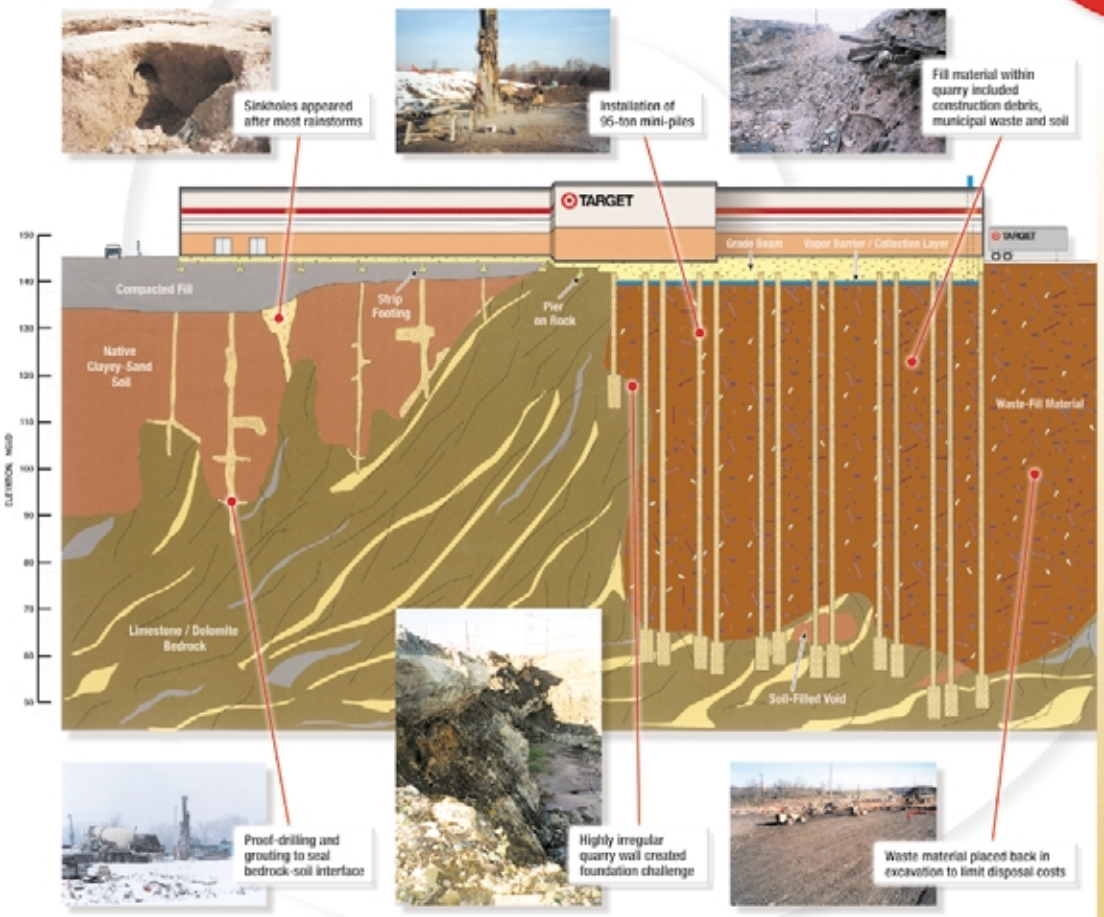
ENGINEERING EXCELLENCE AWARD

Langan
Engineering and Environmental Services

ELMWOOD PARK, NJ NEW YORK, NY PHILADELPHIA, PA DOYLESTOWN, PA NEW HAVEN, CT MIAMI, FL

FOUNDATIONS HIT TARGET

Langan aims foundation design to overcome highly variable subsurface conditions and meets tight 8-month construction schedule.



A waste-filled limestone quarry, erratic bedrock pinnacles, loose fill, and sinkholes were all packed into one building area.

A foundation system consisting of drilled mini-piles, piers on rock, and strip footings on fill and native soil, along with a ground improvement program of proof-drilling and grouting, were employed to meet the geotechnical challenges and the owner's opening date.

Langan's fast-track design maintained the schedule and turned this difficult site into productive retail space.

Langan
Engineering and Environmental Services

PROJECT:
TARGET– Plymouth Meeting, Pennsylvania

OWNER:
TARGET– DHC
Minneapolis, Minnesota

ENGINEER:
Langan Engineering and Environmental Services, Inc.
Philadelphia, Pennsylvania

TARGET

Council of Engineering Companies / Pennsylvania Honor Award

Council of Engineering Companies / Pennsylvania

Engineering Excellence Award

Langan
Engineering and Environmental Services

New Jersey New York Pennsylvania Connecticut Florida Nevada

3

Quality Control

SECTION THREE: QUALITY CONTROL

QA/QC Procedures

The Project Manager is responsible for Langan's work, including compliance with state and federal regulations, quality assurance, achieving objectives, staffing, scheduling, and cost controls. The Project Manager's responsibilities include:

- Evaluating staff QA training needs and arranging for such training;
- Participating in a systematic planning process;
- Assuring that a QA plan is prepared and approved (internally and by our clients, as applicable) before a project begins;
- Ensuring that sampling, analyses, and data management procedures are documented, adequately reviewed, and consistent with accepted scientific principles and EPA mandates; and
- Ensuring that QA-related disputes are resolved in a timely manner and corrective actions are implemented.

The QA Plan describes the policies and practices for a planned and disciplined approach to achieve the standards for quality, safety, and reliability of products and services supplied by Langan. It is structured to meet recognized quality standards such as the American National Standards Institute/American Society for Quality Control (ANSI/ASQC) E4-1994, American National Standard Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs.

ANSI/ASQC E4-1994 is a consensus document that describes basic, mandatory specifications and non-mandatory guidelines by which a quality system for environmental programs can be planned, implemented, and assessed. EPA's quality assurance program is based upon this consensus document. Langan's QA/QC program is tailored to meet EPA QA/R-2, EPA Requirements for Quality Management Plans. QA/R-2 is the policy document containing the specifications and requirements for quality management plans for organizations with which EPA has external agreements.

Langan recognizes three control components for achieving quality standards, each of which will be delineated within project-specific comprehensive plans and will be implemented to ensure that quality standards are met.

- The Preparation component includes the steps necessary to ensure that Langan personnel understand their roles and responsibilities before beginning work.
- The Preliminary component includes a check of all Preparation work to ensure compliance with contract requirements.
- The Final component comprises the performance and documentation of activities to ensure continued compliance.

The Langan system of QA/QC is based on a defined system by which personnel, materials, and services are inspected for compliance with specifications. This system is established through a series of periodic checkpoints or control tests. When a deficiency is identified, work proceeds along clearly defined paths to remedy the problem. During each phase of quality control, each member of the Langan management team has responsibilities that contribute to ensuring that the quality standards of a project are being met.

The assignment of specific duties and administrative functions for a project task will vary according to the work to be performed, contract requirements, and other factors, and will be determined as early as possible. The lines of authority governing administrative and project personnel will be established before beginning work on the project.

Langan procedures provide measures for ensuring that personnel performing quality-affecting activities receive training commensurate with the skill levels needed and that only qualified personnel are assigned to quality-related tasks. Langan management is responsible for assessing areas of responsibility to develop appropriate training, which is formally documented.

Measures will be implemented to ensure that regulatory requirements, design bases, and technical and quality requirements are included or referenced in procurement documents for materials, equipment, or services. Procurement documents will be reviewed before release by QA/QC personnel and other appropriate technical disciplines to ensure that technical and quality control requirements are included.

Where design activities apply to quality-related components or services, measures are established to translate applicable regulatory requirements into accurate design, procurement, and procedural documents. Design documents will include appropriate standards. Measures will be established and implemented to ensure that applicable design basis and regulatory requirements are correctly translated into specifications, drawings, work-plan procedures, or instructions.

Langan personnel who use measuring and testing equipment are responsible to verify that the instruments have not exceeded calibration due dates and to remove the instrument from service if the calibration date has expired, or the instrument is suspected to need repair or to be out of calibration due to damage. Langan personnel will select instruments that fit the required range, tolerance, type, and accuracy necessary to verify conformance.

Langan's field work is governed by Chapter 62-160, Florida Administrative Code, and the Florida Department of Environmental Protection Standard Operating Procedures (revised March 2008). The Project Manager is responsible for reviewing field work, and senior staff are responsible for auditing the field work of junior staff. In conformance with Florida Administrative Code, Langan is responsible to verify that environmental laboratories are certified for analytes and analyses, and that laboratory reports meet state requirements regarding method detection and practical quantitation limits, qualified data, dilutions, and basic (Level 1) QA/QC.

QA/QC procedures are not the responsibility of one individual or group, but of all employees and subcontractors in all project-related functions. For each project, Langan will utilize a project team with varying QA/QC responsibilities to ensure that work is effectively managed and produces consistently high-quality results. It is the responsibility of project team management, which includes designated Quality Assurance staff, to ensure that QA/QC activities take place at all levels in the project organization, and that personnel associated with the project have a high level of quality control awareness and commitment.

4

Project Team Qualifications

SECTION FOUR: STAFF AND TEAM QUALIFICATIONS

Key Personnel

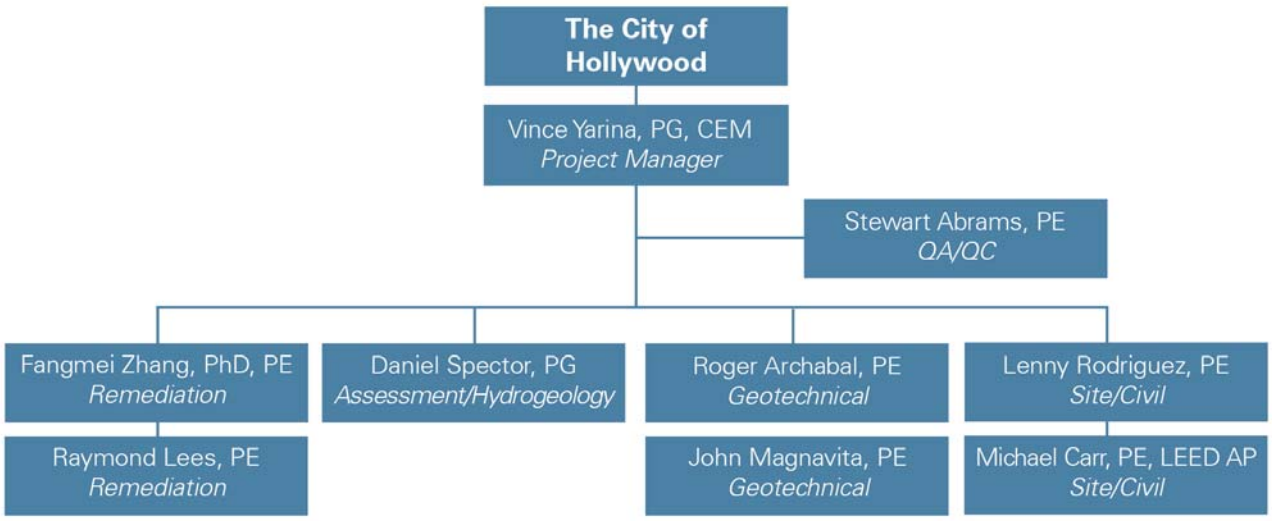
Langan's local Miami Lakes office provides fully-integrated environmental, site/civil, and geotechnical engineering services; and we view this as an advantage for any sized project. Our multidisciplinary team works together to develop solutions that consider all aspects of the a project, allowing our team to see the "big picture" where we are able to anticipate problems, devise innovative solutions, accelerate schedule, and save money.

Langan's management approach starts with a single point of contact and a multi-point infrastructure Quality Assurance for each project. All environmental work will be completed under the supervision of Vince Yarina, PG, CEM. Vince brings over 20 years of experience and leads the Miami Lakes' environmental group. Daniel Spector PG, LEP, will provide assessment/hydrogeology support and also brings with him over 20 years of experience in the environmental and water resources field. Both Vince and Daniel have worked on numerous similar environmental projects together for local and municipal agencies. Fangmei Zhang, PhD, PE and Raymond Lees will be assigned to provide remediation activities. Both possess extensive experience with similar remediation projects. Ancillary support staff includes Roger Archabal, PE and John Magnavita, PE for geotechnical engineering; Lenny Rodriguez, PE and Michael Carr, PE, LEED AP for site/civil engineering services during design and construction; and Stewart Abrams, PE for QA/QC.

Langan will assume the project lead and provide full environmental engineering services. The Langan team will be responsible for the delivery of those services and documentation described under the RFQ. Effective communication and teamwork are crucial to the success of any project. Constant client interface and absolute responsiveness is what differentiates Langan from the competition. We are pleased to commit the time and resources required for this project, and to manage a comprehensive integration of technology and staffing which will allow us to effectively and efficiently meet the project schedule.

Please see the organizational chart and resumes for further detail on individual relevant experience and expertise.

Project Team Organization Chart



Project Management Summary

Langan is committed to providing quality engineering and environmental services. We recognize that our success and our clients' success depend on the efforts of our employees and the corporate commitment to quality, technical excellence, practical experience and responsiveness.

Our primary objective is to ensure that the services and products provided by Langan meet the requirements of applicable regulations, codes, standards, contracts, and technical specifications, as well as client expectations.

Planning, achieving, and verifying quality are the responsibilities of managers. Producing quality work is the responsibility of the company and each Langan employee. Principals, associates, and project managers are accountable for ensuring that the work performed in their discipline, or on their project, meets or exceeds the quality standard set by the company. Work products must satisfy the quality needs of our clients. For employees to deliver a high-quality product, managers must ensure that the services and products provided to their clients, both internal and external, are fully and clearly understood by those providing the services.

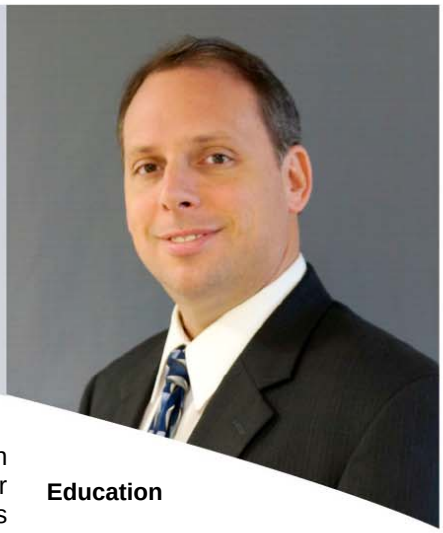
Managers are responsible for ensuring that adequate procedures, equipment, technologies, resources, documentation, services, and supplies are provided for the production of products that meet the standards established for acceptance.

The steps required to ensure and to document that appropriate quality processes have been implemented will vary with the deliverable and the end use of the deliverable. Consequently, staff and managers bear the responsibility for reviewing their tasks in light of company policies and procedures and for ensuring that policies and procedures appropriate to the task are applied. The intent is not to stifle productivity with unnecessary documentation and procedures, but to ensure that prudent and appropriate steps are taken and documented so that we can stipulate that our products and services are of the quality reasonably achievable relative to their intended use.

Project Manager's Resume

Vincent D. Yarina, PG, CEM

Senior Associate
Environmental Assessment, Water Resource Management



22 years in the industry ~ 16 years with Langan

Mr. Yarina has 22 years of environmental and geological consulting experience in the eastern United States, Nevada, California, and abroad. Mr. Yarina is a Senior Associate and Vice President in the Miami office and leads Langan's environmental practice in Florida. His practice includes a national client base that includes Fortune 500 companies, land developers, financial institutions, attorneys, and institutional investors. Mr. Yarina has extensive knowledge working with regulatory agencies in Florida, Georgia, Nevada and California on issues ranging from tank closures to site assessments to remedial actions.

Mr. Yarina's environmental consulting experience includes performing numerous Phase I and Phase II Environmental Site Assessments and groundwater impact studies, development of remedial investigation plans, implementation of remedial plans, well and boring installation, groundwater and soil sampling, construction dewatering, regulatory permitting, and performing and analyzing aquifer pump test data using MODFLOW and other computer modeling software.

Mr. Yarina has presented on the subject of Phase I ESAs, All Appropriate Inquiry, and environmental due diligence at the Florida Chamber of Commerce's Semi-Annual Environmental Permitting Conferences, the Florida Brownfield Association's Annual Conference, the Environmental Bankers Association and RTM.

Selected Projects

New Broward County Courthouse, Fort Lauderdale, FL
US EPA Brownfield Assessment and Cleanup Grants, Cocoa, FL
Miami Science Museum, Miami, FL
Rialto Capital Advisors, Nationwide
Prudential Real Estate Investors, Nationwide
Ryder Transportation Services, Various locations throughout FL
Fontainebleau Resort, Miami Beach, FL
Oceanside, Pompano Beach, FL
Paseo del Mar/Auto Toy Store, Fort Lauderdale, FL
Miami VA Medical Center, Miami, FL
Village of Key Biscayne, Key Biscayne, FL
Ric-Man Construction v. Lopefra Corp., Miami, FL
Citgo Delray Beach, Delray Beach, FL
Morgan's Point Specialist Remediation, Bermuda
Millennium, Hollywood, CA
Former Occidental Research Corporation Facility, LaVerne, CA
New Atlanta Falcons Stadium, Atlanta, GA
Fontainebleau Casino, Las Vegas, NV

Education

M.Sc., Engineering Geology, 1998
Drexel University

B.S., Earth Science (Geosciences), 1992, Pennsylvania State University

Professional Registration

Registered Professional Geologist in Pennsylvania (PG-03260-E) and Florida (PG0002077)

Certified Environmental Manager in Nevada (CEM No. 2104)

40-hour OSHA Health and Safety Training Certificate

INSTEP Licensed Environmental Professional (LEP No. 73)

Daniel Spector, PG, LEP

Senior Project Manager
Hydrogeology, Water Resources,
Contamination Assessment/Remediation

21 years in the industry ~ 9 years with Langan

Mr. Spector has 21 years of experience in the environmental and water resources fields. His area of concentration is hydrogeology and he has investigating aquifer properties for more than 130 stormwater drainage well projects. His hydrogeology experience includes looking for sources of water for major development projects in Nicaragua and Colombia. He is experienced in the application of county, state, and federal laws and regulations and has worked on state and local government and agency projects. He has contamination assessment and remediation experience, designing and implementing assessments of petroleum and non-petroleum contaminated groundwater and soil.

Mr. Spector's experience includes interpreting seismic data and quality control, including calibration of seismic interference and real-time monitoring of data collection, in the Gulf of Mexico and offshore Brazil.

Selected Projects

Methane Gas Mitigation, Ryder Truck Rental, Miami, FL
Monroe County Landfill Groundwater Monitoring, Monroe County, FL
TMR Sunshine Brownfield Redevelopment, FL
Water Resource Investigations and Water Well Design, Installation and Testing, Colombia and Nicaragua
Conditional Closure for Arsenic and Dieldrin, Municipal Golf Course, Pompano Beach, FL
Pan Am Tract 1 Soakage Pit, Sediment, and Groundwater Investigation, Miami International Airport, Miami, FL
Reasonable Assurance Investigations and Specific Capacity Testing for Area-Wide Drainage Improvements, Hallandale Beach and Sunny Isles Beach, FL
Engineering Control Plan Design and Conditional Closure, Trademark Metals Recycling, Opa Locka, FL
Construction Dewatering Monitoring, former Saxony Hotel, Miami Beach, FL
Due Diligence Assessments, Truck Maintenance Facilities, Ryder System, Inc., Miami, FL
UST System Design/Drainage System Design/Contamination Assessment/ Natural Attenuation Monitoring, Ryder Truck Rental, Davie, FL
Tenant Environmental Compliance Audits, Miami International Airport, Miami, FL
Free Product Recovery, ExxonMobil Natural Gas Processing Facility, Jay, FL
Northwest Cargo Area and West End Cargo Area Assessment and Feasibility Study, Miami International Airport, Miami, FL

Education

B.A., Geology
CUNY, Hunter College

M.S., Geosciences
Florida International University

Professional Registration

Registered Professional Geologist in FL (No.1999) and AL (No. 1093)

Licensed Environmental Professional (No. 161)

Fangmei Zhang, PhD, PE

Environmental Engineer

9 years in the industry ~ 1 year with Langan

Ms. Zhang brings over 9 years of experience in the design and management of civil and environmental engineering projects, and field activities. Her experience is inclusive of expertise in ESA, remedial investigation and feasibility studies, soil/groundwater remediation techniques, contaminant transport and groundwater modeling, solid waste management system design and landfill redevelopment permitting, and stormwater management system design and permitting. Ms. Zhang brings vast knowledge of federal and state environmental regulations

Selected Projects

The Saxony Hotel & Residences, Miami Beach, FL
Miami International Airport, Building 1034, Miami, FL
14400 NE 20th Lane, North Miami, FL
Old Spanish Village, Coral Gables, FL
Mizner Lakes Apartments, West Palm Beach, Florida
Former Hector Millan Parcel File No. 07-405, Miami Dade County, FL
Former American Diversified Products, Inc., Miami, FL
4401 NW 87 Avenue, Doral, FL

Education

B.A., Geology
CUNY, Hunter College

M.S., Geosciences
Florida International University

Professional Registration

Registered Professional Geologist in FL (No.1999) and AL (No. 1093)

Licensed Environmental Professional (No. 161)

Raymond Lees, PE, CHMM

Senior Associate
Remediation, Water Quality, Site Characterization, Environmental Site Assessments

26 years in the industry ~ 2 years with Langan

With over twenty-six years of experience, Mr. Lees is an environmental and civil engineer with extensive consulting experience, providing a broad range of environmental services to private, public, and federal sector clients. His areas of expertise include water quality, permitting, remediation, site characterization, technology evaluation, construction, operation and maintenance of treatment systems, and industrial wastewater treatment. Mr. Lees has been a project director, project manager, project engineer, principal-in-charge, or technical reviewer on over 200 projects, predominantly in the private sector. He has extensive experience with design/build/operate arrangements of complex remediation systems involving a full range of remedial technologies. He conducts conceptual and detailed design projects that include technology screening, procurement, detail engineering drawings/specifications, and permitting. His experience also includes project management of industrial projects identified as RCRA and CERCLA sites, as well as provision of litigation support on various environmental projects. Mr. Lees is extensively involved in business development activities on national and regional client accounts and is the account manager for five accounts. In the past, Mr. Lees has served as an engineering manager and operations manager of offices where he was responsible for overall management of the technical and administrative staff assigned to projects and for business development.

Selected Projects

BP Superstop, Fort Lauderdale, FL
151 at Biscayne Landing, North Miami, FL
Pennsylvania Department of Environmental Protection: Act 2 Cleanup, PA
North Penn Superfund Site, PA
RCRA SITE Decommissioning, PA
TSCA PCB Site, PA
Alternative Energy Project, Lancaster, PA
Recycling Facility, Bucks County, PA.
RCRA Remedial Feasibility Investigation, PA
CERCLA Remediation Project, PA
PPC Plan, PA
Superfund Remediation, West Chester, PA
RCRA Interim Corrective Action, PA
RCRA RFI/CMS/CMA, PA

Education

M.E., Environmental Engineering
Clemson University

B.S., Civil Engineering
Drexel University

Professional Registration

Professional Engineer (PE): PA, DE, OH, NY, NJ, & FL (FL No. 76245)
Certified Hazardous Materials Manager (CHMM)

Professional Affiliations

American Academy of Environmental Engineers, Chief Examiner

American Society of Civil Engineers, Philadelphia Section, Chair Env. Group-1998

Chi Epsilon – National Civil Engineering Honor Society

National Society of Professional Engineers

Project Management Institute

Water Pollution Control Federation

Roger Archabal, PE

Principal
Geotechnical Engineering

27 years in the industry ~ 15 years with Langan

Mr. Archabal has over twenty-seven years of geotechnical engineering experience and has practiced in numerous and varied geological regions in the United States and abroad. The majority of his career emphasis has been in Florida and the Gulf of Mexico regions as well as the Central American and Caribbean regions. Mr. Archabal is experienced in all aspects of geotechnical engineering, especially difficult foundations in coastal environments. He has performed hundreds of geotechnical explorations of varied size and scope including single story to high rise buildings for residential, commercial and institutional developments, retaining walls, marinas, port facilities, large diameter storage tanks, underground utilities, transmission towers, roadways, airports, bridges and earth structures.

Mr. Archabal has managed hundreds of projects covering a wide variety of deep and shallow foundation systems. His deep foundation experience includes driven piles, drilled shafts and augercast piles. He has designed and executed dozens of pile load tests for ultimate loads of up to 5,000 tons. The treatise of his master's degree thesis dealt with the estimation of pile load capacities based on soil properties and load tests. Mr. Archabal has also designed shallow foundations including spread footings, combined footings and mats for varied sized structures, including towers over 40 stories tall.

Mr. Archabal has extensive experience with coastal geotechnical engineering structures including piers, relieving platforms, breakwaters, retaining walls, cofferdams and earthen levees. Typical coastal engineering explorations have covered issues including earth slope stability, foundation support, geosynthetic slope and base reinforcement, preloading and prefabricated vertical drains to reduce settlements and improve stability. His retaining wall experience includes cantilevered and tie back walls as well as concrete gravity walls. He has also performed geotechnical failure investigations for building foundations, earth structures and retaining walls.

Selected Projects

Alexander Orr Water Treatment Plant, South Miami, FL
Port of Miami, Miami, FL
American Airlines Arena, Miami, FL
Flow Equalization Basin (FEB), Everglades Restoration Project, FL
I-95 Managed Lanes, Miami, FL
Jewfish Creek Bridge, Key Largo, Monroe County, FL
Key Biscayne Resort and Residences, Key Biscayne, FL
Loews Hotel and Resort, Miami Beach, FL
Marquis Tower, Miami, FL
Miami International Airport, Miami, FL
Miami Intermodal Center (MIC), Miami, FL
NW 21st Street Bridge, Miami, FL
Oceania Island, North Miami Beach, FL
Royal Palm Crowne Plaza Resort, Miami Beach, FL
State Road 15/U.S. Road 441, Palm Beach County, FL
The Bath Club, Miami Beach, FL
The Roney Palace, Miami Beach, FL
The Bentley Hotel, The Bentley Beach and The Bentley Bay Developments, Miami Beach, FL

Education

M.Sc. Civil Engineering (Geotechnical)
University of New Orleans

B.Sc. Civil Engineering
Arizona State University

Professional Registration

Professional Engineer in FL, LA & NV

Affiliations

American Society of Civil Engineers (ASCE) – Past Executive Board and Miami-Dade Chapter President

Leadership Miami - Greater Miami Chamber of Commerce - Executive Committee

Urban Land Institute (ULI)

Design Build Industry Association (DBIA)

Committee Lead Chairperson, Langan's Annual Corporate Geotechnical Workshop

John Magnavita, PE

Senior Project Manager
Geotechnical Engineering

20 years in the industry ~ 20 years with Langan

Mr. Magnavita has 20 years of geotechnical engineering experience at Langan. His practical experience was gained by working on projects in Florida, Nevada, Virginia, Delaware, Connecticut, New York, New Jersey and Maryland.

Mr. Magnavita's geotechnical engineering experience includes foundation design, engineering inspection and monitoring of shallow and deep foundations for high-rise developments; monitoring and designing preloading of organic soils for low-rise residential structures; preloading of loose sand for high-rise structures; slope stability analysis; evaluation of deep construction excavations in fine-grained soils; evaluation of construction dewatering techniques for mass excavations in various soil types; and development of load test programs for deep foundations. He has extensive office and field experience including developing earthwork site preparation procedures for large-scale projects, developing technical specifications for shallow and deep foundations, in-situ testing of soil and rock samples; monitoring pre-, during, and post-construction settlements, and designing and inspecting large-scale dewatering systems.

Selected Projects

Everglades Agricultural Area – Reservoir A-1 FEB, Western Palm Beach County, FL
Miami Children's Hospital, Miami, FL
Progresso Point Apartments, Fort Lauderdale, FL
University of Miami Life Science & Technology Park, Miami, FL
The Marlin's Ballpark and Parking Garages, Miami, FL
The Point at the Waterways, Aventura, FL
Blue and Green Diamond Condominium Towers (4775 Collins Avenue), Miami Beach, FL
Porto Vita (F4/F5 Sites), Aventura, FL
Ocean Point Hotel/Condominium, North Miami Beach, FL
Harbor Islands, Hollywood, FL
The Aventura Mall Expansion, Aventura, FL
Target Store, Aberdeen, MD
2000 Island Boulevard, Williams Island, FL
Boynton Marina Place, Boynton Beach, FL
The Palms, Fort Lauderdale Beach, FL
Hotel Addition to Doral Ocean Beach Resort, Miami Beach, FL
Aventura Z12/Lawn Site, Aventura, FL
Turnberry G-1 Site, Aventura, FL

Education

M. Sc., Engineering (Geotechnical)
The University of Florida

B. Sc. Civil Engineering
The University of Florida

Professional Registration

Licensed Professional Engineer in Florida

Affiliations

American Society of Civil Engineers

Construction Association of South Florida

Leonardo Rodriguez, PE

Senior Project Manager
Project Management, Site Engineering / Land Development, Hydraulics & Hydrology

20 years in the industry ~ 4 years with Langan

Mr. Rodriguez has over 20 years of Civil Engineering experience of which approximately seven years have been as project manager. He has been the primary point of contact for public and private sector clients for projects ranging from Municipal utility improvements, roadway resurfacing and reconstruction, as well as County local and area wide drainage improvements. Mr. Rodriguez has spearheaded the Environmental Resource Permit (ERP) and Corp of Engineer Dredge and Fill permitting efforts on numerous projects. He is intimately familiar with the Miami-Dade Water and Sewer Department (MDWASD) standards and specifications as well as with the permit process through the Miami-Dade County Department of Planning, Environmental and Regulatory Affairs (PERA), the City of Doral Works Department, the South Florida Water Management District, the Florida Department of Environmental Protection and US Army Corp of Engineers.

Selected Projects

One Brickell City Centre, Miami, FL
Old Spanish Village, Miami, FL
ParkSquare Aventura, Aventura, FL
SLS Brickell, Miami, FL
Biscayne Beach Club, Miami, FL
River Landing, Miami, FL
SunLife Stadium Drainage Improvements, Miami Gardens, FL
Miami Dolphins Water Park at SunLife Stadium, Miami Gardens, FL
Miami MetroZoo Amphitheater, Miami-Dade County, FL
Florida Forestry Department Fire Station, Homestead, FL
The Promenade at Coconut Creek, Broward County, FL
Banco Santander Tower, Miami, FL
Flagler Station Warehouse Building 34, Miami-Dade County, FL
Flagler Station Warehouse Building 35 and 36, Miami-Dade County, FL
Flagler Station Warehouse Building 37, Miami-Dade County, FL
Flagler Station Warehouse Building 38, Miami-Dade County, FL
Flagler III Warehouse Building 1 and 2, Miami-Dade County, FL
Fed Ex Ground Distribution Center, Palm Beach County
Fed Ex Ground Distribution Center, Miami-Dade County
Mount Sinai Energy Plant, Miami Beach, FL
Trademark Metal Recycling, Opa Locka, FL
1800 Club, Miami, FL
1400 Biscayne Boulevard, Miami, FL
Bel Aire Drainage Improvements, Miami-Dade County, FL
Bellagio, Miami, FL
Biscayne Gardens Elementary, Miami-Dade County, FL
Blue Lagoon Lake Fill, Miami, FL
Blue Mountain Resort Due Diligence, Blue Mountains, Canada
Broward County Government Center Redevelopment Project, Fort Lauderdale, FL

Education

M. Sc., Environmental Engineering
Florida International University

B. Sc., Civil Engineering
University of Miami

Professional Registration

Licensed Professional Engineer, Florida

Michael Carr, PE, LEED AP

Project Engineer
Site Engineering/Land Development, Hydraulics & Hydrology

8 years in the industry ~ 8 years with Langan

Mr. Carr has eight years of experience in civil engineering projects. His specialization includes site engineering, hydraulics and hydrology, storm drainage, water distribution systems and sanitary sewerage (including Low Head Pressure systems, gravity, and pump stations) conveyance design.

Mr. Carr's experience includes land development design for sites of new commercial and residential development and redevelopment, regulatory permitting processes, and construction support and coordination. A listing of example projects that Mr. Carr has been involved with is provided below.

Selected Projects

Water Resource Investigations and Water Well Design, Installation and Testing – Colombia and Nicaragua
Flagler Station Building 34 – Miami-Dade County, FL
Serena Del Mar Master Planning – Cartagena, Colombia
SLS Brickell – Miami, FL
1400 Biscayne Boulevard, Miami, FL
Silverspot Cinema – Coconut Creek, FL
Homestead AFB Customs Warehouse, Homestead, FL
University of Miami Frost School of Music, Coral Gables, FL
University of Miami Life Science Park, Miami, FL
1401 Brickell Avenue – Banco Santander, Miami, FL
Aventura Marina Parking Lot Expansion, Aventura, FL
First Baptist Church of Fort Lauderdale, Fort Lauderdale, FL
Sunny Hills, Units 12, 13, 14, and 15, Washington County, FL
Medical Office Building Complex, Lake Mary, FL
Miami Dolphins Water Park, Miami Gardens, FL
Biomass Power Plant, Tallahassee, FL
Biomass Power Plant, Port St. Joe, FL
Westshore Plaza – Seasons 52, Tampa, FL
Carrabba's - Fort Lauderdale, Fort Lauderdale, FL
Market Square Shopping Center at Tampa Palms, Tampa, FL
Tampa Palms Park and Ride Facility, Tampa, FL
Cooper City Commerce Park, Cooper City, FL
Sun'n Lake Estates of Sebring, Unit 12, Highlands County, FL
Promenade at Coconut Creek, City of Coconut Creek, FL
Heartland Ranchettes, Okeechobee County, FL

Education

B.Sc., Civil Engineering
Pennsylvania State University

Professional Registration

Licensed Professional Engineer, Florida

Certifications

40-hour HAZWOPER, OSHA

Nuclear Moisture-Density Gage Certified

Florida Qualified Stormwater Management Inspector

Stewart H. Abrams, PE

Senior Associate/Vice President

Corporate Director of Remediation Technology

Bioremediation, Chemical Oxidation, Water Treatment, Air Sparging and Soil Vapor Extraction

32 years in the industry ~ 6 years with Langan

Mr. Abrams has over 30 years of experience in site remediation, groundwater remediation, Brownfields redevelopment, water treatment and engineering design. He is an expert in remedial technology, with particular emphasis on bioremediation, chemical oxidation/reduction technologies, soil vapor extraction and air sparging. He also has extensive experience in water process engineering, notably water and wastewater treatment and industrial waste treatment for both organics and metals. He has recently become involved in the emerging field of Sustainable Remediation. Previous to joining Langan, Mr. Abrams held positions of National Practice Leader for Remediation at a major national consulting and engineering company and as Vice President of Operations at an environmental R&D firm.

Selected Projects

Brixmor – Randallstown, Maryland
New Jersey Turnpike, Cranbury, NJ
In-situ remediation of hexavalent chromium, NJ
Pump & Treat Shutdown, MA
Aerobic Bioaugmentation, NJ
Remediation of Chlorinated Solvents, NJ
PCE Contaminated Aquifer, NJ
NJGE – Schenectady, NY
United Technologies Corporation, Lodi, NJ
BROS Superfund Site, Bridgeport, NJ
Sunoco, Blackwood, NJ
First Morris Bank, Former Morris Graphics Facility, Morristown, NJ
Woodlands Superfund Site, Woodland Twp, NJ
Greenberg Gibbons Commercial, Annapolis, MD

Education

M.Sc., Environmental Sciences
Rutgers University, 1991

Graduate Studies in Public Administration
New York University

B.Sc., Civil Engineering
Rutgers University, 1981

B.A., Political Science
Rutgers University, 1981

Professional Registration

Professional Engineer (PE) in NJ, NY, PA

New Jersey Subsurface Evaluator and UST Certification

Affiliations

Sustainable Remediation Forum (SURF) (2009 – present)

ITRC Integrated Chlorinated Site Remedy Committee (2007 – 2009)

NJDEP Advisory Council on Environmental Justice (2002 - 2004, 2006 - 2013)

Governor-elect Corzine Environmental Policy Transition Committee (2005 – 2006)

NJDEP Remediation Stakeholders Committee (2007 - 2009)

Sustainable Cherry Hill – Board of Trustees (2008 – 2011)

Licenses

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

BOARD OF PROFESSIONAL GEOLOGISTS (850) 487-1395
1940 NORTH MONROE STREET
TALLAHASSEE FL 32399-0783

LANGAN ENGINEERING&ENVIRONMENTAL SERVICES,INC
RIVER DR. CENTER I
ELMWOOD PARK NJ 074070000

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DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
GB401 ISSUED: 07/28/2014
GEOLOGY BUSINESS
LANGAN ENGINEERING&ENVIRONMENTAL SERVICES,INC
IS CERTIFIED under the provisions of Ch.492 FS.
Expiration date: JUL 31, 2016 L1407280001729

DETACH HERE

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STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS

LICENSE NUMBER
GB401

The GEOLOGY BUSINESS
Named below IS CERTIFIED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2016

LANGAN ENGINEERING&ENVIRONMENTAL SERVICES,INC
RIVER DR. CENTER I
ELMWOOD PARK NJ 074070000

ISSUED: 07/28/2014 DISPLAY AS REQUIRED BY LAW SEQ # L1407280001729

RICK SCOTT, GOVERNOR KEN LAWSON, SECRETARY

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS

LICENSE NUMBER
PG2077

The PROFESSIONAL GEOLOGIST
Named below IS LICENSED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2016

YARINA, VINCENT D
11115 WHITEHAWK
PLANTATION FL 33324

ISSUED: 07/21/2014 DISPLAY AS REQUIRED BY LAW SEQ # L1407210001774

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

BOARD OF PROFESSIONAL GEOLOGISTS (850) 487-1395
1940 NORTH MONROE STREET
TALLAHASSEE FL 32399-0783

SPECTOR, DANIEL
421 NE 110 STREET
MIAMI FL 331617148

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DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
PG1999 ISSUED: 05/01/2014
PROFESSIONAL GEOLOGIST
SPECTOR, DANIEL
IS LICENSED under the provisions of Ch.492 FS.
Expiration date: JUL 31, 2016 L1405010001304

DETACH HERE

RICK SCOTT, GOVERNOR KEN LAWSON, SECRETARY

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS

LICENSE NUMBER
PG1999

The PROFESSIONAL GEOLOGIST
Named below IS LICENSED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2016

SPECTOR, DANIEL
421 NE 110 STREET
MIAMI FL 331617148

ISSUED: 05/01/2014 DISPLAY AS REQUIRED BY LAW SEQ # L1405010001304

State of Florida
Board of Professional Engineers
Attests that
Fangmei Zhang, P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2015 P.E. Lic. No: 70325
Audit No: 228201524073

State of Florida
Board of Professional Engineers
Attests that
Raymond Edwin Lees, P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2015 P.E. Lic. No: 76245
Audit No: 228201532259 I

State of Florida
Board of Professional Engineers
Attests that
Roger Alan Archabal, P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2015 P.E. Lic. No: 48404
Audit No: 228201526277

State of Florida

Board of Professional Engineers

Attests that

John Magnavita, P.E.

Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2015

Audit No: 228201527060

P.E. Lic. No: 54826

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT
1940 NORTH MONROE STREET
TALLAHASSEE FL 32399-0783

(850) 487-1395

LANGAN ENGINEERING & ENVIRONMENTAL SERVICES INC
JOHN MAGNAVITA
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STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
ZA341 ISSUED: 09/17/2013
ASBESTOS BUSINESS ORGANIZATION
LANGAN ENGINEERING & ENVIRONMENTAL SERVICES INC
JOHN MAGNAVITA
IS LICENSED under the provisions of Ch 469 FS.
Expiration date: NOV 30, 2015 L1309170004171

The Department of State is leading the commemoration of Florida's 500th anniversary in 2013. For more information, please go to www.VivaFlorida.org.

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STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
ASBESTOS LICENSING UNIT

LICENSE NUMBER
ZA341

The ASBESTOS BUSINESS ORGANIZATION
Named below IS LICENSED
Under the provisions of Chapter 469 FS.
Expiration date: NOV 30, 2015

LANGAN ENGINEERING & ENVIRONMENTAL SERVICES INC
JOHN MAGNAVITA
RIVER DRIVE CENTER #1
ELMWOOD PARK NJ 07407

VIVA FLORIDA 500

RICK SCOTT, GOVERNOR — ISSUED: 09/17/2013 SEQ # L1309170004171 — KEN LAWSON, SECRETARY

DISPLAY AS REQUIRED BY LAW

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

MOLD-RELATED SERVICES LICENSING PROGRAM
1940 NORTH MONROE STREET
TALLAHASSEE FL 32399-0783

(850) 487-1395

ALLISON, NATHAN THOMAS
1500 WEST CYPRESS CREEK ROAD
SUITE 413
FORT LAUDERDALE FL 33309

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STATE OF FLORIDA AC# 6130783
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
MRSA72 05/17/12 118186376
MOLD ASSESSOR
ALLISON, NATHAN THOMAS
IS CERTIFIED under the provisions of Ch.468 FS.
Expiration date: JUL 31, 2014 L12051701038

DETACH HERE

AC# 6130783

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
MOLD-RELATED SERVICES LICENSING PROGRAM

SEQ# L12051701038

DATE	BATCH NUMBER	LICENSE NBR
05/17/2012	118186376	MRSA72

The MOLD ASSESSOR
Named below IS CERTIFIED
Under the provisions of Chapter 468 FS.
Expiration date: JUL 31, 2014

ALLISON, NATHAN THOMAS
1500 WEST CYPRESS CREEK ROAD
SUITE 413
FORT LAUDERDALE FL 33309

RICK SCOTT, GOVERNOR — KEN LAWSON, SECRETARY

DISPLAY AS REQUIRED BY LAW

Asbestos Consulting & Training Systems

This is to Certify that

Nathan Allison

XXX-XX-7577

4401 NW 3 ST, Coconut Creek, FL

has successfully completed an English

Asbestos Building Inspection Refresher

11-Oct-13 TO 11-Oct-13

NDAAC Provider #451 Trainer(s): Mark Koch

Training Address: 900 NW 5 AV, Fort Lauderdale, FL 33311

Processed By: Seagull. To Authenticate Certificate: www.seagulltraining.com

James F. Stump, Course Sponsor

This Certificate Expires: 11-Oct-14

Certificate Number

Course Number SE1341

American IAQ Council

hereby certifies that

Nathan Allison

having successfully passed the Examination, is hereby granted the CRMI designation

Council-certified Residential Mold Inspector

CRMI

Expiration Date: January 31, 2008

Charles F. Wiles, Exec Director

Certificate #

United States Environmental Protection Agency

This is to certify that

Nathan Thomas Allison

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 October 11, 2014

FL-R-108709-1
Certification #

Issued On

Jeannette R. Gaitis, Chief
Pesticides and Toxic Substances Branch

ACM ENGINEERING & ENVIRONMENTAL SERVICES INC.

certifies that

Nathan Allison

has successfully completed the

NIOSH 582 Equivalency Course

for sampling and analysis of airborne fibers conducted by ACM Engineering & Environmental Services, Inc.

Presented this 13th day of January, 2011

Larry Malone, Course Instructor

Course Dates: January 10-13, 2011

ACM ENGINEERING & ENVIRONMENTAL SERVICES, INC.

Indiana – Texas – Florida – Illinois – Georgia

Contaminated Water Identification & Remediation Protocols
Training Course
CERTIFICATE OF COMPLETION
2.0 Continuing Education Credits

Awarded to

Nathan Allison

On the 28th day of July, 2006

David A. Lamfrom, Vice President - South Florida

Patrick T. Griffin, P.E., President & CEO

Florida Department of Financial Services-Continuing Education-Course #55847

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Related Experience and References

SECTION FIVE: RELATED EXPERIENCE + REFERENCES

Summary of Qualifications

Across Florida we have provided environmental engineering services similar to those requested by the City of Hollywood (the City). Langan's full-service environmental and civil engineering capabilities include stormwater, assessment, environmental site assessments, site-wide hydrogeological characterizations, soil and groundwater remediation system design, regulatory advocacy and support, environmental permitting and compliance, and project and contractor management. We pride ourselves on solving challenging technical and regulatory problems in a manner that is protective of the environment and is acceptable to the regulatory agencies, while maintaining a focus on cost and practical solutions. Our project approach will incorporate these skills to assist the City.

Our public-agency clients include:

- The Monroe County Solid Waste Management Division
- The City of Homestead
- The City of Pompano Beach
- The City of Lauderhill
- The City of Coconut Creek
- The Miami-Dade Department of Regulatory and Economic Resources
- The Government of Bermuda
- The Miami-Dade Aviation Department
- The City of Miami Beach
- The City of Miami
- The Florida Department of Environmental Protection – South, Southwest, and Southeast Districts
- The South Florida Water Management District

Notable private-sector clients include:

- Lennar Homes
- Fontainebleau Resort
- Ryder Transportation Services
- Turnberry Associates
- Prudential Real Estate Investors
- Standard Pacific Homes
- The Miami Dolphins
- Related Group of Florida
- Rialto Capital
- The Goldstein Environmental Law Firm

LANDFILL GROUNDWATER MONITORING
MONROE COUNTY, FL

RELEVANCE

- ✓ Coordination with FDEP
- ✓ Landfill groundwater monitoring
- ✓ Application for termination of long-term monitoring

Langan is monitoring groundwater semi-annually at three county landfills – Cudjoe Key, Long Key, and Key Largo – as part of the county's solid waste permits from the Florida Department of Environmental Protection (FDEP).

The project involves collecting samples from 11 monitoring wells and one surface water location, in accordance with Chapter 62-701, Florida Administrative Code. Analytical parameters for groundwater are: cadmium, chromium, nickel, lead, and zinc by EPA Method 6010B; mercury by EPA Method 7470A; total organic carbon by EPA Method 5310C; nitrate (as N) and nitrite (as N) by EPA Method 353.2; total nitrate/nitrite by EPA Method 353.2; Kjedhal nitrogen by EPA Method 351.2; Total nitrogen (lab calculation); phosphorus (as P) by EPA Method 365.4; total dissolved solids by EPA Method SM2540C; and total suspended solids by EPA Method SM2540D. Analytical parameters for surface water are: total aluminum, arsenic and iron by EPA Method 6010B; sulfate by EPA Method 300.0; chloride by EPA Method 300.0; chemical Oxygen Demand by EPA Method SM5220D; ammonia by EPA Method 350.1; and fecal coliform by EPA Method SM9222D

Under separate purchase orders, Langan repaired an aboveground well riser and will prepare documentation on behalf of the County that will support a request to reduce the number of analytes required by the monitoring program.

REFERENCE:
Monroe County Public Works
Rosa Washington
T: 305.292.4432
E: Washington-rosa@monroecounty-fl.gov

RYDER METHANE MITIGATION SERVICES
DORAL, FL

RELEVANCE

- ✓ Coordination with DERM
- ✓ Methane Assessment
- ✓ Methane Mitigation Design
- ✓ Construction
- ✓ O&M

Langan was contracted to prepare a Methane Gas Mitigation Plan (MGMP) and facilitate the selection of a contractor to build a methane mitigation system at the project site.

Langan's responsibilities include observing the construction of a methane gas mitigation system and post-construction operation and maintenance (O&M) of the system for a period of one year. Deliverables during construction included frequent interaction with the client and regulatory agencies such as the Miami-Dade County Department of Environmental Resource Management (DERM), regularly scheduled site visits to monitor construction activities, and the preparation of as-built drawings.

During the O&M Phase, Langan will supply staff to perform monitoring activities on a decreasing schedule over the life of the project. Initially, monitoring will take place on a weekly basis and then gradually begin to decline in frequency until staff is only required to visit the site on a quarterly basis. Staff will check system operations and record operating parameters as well as sample and record methane concentrations at designated vacuum extraction wells and vapor monitoring wells at scheduled intervals. Findings from site visits are included in a quarterly report that provides a summary of monitoring results, an interpretation of the data and any conclusions and recommendations.

Because the building had been built without a mitigation system, the challenge for Langan was to retrofit the building with a methane mitigation system, which involved designing the system to be as unobtrusive as possible to facility operations.

The total cost of the pilot testing, permitting, and construction was $192,000. Langan is monitoring semi-annually at a cost of $10,000 per year.

REFERENCE:
Ryder System, Inc.
George Luostari
T: 305.500.3726
E: gluostari@ryder.com

MORGAN'S POINT REMEDIATION PROJECT
SOUTHAMPTON, BERMUDA

RELEVANCE

- ✓ Design
- ✓ Construction
- ✓ Monitoring

Langan is acting as the specialist remediation consultant for the Government of Bermuda on this report property on over 280 acres. This project involves landfill and remediation design and construction services of groundwater remediation systems and clean-up of the former U.S. Naval Base Annex at Morgan's Point.

REFERENCE:
Entech, LTD
Vanessa Turner
T: +1 441.292.9192
E: vturner@entech.bm

ROSCOE WARREN PARK ENVIRONMENTAL SERVICES
HOMESTEAD, FL

RELEVANCE

- ✓ Coordination with DERM
- ✓ Landfill construction engineering certification
- ✓ Groundwater monitoring

Langan was selected to implement a groundwater monitoring program to comply with the Miami-Dade County Regulatory and Economic Resources Department for Environmental Resources Management (DERM)-approved Remedial Action Plan (RAP) for this recreational park housed on the former Homestead Landfill.

Activities leading up to the implementation of the groundwater monitoring program included site reconnaissance to identify the presence and condition of six existing monitoring wells. Langan proceeded to install one monitoring well as only five of the existing wells were visible at the site.

Groundwater sampling will be conducted by collecting samples from each well and one surface water location at the southeast corner of the site on a semi-annual basis. Langan will measure water quality parameters (dissolved oxygen, temperature pH, conductivity, and turbidity) until values stabilize within Florida Department of Environmental Protection (FDEP)-acceptable ranges. Groundwater and surface water samples will be analyzed for inorganics (chloride, sulfate, total ammonia, and total dissolved solids), metals (aluminum, iron, sodium, arsenic, cadmium, lead, and mercury), phenolic compounds, volatile organic aromatics (VOAs) and volatile organic halocarbons (VOHs).

Langan will prepare semi-annual monitoring reports that will include a summary of field activities and analytical results, figures, tables, conclusions and recommendations.

REFERENCE:
City of Homestead
Ana Azicri
T: 305.224.4777
E: aazicri@cityofhomestead.com

TRADEMARK METALS RECYCLING – SUNSHINE FACILITY
OPA-LOCKA, FL

RELEVANCE

- ✓ Brownfield redevelopment

Langan was contracted to design and implement groundwater monitoring programs for the Trademark Metals Recycling (Sunshine) facility in Opa Locka, Florida. The first program is required as part of the facility's solid waste annual operating permit to monitor facility operations on groundwater quality. The second program is required as part of qualifying for conditional closure to monitor groundwater quality at the facility boundaries.

Langan designed both monitoring programs (i.e., determined well locations and construction and contaminants of concern), secured approval from the Miami-Dade County Department of Permitting, Environment and Regulatory Affairs, installed and developed the monitoring wells, and implemented the monitoring.

The monitoring program for the operating permit is semi-annual and continuous and was initiated in 2010 with four monitoring wells. The monitoring program for the conditional closure is quarterly for at least one year and was initiated in 2012 with five monitoring wells.

The monitoring programs include sampling for the following contaminants of concern: volatile organic aromatics, volatile organic halocarbons, polycyclic aromatic hydrocarbons, total recoverable petroleum hydrocarbons, isopropylbenzene, trimethylbenzenes, ammonia, iron, arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver. Langan manages the off-site waste disposal and agency notification of field work. Langan coordinates field work with facility management to minimize disruption to facility operations and to ensure the health and safety of Langan personnel.

REFERENCE:
Trademark Metals Recycling LLC
Brenda Anderson
T: 813.677.4471
E: banderson@tmrecycling.com

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Schedule and Availability

SECTION SIX: SCHEDULE AND AVAILABILITY
STAFFING RESOURCES AND LOCATION

Langan is committed to dedicating substantial time and effort to this important project and offers an ample pool of local staffing resources from our offices in Miami-Dade and Broward counties – each conveniently located less than 16 miles from the City of Hollywood.

Miami Lakes Office
15150 NW 79 Court, Suite 200
Miami Lakes, FL 33016
Distance to project: 15.5 miles

Fort Lauderdale Office
110 E. Broward Boulevard, Suite 1700
Fort Lauderdale, FL 33301
Distance to project: 11.2 miles

Our management approach enables us to transition staff from existing projects approaching conclusion to address new opportunities as they are awarded. As such, there will be sufficient time for our professional staff to adequately engage in the provision of services immediately upon authorization by the City of Hollywood.

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References

SECTION SEVEN: REFERENCES
PERFORMANCE VERIFICATION

For over three decades, our South Florida staff of more than 35 environmental, geotechnical, and civil engineering and consulting professionals has helped clients such as local governments and developers evaluate and redevelop underutilized properties as prospering urban centers. We wish to serve and provide the same high level of consulting that we share with the following clients to the City of Hollywood.

LANDFILL GROUNDWATER MONITORING
Monroe County Public Works
Rosa Washington, Senior Solid Waste Administrator
1100 Simonton Street, Room 2-231, Key West, Florida 33040
T: 305.292.4432 *F*: 305.292.4555 *E*: Washington-rosa@monroecounty-fl.gov
Date of Contract: April 2012
Description: Landfill Compliance Monitoring

MORGAN'S POINT REMEDIATION PROJECT
Entech, LTD
Vanessa Turner, Project Manager
P.O. Box HM 2574, HM KX, Bermuda
T: +1 441.292.9192 *F*: +1 441.294.9087 *E*: vturner@entech.bm
Date of Contract: January 2014
Description: Environmental Assessment and Remediation

PARK SQUARE AVENTURA
Integra Investments
Steven Sorensen, Chief Development Officer
150 SE 2nd Avenue, Suite 800, Miami, Florida 33131
T: 305.774.0110 *F*: 305.567.1169 *E*: ssorensen@integrafl.com
Date of Contract: October 2013
Description: Geotechnical Engineering and Environmental Assessment

METHANE MITIGATION SERVICES
Ryder System, Inc.
George Luostari, Senior Manager
11690 NW 105 Street, Miami, Florida 33178
T: 305.500.3726 *F*: 305.500.4713 *E*: gluostari@ryder.com
Date of Contract: September 2011
Description: Environmental Remediation

ROSCOE WARREN PARK
City of Homestead
Ana Azicri, Project Coordinator
551 SE 8th Street, Homestead, Florida 33030
T: 305.224.4777 *F*: 305.224.4789 *E*: aazicri@cityofhomestead.com
Date of Contract: May 2014
Description: Landfill Compliance Monitoring

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Administrative Information

SECTION EIGHT: ADMINISTRATIVE INFORMATION
FORMS, LICENSES AND OTHER REQUIREMENTS

Per the requirements of the RFQ, the following items are included in this section:

- Standard Form 330
- Certificate of Authorization and Licenses
- Contract History
- Administrative/Judicial History
- Financial Statement
- Surety Information
- Bankruptcy Information
- Pending Litigation
- EEO Statement
- Insurance Information
- References
- Declaration
- Conflict of Interest
- Hold Harmless/Indemnification
- Corporation Statement
- RFQ Checklist
- Acknowledgement/Signature page
- Source of Information
- Addendum(s)

Standard Form 330

ARCHITECT - ENGINEER QUALIFICATIONS

PART I - CONTRACT-SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION *(City and State)*

Request for Qualifications for Environment Engineering Service

2. PUBLIC NOTICE DATE	3. SOLICITATION OR PROJECT NUMBER
07/18/2014	RFQ-4427-14-IS

B. ARCHITECT-ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Vince Yarina, PG, CEM, Sr. Assoc/VP

5. NAME OF FIRM

Langan Engineering and Environmental Services, Inc.

6. TELEPHONE NUMBER	7. FAX NUMBER	8. E-MAIL ADDRESS
783.264.7214	786.264.7201	vyarina@langan.com

C. PROPOSED TEAM

(Complete this section for the prime contractor and all key subcontractors.)

	(Check) PRIME	(Check) J-V PARTNER	(Check) SUBCON-TRACTOR	9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
a.	✘			Langan Engineering and Environmental Services, Inc. ☒ CHECK IF BRANCH OFFICE	15150 NW 79th Court, Suite 200, Miami Lakes, FL 33016-5848	Environmental, Geotechnical, and Hazardouse Materials Engineering
b.				☐ CHECK IF BRANCH OFFICE		
c.				☐ CHECK IF BRANCH OFFICE		
d.				☐ CHECK IF BRANCH OFFICE		
e.				☐ CHECK IF BRANCH OFFICE		
f.				☐ CHECK IF BRANCH OFFICE		

D. ORGANIZATIONAL CHART OF PROPOSED TEAM ☒ *(Attached)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
Vincent D. Yarina, PG, CEM	Project Manager	a. TOTAL 23	b. WITH CURRENT FIRM 16

15. FIRM NAME AND LOCATION *(City and State)* Langan Engineering & Environmental Services, Inc, Miami Lakes, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Pennsylvania State University, BS in Earth Science, 1992 Drexel University, MS in Engineering Geology, 1999	Registered Professional Geologist in Florida (No. 2077) and Pennsylvania (No. 3260-E) Certified Florida Environmental Assessor (No. 248) Licensed Environmental Professional (No. 73) Certified Environmental Manager in Nevada (No. 2104)

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
Biscayne Landing North Miami, Florida	2007	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Project Manager; The project consisted of the development of a residential community over a previous municipal waste landfill. The development consisted of mixed structure types, varying from low-rise single family homes, low-rise townhouse buildings and mid to high-rise towers.

b.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
151 Biscayne North Miami, Florida	Ongoing	N/A

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Project Manager; This project involves the amenities complex of a residential development being built on a former landfill. The complex will include a guard house, a pool, a one-story event room, one-story men's and women's shower and bathroom facilities, an athletic court, and a children's play area.The scope of work includes the design of a methane gas management system to monitor methane gas being produced by the landfill.

c.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
Cascades Park Remediation Project Tallahassee, Florida	2007	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Project Manager; Langan was responsible for design consulting and engineering oversight services for the $8M Cascades Park Remediation Project, a coal gasification plant and landfill Superfund site that underwent remediation by the City of Tallahassee under an Administration Order of Consent with USEPA. Langan prepared the Removal Action Work Plan which received USEPA approval in a one month time period. Design specifications and drawings were developed for the removal of in excess of 47,000 cubic yards of contaminated soil, and the construction of a low permeability liner within the excavated area for future use as a stormwater management facility at the former plant site.

e.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
Pompano Beach Municipal Golf Course Pompano Beach, Florida	2011	N/A

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Project Manager; The City of Pompano Beach Municipal Golf Course is considered by Broward County EPD to be a contaminated site in which soil and groundwater are contaminated with arsenic; the site has been undergoing assessment and evaluation for a number of years. The city contracted Langan to help negotiate a final closure plan for the contamination. Langan collected soil and groundwater samples to determine the current status of the contamination.

e.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(if applicable)*
Morgan's Point Environmental Services South Hampton, Bermuda	Ongoing	N/A

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Project Manager; Langan is acting as the specialist remediation consultant for the Government of Bermuda for this project that involves temporary landfill services, sediment investigations, QA/QC and fill testing, and cave investigations. The scope of work includes validation; background, design and detailing, and tender assistance; and supervising and reporting activities.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
Stewart Abrams, PE	QA/QC	a. TOTAL: 25+	b. WITH CURRENT FIRM: 1

15. FIRM NAME AND LOCATION *(City and State)*: Langan Engineering & Environmental Services, Inc., Elmwood Park, NJ

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
M.S., Environmental Sciences, Rutgers University, 1991 New York University, Graduate School of Public Administration, 1983 B.S., Civil Engineering, Rutgers University, 1981 B.A., Political Science, Rutgers University, 1981	Registered Professional Engineer in NY, PA, NJ, NC New Jersey Subsurface Evaluator and UST Certification

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Northrop-Grumman Hawthorne, CA	PROFESSIONAL SERVICES 2004	CONSTRUCTION *(if applicable)*

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm.

QA/QC Officer; Supported a comprehensive remedial strategy for this multi-AOC site in southern California. Site divided into segments and specific "mini-plans" developed to exit from each AOC. Distilled this remedial strategic plan into a dynamic PowerPoint presentation to the LA Water Board as a means to achieve buy-in for the multi-year strategy. Evaluated the hydrogeology of the site, including the deep Bellflower aquifer. Performed soil vapor extraction pilot test under the slab and within an operating manufacturing building.

b.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
FMC Corporation South Charleston, WV	PROFESSIONAL SERVICES 2007	CONSTRUCTION *(if applicable)*

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm.

QA/QC Officer; Field pilot study for the evaluation of activated persulfate for the remediation of carbon tetrachloride DANPL. Both iron activation and alkaline activation methods were evaluated and project was preceded by treatability studies. Evaluated DNAPL rebound.

c.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
General Electric Schenectady, NY	PROFESSIONAL SERVICES 2004	CONSTRUCTION *(if applicable)*

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm.

QA/QC Officer; Served as Technical Director of the design of a comprehensive remediation program for a New York State site involving the bioremediation of three separate VOC plumes, as well as the collection and treatment of leachate seeps. Supported GE Researchers in the design and execution of a laboratory flow through column test utilizing innovative sulfate reduction techniques to remediate a BTEX plume. In turn, lead the scale up of this column study into a design.

d.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Honeywell International Groton, MA	PROFESSIONAL SERVICES 2007	CONSTRUCTION *(if applicable)*

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm.

QA/QC Officer; Site with both Cr+6 and TCE contamination. A wide range of both chemical and biological reducing agents were laboratory tested and reviewed as part of a comprehensive feasibility study. Zero-valent iron, bioremediation, calcium polysulfide, and ferrous sulfate were all tested. Directed the field pilot testing of bioaugmentation and nano-scale zero valent iron at the sites. Bioaugmentation selected for full scale, since it was highly effective for both Cr+6 and TCE. Remediation targets are both Chromium and chlorinated solvents. Working around an existing pump and treat system.

e.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Greenberg Gibbons Commercial Annapolis, MD	PROFESSIONAL SERVICES 2008	CONSTRUCTION *(if applicable)*

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm.

QA/QC Officer; Directed the injection of over 300,000 pounds of potassium permanganate for chlorinated solvent destruction at a large Brownfield site in Maryland. Extensive use of horizontal wells. Work being performed under a fixed price contract with blended finite insurance. Prudential Real Estate is a significant investor in this program.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
Daniel Spector, PG, LEP	Remediation, Site Assessment / Hydrogeology	a. TOTAL 22	b. WITH CURRENT FIRM 10

15. FIRM NAME AND LOCATION *(City and State)* Langan Engineering & Environmental Services, Inc, Miami Lakes, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Hunter College, CUNY, BA, Geology Florida International University, M.S., Geosciences	Registered Professional Geologist, Florida Licensed Professional Geologist, Alabama Licensed Environmental Professional, Florida

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Biscayne Landing
North Miami, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2007
CONSTRUCTION *(if applicable)*:

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Responsible for Remediation, Site Assessment/Hydrogeology; The project consisted of the development of a residential community over a previous municipal waste landfill. The development consisted of mixed structure types, varying from low-rise single family homes, low-rise townhouse buildings and mid to high-rise towers.

b.

(1) TITLE AND LOCATION (City and State)
151 Biscayne
North Miami, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: Ongoing
CONSTRUCTION *(if applicable)*: N/A

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Responsible for Remediation, Site Assessment/Hydrogeology; This project involves the amenities complex of a residential development being built on a former landfill. The complex will include a guard house, a pool, a one-story event room, one-story men's and women's shower and bathroom facilities, an athletic court, and a children's play area.The scope of work includes the design of a methane gas management system to monitor methane gas being produced by the landfill.

c.

(1) TITLE AND LOCATION (City and State)
Landfill Groundwater Monitoring
Monroe County, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: Ongoing
CONSTRUCTION *(if applicable)*:

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Responsible for Remediation, Site Assessment/Hydrogeology; Langan is monitoring groundwater semi-annually at three county landfills – Cudjoe Key, Long Key, and Key Largo – as part of the county's solid waste permits from the Florida Department of Environmental Protection (FDEP).

e.

(1) TITLE AND LOCATION (City and State)
Pompano Beach Municipal Golf Course
Pompano Beach, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2011
CONSTRUCTION *(if applicable)*: N/A

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Responsible for Remediation, Site Assessment/Hydrogeology; The City of Pompano Beach Municipal Golf Course is considered by Broward County EPD to be a contaminated site in which soil and groundwater are contaminated with arsenic; the site has been undergoing assessment and evaluation for a number of years. The city contracted Langan to help negotiate a final closure plan for the contamination. Langan collected soil and groundwater samples to determine the current status of the contamination.

e.

(1) TITLE AND LOCATION (City and State)
Ryder Methane Mitigation Services
Doral, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: Ongoing
CONSTRUCTION *(if applicable)*: N/A

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Responsible for Remediation, Site Assessment/Hydrogeology; Langan's responsibilities include observing the construction of a methane gas mitigation system and post-construction operation and maintenance (O&M) of the system for a period of one year. Deliverables during construction included frequent interaction with the client and regulatory agencies such as the Miami-Dade County Department of Environmental Resource Management (DERM), regularly scheduled site visits to monitor construction activities, and the preparation of as-built drawings.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
Raymond Lees, PE BCEE, CHMM	Remediation	a. TOTAL: 25	b. WITH CURRENT FIRM: 2

15. FIRM NAME AND LOCATION *(City and State)* Langan Engineering & Environmental Services, Inc., Elmwood Park, NJ

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
ME, Environmental Engineering, Clemson University B.Sc., Civil Engineering. Drexel University	Professional Engineer FL, DE, NY, PA, OH, NJ, MD; Board Certified Environmental Engineer (BCEE); Certified Hazardous Materials Manager; New Jersey N2 Operator; Certified Underground Storage Tank Professional; Sewage Plant and System Operator; Wastewater Treatment Plant Operator

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

American Academy of Environmental Engineers, Chief Examiner
American Society of Civil Engineers, Philadelphia Section, Chair Env. Group-1998
Chi Epsilon - National Civil Engineering Honor Society
National Society of Professional Engineers
Project Management Institute
Water Pollution Control Federation

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Remedial Design
New Jersey

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2011 | CONSTRUCTION *(if applicable)*:

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm.

Managed a remedial design for a landfill cap and soil remediation at a CERCLA site in New Jersey. The remedial design for the 10-acre landfill consisted of multicomponent RCRA cap, groundwater interception trench, and gabion stability wall. Stream restoration, including wetland mitigation, was integrated into the soil remediation component of the project.

b.

(1) TITLE AND LOCATION (City and State)
Concept Design
Pennsylvania

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2011 | CONSTRUCTION *(if applicable)*:

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm.

Managed a conceptual design for expansion of a 0.1-mgd sanitary landfill leachate treatment plant. The treatment system consisted of a biological sequencing batch reactor, metals precipitation, and clarification.

c.

(1) TITLE AND LOCATION (City and State)
151 Biscayne
North Miami, Florida

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing | CONSTRUCTION *(if applicable)*:

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Lead remediation engineer; This project involves the amenities complex of a residential development being built on a former landfill. The complex will include a guard house, a pool, a one-story event room, one-story men's and women's shower and bathroom facilities, an athletic court, and a children's play area.The scope of work includes the design of a methane gas management system to monitor methane gas being produced by the landfill.

d.

(1) TITLE AND LOCATION (City and State)
Morgan's Point Environmental Services
South Hampton, Bermuda

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing | CONSTRUCTION *(if applicable)*:

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Lead remediation engineer; Langan is acting as the specialist remediation consultant for the Government of Bermuda for this project that involves temporary landfill services, sediment investigations, QA/QC and fill testing, and cave investigations. The scope of work includes validation; background, design and detailing, and tender assistance; and supervising and reporting activities.

e.

(1) TITLE AND LOCATION (City and State)
RCRA RFI/CMS/CMA
Pennsylvania

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2010 | CONSTRUCTION *(if applicable)*:

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm.

Investigated and characterized volatile organic compounds and metals in groundwater, fractured bedrock, soil and sediment for volatile organic compounds and metals. An interim corrective action involving groundwater recovery and treatment was designed and implemented to control off-site migration of impacted groundwater.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
Fangmei Zhang, PhD, PE	Remediation	a. TOTAL: 9	b. WITH CURRENT FIRM: 1

15. FIRM NAME AND LOCATION *(City and State)*: Langan Engineering & Environmental Services, Inc., Elmwood Park, NJ

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Ph.D., Civil Engineering, Case Western Reserve University M.S., Environmental Engineering, Tongji University, Shanghai, China B.S., Environmental Engineering, Southeast University, Nanjing, China	Professional Engineer FL

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **151 Biscayne**, North Miami, Florida

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION *(if applicable)*:

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE — ☒ Check if project performed with current firm.

Remediation engineer; This project involves the amenities complex of a residential development being built on a former landfill. The complex will include a guard house, a pool, a one-story event room, one-story men's and women's shower and bathroom facilities, an athletic court, and a children's play area.The scope of work includes the design of a methane gas management system to monitor methane gas being produced by the landfill.

b.

(1) TITLE AND LOCATION (City and State): **Roscoe Warren Park Environmental Services**, Homestead, Florida

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION *(if applicable)*:

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE — ☒ Check if project performed with current firm.

Remediation engineer; Langan was selected to implement a groundwater monitoring program to comply with the Miami-Dade County Regulatory and Economic Resources Department for Environmental Resources Management (DERM)-approved Remedial Action Plan (RAP) for this recreational park housed on the former Homestead Landfill.

c.

(1) TITLE AND LOCATION (City and State): **Biscayne Landing**, North Miami, Florida

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2007; CONSTRUCTION *(if applicable)*:

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE — ☐ Check if project performed with current firm.

Environmental engineer; The project consisted of the development of a residential community over a previous municipal waste landfill. The development consisted of mixed structure types, varying from low-rise single family homes, low-rise townhouse buildings and mid to high-rise towers.

d.

(1) TITLE AND LOCATION (City and State): **Morgan's Point Environmental Services**, South Hampton, Bermuda

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION *(if applicable)*:

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE — ☒ Check if project performed with current firm.

Environmental engineer; Langan is acting as the specialist remediation consultant for the Government of Bermuda for this project that involves temporary landfill services, sediment investigations, QA/QC and fill testing, and cave investigations. The scope of work includes validation; background, design and detailing, and tender assistance; and supervising and reporting activities.

e.

(1) TITLE AND LOCATION (City and State): **Landfill Groundwater Monitoring**, Monroe County, Florida

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION *(if applicable)*:

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE — ☒ Check if project performed with current firm.

Environmental engineer; Langan is monitoring groundwater semi-annually at three county landfills – Cudjoe Key, Long Key, and Key Largo – as part of the county's solid waste permits from the Florida Department of Environmental Protection (FDEP).

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
Roger A. Archabal, PE	Geotechnical Engineer	a. TOTAL 27	b. WITH CURRENT FIRM 15

15. FIRM NAME AND LOCATION *(City and State0:* Langan Engineering & Environmental Services, Miami Lakes, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
University of New Orleans: M.S. Civil Engineering (Geotechnical) Arizona State University: B.S. Civil Engineering	Professional Engineer: Florida, Louisiana, Nevada

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

American Society of Civil Engineers (ASCE) - Executive Board, President 2000-2001; Leadership Miami - Greater Miami Chamber of Commerce - Executive Committee; Urban Land Institute (ULI), Design Build Institute of America (DBIA)

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Border Patrol at Dania Beach, Dania Beach, Broward County, Florida	PROFESSIONAL SERVICES 2008	CONSTRUCTION *(if applicable)* 2009

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Mr. Archabal managed the geotechnical engineering services component for Langan's multi-service effort for a 30,000 SF Border Patrol Facility which was built over highly compressible organic deposits. Design services include site planning, grading, drainage, and utility design. Specifically, Mr. Archabal managed the geotechnical engineering exploration study and prepared a thorough engineering report addressing site preparation procedures, ground improvement options, cost comparisons, and foundation recommendations for efficient cost-effective support of this proposed structure and site infrastructure. Due to an elevated arsenic content in the native muck soils, Mr. Archabal devised a soil-mixing program to stabilize and improve the much to become a suitable stabilized subgrade material. This reduced off-site disposal costs saving unnecessary construction costs.

b.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Biscayne Landing North Miami, Florida	PROFESSIONAL SERVICES 2007	CONSTRUCTION *(if applicable)*

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Geotechnical Engineer; The project consisted of the development of a residential community over a previous municipal waste landfill. The development consisted of mixed structure types, varying from low-rise single family homes, low-rise townhouse buildings and mid to high-rise towers.

c.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
151 Biscayne North Miami, Florida	PROFESSIONAL SERVICES Ongoing	CONSTRUCTION *(if applicable)* n/a

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Lead geotechnical engineer; This project involves the amenities complex of a residential development being built on a former landfill. The complex will include a guard house, a pool, a one-story event room, one-story men's and women's shower and bathroom facilities, an athletic court, and a children's play area.The scope of work includes the design of a methane gas management system to monitor methane gas being produced by the landfill.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
The Promenade at Coconut Creek Broward County, Florida	PROFESSIONAL SERVICES 2009	CONSTRUCTION *(if applicable)*

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Lead geotechnical engineer; This LEED certified, mixed-use development is comprised of sixteen buildings plus three parking garage structures. The project is situated on 23 acres and includes 200,000 SF retail and restaurants, 125,000 SF office and 456 mid-rise residential units.

e.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Cascades Park Remediation Tallahassee, Florida	PROFESSIONAL SERVICES 2007	CONSTRUCTION *(if applicable)*

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Lead geotechnical engineer; Langan was responsible for design consulting and engineering oversight services for the $8M Cascades Park Remediation Project, a coal gasification plant and landfill Superfund site that underwent remediation by the City of Tallahassee under an Administration Order of Consent with USEPA. Langan prepared the Removal Action Work Plan which received USEPA approval in a one month time period. Design specifications and drawings were developed for the removal of in excess of 47,000 cubic yards of contaminated soil, and the construction of a low permeability liner within the excavated area for future use as a stormwater management facility at the former plant site.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
John Magnavita, PE	Geotechnical Engineering	a. TOTAL: 21	b. WITH CURRENT FIRM: 21

15. FIRM NAME AND LOCATION *(City and State)* Langan Engineering & Environmental Services, Inc., Miami Lakes, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
University of Florida, BSCE 1992, Masters in Engineering, 2002	Florida Licensed Professional Engineer (PE No. 54826) Florida Licensed Asbestos Consultant (License No. AX-70 Florida AHERA Certified Asbestos Project Designer, Management Planner and Building Inspector

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

American Society of Civil Engineers

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
151 Biscayne North Miami, Florida	PROFESSIONAL SERVICES Ongoing	CONSTRUCTION *(if applicable)* N/A

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Geotechnical engineer; This project involves the amenities complex of a residential development being built on a former landfill. The complex will include a guard house, a pool, a one-story event room, one-story men's and women's shower and bathroom facilities, an athletic court, and a children's play area. The scope of work includes the design of a methane gas management system to monitor methane gas being produced by the landfill.

b.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
The 321 Development Project (Former Fashion Mall) Plantation, Florida	PROFESSIONAL SERVICES 2011	CONSTRUCTION *(if applicable)* N/A

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Senior project manager; This project included a three-level shopping mall, seven-story office building, and a parking garage. The scope of work included the visual inspection of the buildings to identify the presence, condition, and extent of asbestos-containing materials (ACM) as well as the preparation of an asbestos survey report. Mr. Magnavita managed and prepared the asbestos surveys of the several thousand square feet of the buildings. He was also responsible for providing overall project coordination, facilitating the selection of an abatement contractor, managing asbestos abatement monitoring, and preparing final clearance documents.

c.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Opa Locka Abandoned Water Treatment Plant Demolition Opa Locka, Florida	PROFESSIONAL SERVICES 2010	CONSTRUCTION *(if applicable)* N/A

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Senior project manager; This project involved the preparation of demolition specifications, asbestos/Lead-based paint consulting, and environmental hazard assessments for this 80-year-old water treatment facility that had been abandoned for 25 years. Mr. Magnavita was responsible for supervising and coordinating the asbestos survey and the lead-based paint check as well as the hazardous assessment, which precluded the demolition specification preparation.

d.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Fontainebleau Resort Miami Beach, Florida	PROFESSIONAL SERVICES 2009	CONSTRUCTION *(if applicable)* 2009

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Senior project manager; This project involved geotechnical, environmental due diligence, groundwater remediation and asbestos and mold abatements services for the entire 1,000,000-sf Fontainebleau Resort complex. Mr. Magnavita was responsible for the geotechnical investigation and site work as well as preparation and management of the asbestos surveys. He also prepared comprehensive maps of asbestos materials as part of the asbestos surveys, organized client/regulatory meetings regarding disposition of asbestos materials, managed asbestos abatement monitoring services, and prepared final clearance documents for re-occupation of entire facility.

e.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Biscayne Landing North Miami, Florida	PROFESSIONAL SERVICES 2007	CONSTRUCTION *(if applicable)* N/A

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Project engineer; The project consisted of the development of a residential community over a previous municipal waste landfill. The development consisted of mixed structure types, varying from low-rise single family homes, low-rise townhouse buildings and mid to high-rise towers.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
Leonardo Rodriguez, PE	Senior Project Manager, Site/Civil	a. TOTAL 22	b. WITH CURRENT FIRM 6

15. FIRM NAME AND LOCATION *(City and State);* Langan Engineering & Environmental Services, Miami Lakes, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Florida International University – *M.S., Environmental Engineering* University of Miami – *B.S., Civil Engineering*	Licensed Professional Engineer, Florida

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
The Promenade at Coconut Creek Broward County, Florida	PROFESSIONAL SERVICES 2008	CONSTRUCTION *(if applicable)* 2009

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Project Manager responsible for site development design engineering for a LEED certified, mixed-use development comprised of sixteen buildings plus three parking garage structures. The project is situated on 23 acres and includes 200,000 SF retail and restaurants, 125,000 SF office and 456 mid-rise residential units. Site design services include site planning, paving, grading and drainage design, and utilities design. 4,200 linear feet of exfiltration trench, 8,500 linear feet of water distribution lines and 4,400 linear feet of gravity sanitary sewer were designed. Offsite design services included several new turning lanes totaling 1,800 linear feet located on two Broward County roads and the design of 3,000 linear feet of new City roads with 1,275 linear feet of exfiltration trenches. Site Plan and Rezoning approvals were obtained in 2006 and City and Broward County EPD construction permits were obtained in 2007 for site development. Broward County Highway Construction and Engineering Division (BCHCED) and Broward County Traffic Engineering Division (BCTED) approvals were obtained in 2008. Construction Engineering Inspection services for the onsite and offsite improvements were provided. Construction completion certifications for onsite and offsite improvements were provided to City and County agencies. Phase 1 of the project opened in November 2008.

b.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Couva Childrens Hospital Couva, Trinidad and Tobago	PROFESSIONAL SERVICES Ongoing	CONSTRUCTION *(if applicable)* Ongoing

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Project Manager. Langan's role began with preparing master planning civil engineering documents and a preliminary geotechnical review. Our services were later expanded to design development for the civil infrastructure including, roads, site grading and stormwater management, water and sewerage and the onsite wastewater treatment plant. Langan's value-added services include fast-track design production. Master planning engineering documents were prepared in four weeks and design development documents were prepared in two months. Langan also used site optimization software to minimize the earthwork volumes, saving the client both construction time and cost.

c.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Border Patrol at Dania Beach Broward County, Florida	PROFESSIONAL SERVICES 2009	CONSTRUCTION *(if applicable)* 2009

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Project Manager, provided site development design engineering for a 40,000 square feet Border Patrol facility. Services include site planning, paving, grading and drainage, and utilities design and permitting. Site Plan approval from the City of Dania Beach and Construction approvals from Broward County were obtained.

d.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
University of Miami, Patricia Louise Frost Music Studios Coral Gables, Florida	PROFESSIONAL SERVICES 2012	CONSTRUCTION *(if applicable)* Ongoing

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Project Manager. Langan is providing complete site/civil engineering services and regulatory permitting services for Phase I of this expansion project which included new cutting edge practice studios, classrooms and recital halls. The expansions will provide area for the Frost School of Music to expand their rapidly growing enrollment in a phased design and construction approach. Due to the dense development nature of the current Frost School of Music campus the proposed building expansion required significant utility relocations and challenging grading constraints. Langan is currently preparing construction plans for an 800 linear foot water main relocation and providing coordination with regards to the electrical duct bank and chilled water utilities relocations.

e.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
University of Miami, Life Science & Technology Park Miami, Florida	PROFESSIONAL SERVICES 2013	CONSTRUCTION *(if applicable)* 2013

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.

Project Manager providing site/civil engineering for this research and development park will provide office and laboratory space for companies to collaborate with UM researchers, making it easier to turn scientific discoveries into commercial products. The extensive 1.4 million square foot research and development complex will be constructed in phases and consists of numerous mid-rise buildings and associated multi-level parking structures. Services include Site/Civil Engineering, Geotechnical Exploration, Foundation Recommendations, Pile Load Test Program, Earthwork Inspection & Testing, Percolation Testing, Injection Well Reasonable Assurance Report, and Varied Consulting Services to the Owner.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
Michael Carr, PE, LEED AP	Project Engineer, Site/Civil	a. TOTAL 9	b. WITH CURRENT FIRM 9

15. FIRM NAME AND LOCATION *(City and State):* Langan Engineering & Environmental Services, Miami Lakes, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Pennsylvania State University – Bachelor of Science in Civil Engineering	Florida –Professional Engineer – certificate pending

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
FDEP certified stormwater management inspector, SWFWMD Determination of Seasonal High Water Ground Water Table, FDOT Pond Design Training, OSHA Certified, Nuclear Gauge Safety Certification

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(4) YEAR COMPLETED	
The Promenade at Coconut Creek City of Coconut Creek, Florida	PROFESSIONAL SERVICES 2008	CONSTRUCTION *(if applicable)* 2009

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Project Engineer. The Promenade at Coconut Creek is a lifestyle center located on a 23-acre site featuring an upscale mixed use center includes 250,000 square feet of retail and restaurant space, 50,000 square feet of office space and a seven-story 456 residential unit building. The design includes site planning, stormwater management design including approximately 3,500 linear feet of exfiltration trench, plat amendment, traffic analysis, and utility coordination services. Florida Green Building / LEEDS certification were incorporated into the design.

b.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Couva Childrens Hospital Couva, Trinidad and Tobago	PROFESSIONAL SERVICES Ongoing	CONSTRUCTION *(if applicable)* Ongoing

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Project Engineer. Langan's role began with preparing master planning civil engineering documents and a preliminary geotechnical review. Our services were later expanded to design development for the civil infrastructure including, roads, site grading and stormwater management, water and sewerage and the onsite wastewater treatment plant. Langan's value-added services include fast-track design production. Master planning engineering documents were prepared in four weeks and design development documents were prepared in two months. Langan also used site optimization software to minimize the earthwork volumes, saving the client both construction time and cost.

c.

(1) TITLE AND LOCATION (City and State)	(3) YEAR COMPLETED	
Border Patrol at Dania Beach Broward County, Florida	PROFESSIONAL SERVICES 2009	CONSTRUCTION *(if applicable)* 2009

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Project Engineer, provided site development design engineering for a 30,000 square feet Border Patrol facility. Services include site planning, paving, grading and drainage, and utilities design and permitting. Site Plan approval from the City of Dania Beach and Construction approvals from Broward County were obtained.

d.

(1) TITLE AND LOCATION (City and State)	(3) YEAR COMPLETED	
University of Miami, Patricia Louise Frost Music Studios Coral Gables, Florida	PROFESSIONAL SERVICES 2012	CONSTRUCTION *(if applicable)* Ongoing

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Project Engineer. Langan is providing complete site/civil engineering services and regulatory permitting services for Phase I of this expansion project which included new cutting edge practice studios, classrooms and recital halls. The expansions will provide area for the Frost School of Music to expand their rapidly growing enrollment in a phased design and construction approach. Due to the dense development nature of the current Frost School of Music campus the proposed building expansion required significant utility relocations and challenging grading constraints. Langan is currently preparing construction plans for an 800 linear foot water main relocation and providing coordination with regards to the electrical duct bank and chilled water utilities relocations.

e.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
University of Miami, Life Science & Technology Park Miami, Florida	PROFESSIONAL SERVICES 2013	CONSTRUCTION *(if applicable)* 2013

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☒ Check if project performed with current firm.
Project Engineer providing site/civil engineering for this research and development park will provide office and laboratory space for companies to collaborate with UM researchers, making it easier to turn scientific discoveries into commercial products. The extensive 1.4 million square foot research and development complex will be constructed in phases and consists of numerous mid-rise buildings and associated multi-level parking structures. Services include Site/Civil Engineering, Geotechnical Exploration, Foundation Recommendations, Pile Load Test Program, Earthwork Inspection & Testing, Percolation Testing, Injection Well Reasonable Assurance Report, and Varied Consulting Services to the Owner.

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **1**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Biscayne Landing North Miami, Florida	2007	2007

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Swerdlow Boca Development Company	Randy Foltz	305.476.0100

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The project consisted of the development of a residential community over a previous municipal waste landfill. The development consisted of mixed structure types, varying from low-rise single family homes, low-rise townhouse buildings and mid to high-rise towers.

Langan's involvement concentrated on the critical geotechnical issues associated with development atop 20 ft to 25 ft of landfill waste material. The engineering properties of the landfill material were evaluated, specifically strength and compressibility under varied design loadings. Detailed pilot test programs were developed and implemented to (1) evaluate and refine the dynamic compaction as well as preload ground improvement processes, (2) study vibration and settlement influences on infrastructure at varied distances during the dynamic compaction process, (3) evaluate short-term settlement behavior of the landfill under varied dynamic compaction scenarios and design fill thicknesses, and (4) evaluate potential long-term creep settlement and its impact on site infrastructure (utilities, roadways, etc.) and structures.

Engineering evaluations and recommendations were provided relative to the most appropriate ground improvement techniques and future site performance. The recommendations were utilized to develop the site preparation program.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Langan Engineering & Environmental Services, Inc.	Miami Lakes, Florida	Ground Improvement Evaluations and Recommendations; Geotechnical Engineering; Implementation of Pilot Test Ground Improvement Program; Implementation of Site Preparation Procedures; Environmental Remediation

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **2**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
151 Biscayne North Miami, Florida	Ongoing	Ongoing

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Hellinger Penabad Companies	Andrew Hellinger	305.442.3108

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Langan is providing environmental, geotechnical, and civil engineering services for the amenities complex of this residential development being built on a former landfill. The complex will include a guard house, a pool, a one-story event room, one-story men's and women's shower and bathroom facilities, an athletic court, and a children's play area.

The environmental scope includes the design of a methane gas management system to monitor methane gas being produced by the landfill. Langan will also perform a geotechnical study to include an in-depth review of the reports and documents from our work for Phase IA of the original Biscayne Landing development and available subsurface information from the former landfill site and other nearby sites; perform subsurface investigations; develop practical site stabilization techniques for site grading and essential infrastructure and site features; perform foundation analyses and evaluations comparing alternative foundation support systems for the proposed structure and developing preliminary recommendations; and provide site preparation and foundation construction observation and monitoring services.

The civil engineering scope for this project includes plans for the proposed pool complex and guard house structures (amenities), which will include on-site grading and drainage, potable water and sanitary sewer services, on-site pavement marking and signage of vehicular drives, and a site geometry plan locating the proposed components of the amenities complex from abutting property lines after receiving the final site plan from the project's architect. Langan will also process permits through the regulatory agencies and provide construction phase services.

In addition, Langan is providing geotechnical engineering design recommendations for foundation support of the proposed Biscayne Landing Pool House structures.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Langan Engineering & Environmental Services, Inc.	Miami Lakes, Florida	Geotechnical, Site/Civil, and Environmental Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **3**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Landfill Groundwater Monitoring Monroe County, Florida	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Monroe County Public Works	Rosa Washington	305.292.4432

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Langan is monitoring groundwater semi-annually at three county landfills – Cudjoe Key, Long Key, and Key Largo – as part of the county's solid waste permits from the Florida Department of Environmental Protection (FDEP).

The project involves collecting samples from 11 monitoring wells and one surface water location, in accordance with Chapter 62-701, Florida Administrative Code. Analytical parameters for groundwater are: cadmium, chromium, nickel, lead, and zinc by EPA Method 6010B; mercury by EPA Method 7470A; total organic carbon by EPA Method 5310C; nitrate (as N) and nitrite (as N) by EPA Method 353.2; total nitrate/nitrite by EPA Method 353.2; Kjedhal nitrogen by EPA Method 351.2; Total nitrogen (lab calculation); phosphorus (as P) by EPA Method 365.4; total dissolved solids by EPA Method SM2540C; and total suspended solids by EPA Method SM2540D. Analytical parameters for surface water are: total aluminum, arsenic and iron by EPA Method 6010B; sulfate by EPA Method 300.0; chloride by EPA Method 300.0; chemical Oxygen Demand by EPA Method SM5220D; ammonia by EPA Method 350.1; and fecal coliform by EPA Method SM9222D

Under separate purchase orders, Langan repaired an aboveground well riser and will prepare documentation on behalf of the County that will support a request to reduce the number of analytes required by the monitoring program.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Langan Engineering & Environmental Services, Inc.	Miami Lakes, FL	Environmental engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER: **4**

21. TITLE AND LOCATION *(City and State)*

Cascades Park Remediation Project
City of Tallahassee, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2007	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Tallahassee	Koren Taylor	850.891.8703

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

It's one of the most historically significant locations in Tallahassee, not to mention the entire state of Florida. The City of Tallahassee's Cascades Park Cleanup project was a critically important step in the transition of the site into a multi-use downtown park.

Langan performed services as a sub-contractor to WRS Infrastructure & Environment, Inc. for design consulting and engineering oversight services for the $8M Cascades Park Remediation Project, a coal gasification plant and landfill Superfund site that underwent remediation by the City of Tallahassee under an Administration Order of Consent with USEPA.

Langan prepared the Removal Action Work Plan which received USEPA approval in a one month time period. Design specifications and drawings were developed for the removal of in excess of 47,000 cubic yards of contaminated soil, and the construction of a low permeability liner within the excavated area for future use as a stormwater management facility at the former plant site.

At the landfill site, Langan conducted geotechnical investigations and developed engineering specifications and drawings for the removal action which involved sediment removal from the creek; installation of a 400 linear foot box culvert within the creek; and installation of a geosynthetic clay liner (GCL) cap on the landfill surface, and installation of a GCL along the landfill embankment, totaling 5,720 square yards.

Langan also provided engineering oversight during the earthwork and liner installation at the former plant site, and provided oversight during the box culvert and GCL installation to be started in August 2006 at the landfill site.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Langan Engineering & Environmental Services, Inc.	Tallahassee/Miami, Florida	Sub-Contractor to WRS Infrastructure & Environmental, Inc.

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **5**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ryder Methane Mitigation Services Doral, Florida	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Ryder System, Inc.	George Luostari	305.500.3726

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Langan was contracted to prepare a Methane Gas Mitigation Plan (MGMP) and facilitate the selection of a contractor to build a methane mitigation system at the project site.

Langan's responsibilities include observing the construction of a methane gas mitigation system and post-construction operation and maintenance (O&M) of the system for a period of one year. Deliverables during construction included frequent interaction with the client and regulatory agencies such as the Miami-Dade County Department of Environmental Resource Management (DERM), regularly scheduled site visits to monitor construction activities, and the preparation of as-built drawings.

During the O&M Phase, Langan will supply staff to perform monitoring activities on a decreasing schedule over the life of the project. Initially, monitoring will take place on a weekly basis and then gradually begin to decline in frequency until staff is only required to visit the site on a quarterly basis. Staff will check system operations and record operating parameters as well as sample and record methane concentrations at designated vacuum extraction wells and vapor monitoring wells at scheduled intervals. Findings from site visits are included in a quarterly report that provides a summary of monitoring results, an interpretation of the data and any conclusions and recommendations.

Because the building had been built without a mitigation system, the challenge for Langan was to retrofit the building with a methane mitigation system, which involved designing the system to be as unobtrusive as possible to facility operations.

The total cost of the pilot testing, permitting, and construction was $192,000. Langan is monitoring semi-annually at a cost of $10,000 per year.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Langan Engineering & Environmental Services, Inc.	Miami Lakes, Florida	Environmental Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **6**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Pompano Beach Municipal Golf Course 1401 North Federal Highway Pompano Beach, Florida	2011	N/A

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER City of Pompano Beach	b. POINT OF CONTACT NAME Alessandra Delfico	c. POINT OF CONTACT TELEPHONE NUMBER 954.786.4144

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The City of Pompano Beach Municipal Golf Course is considered by Broward County EPD to be a contaminated site in which soil and groundwater are contaminated with arsenic; the site has been undergoing assessment and evaluation for a number of years.

The city contracted Langan to help negotiate a final closure plan for the contamination. Langan collected soil and groundwater samples to determine the current status of the contamination. Langan completed a statistical evaluation of the soil sample data in an effort to reduce the amount of contaminated soil to be removed for disposal. Based on the evaluation, Langan was able to prepare a No Further Action with Conditions Plan under Chapter 62-782.680(2), Florida Administrative Code (Risk Management Option II), which proposed limiting contaminated soil removal to three locations in the maintenance facility area. EPD approved the source removal plan and requested additional groundwater delineation at the property boundary with the municipal airport. The city then asked Langan to complete the source removal and groundwater delineation.

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25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Langan Engineering & Environmental Services, Inc.	Miami Lakes, Florida	Environmental Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **7**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Morgan's Point Remediation Project Southampton, Bermuda	Ongoing	

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER Entech, LTD	b. POINT OF CONTACT NAME Vanessa Turner	c. POINT OF CONTACT TELEPHONE NUMBER +1 441.292.9192

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Langan is acting as the specialist remediation consultant for the Government of Bermuda on this report property on over 280 acres. This project involves landfill and remediation design and construction services of groundwater remediation systems and clean-up of the former U.S. Naval Base Annex at Morgan's Point.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Langan Engineering & Environmental Services	Miami Lakes, Florida	Environmental Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER **8**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Roscoe Warren Park Environmental Services Homestead, Florida	Ongoing	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Homestead	Ana Azicri	305.224.4777

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Langan was selected to implement a groundwater monitoring program to comply with the Miami-Dade County Regulatory and Economic Resources Department for Environmental Resources Management (DERM)-approved Remedial Action Plan (RAP) for this recreational park housed on the former Homestead Landfill.

Activities leading up to the implementation of the groundwater monitoring program included site reconnaissance to identify the presence and condition of six existing monitoring wells. Langan proceeded to install one monitoring well as only five of the existing wells were visible at the site.

Groundwater sampling will be conducted by collecting samples from each well and one surface water location at the southeast corner of the site on a semi-annual basis. Langan will measure water quality parameters (dissolved oxygen, temperature pH, conductivity, and turbidity) until values stabilize within Florida Department of Environmental Protection (FDEP)-acceptable ranges. Groundwater and surface water samples will be analyzed for inorganics (chloride, sulfate, total ammonia, and total dissolved solids), metals (aluminum, iron, sodium, arsenic, cadmium, lead, and mercury), phenolic compounds, volatile organic aromatics (VOAs) and volatile organic halocarbons (VOHs).

Langan will prepare semi-annual monitoring reports that will include a summary of field activities and analytical results, figures, tables, conclusions and recommendations

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Langan Engineering & Environmental Services, Inc.	Miami Lakes, Florida	Environmental Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **9**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Trademark Metals Recycling – Sunshine Facility Opa-Locka, Florida	Ongoing	

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER Trademark Metals Recycling LLC	b. POINT OF CONTACT NAME Brenda Anderson	c. POINT OF CONTACT TELEPHONE NUMBER 813.677.4471

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Langan was contracted to design and implement groundwater monitoring programs for the Trademark Metals Recycling (Sunshine) facility in Opa Locka, Florida. The first program is required as part of the facility's solid waste annual operating permit to monitor facility operations on groundwater quality. The second program is required as part of qualifying for conditional closure to monitor groundwater quality at the facility boundaries.

Langan designed both monitoring programs (i.e., determined well locations and construction and contaminants of concern), secured approval from the Miami-Dade County Department of Permitting, Environment and Regulatory Affairs, installed and developed the monitoring wells, and implemented the monitoring.

The monitoring program for the operating permit is semi-annual and continuous and was initiated in 2010 with four monitoring wells. The monitoring program for the conditional closure is quarterly for at least one year and was initiated in 2012 with five monitoring wells.

The monitoring programs include sampling for the following contaminants of concern: volatile organic aromatics, volatile organic halocarbons, polycyclic aromatic hydrocarbons, total recoverable petroleum hydrocarbons, isopropylbenzene, trimethylbenzenes, ammonia, iron, arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver. Langan manages the off-site waste disposal and agency notification of field work. Langan coordinates field work with facility management to minimize disruption to facility operations and to ensure the health and safety of Langan personnel.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Langan Engineering & Environmental Services, Inc.	Miami Lakes, Florida	Environmental Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER **10**

21. TITLE AND LOCATION *(City and State)*

The Promenade at Coconut Creek
Coconut Creek, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2012	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Garrison Investment Group	Andy Kwon	212.372.9593

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Rendering courtesy of Dorsky + Yu International Architecture

The Promenade at Coconut Creek is a lifestyle center located on a 23-acre site at the intersection of Wiles Road and Lyons Road in the City of Coconut Creek, Broward County, Florida. This upscale mixed use center includes 200,000 square feet of retail and restaurant space, 125,000 SF of office space and a seven-story 456 residential unit building.

The site design includes on-grade parking and three parking structures. Site amenities include outdoor restaurant seating, expansive hardscape areas, sidewalks and bus stops for city and county bus systems to provide mass transportation access.

The project scope included obtaining rezoning of the subject site and simultaneously obtaining site plan approval. The site is located in a newly formed city recreational activity center, which established parameters for creating areas for greater public access and outdoor amenities. Roof-top greenspace is planned to compensate for the intensive site coverage. USGBC LEED certification requirements were incorporated into the design.

Langan performed site planning, stormwater management design, plat amendment, traffic analysis, utility coordination services and geotechnical services to develop a comprehensive program of foundation and soils design parameters.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Langan Engineering & Environmental Services, Inc.	Miami Lakes, Florida	Surveying; Geotechnical Investigation; Site/Civil Engineering; Zoning & Planning; Stormwater Management Design; Utility Design and Coordination; Regulatory Permitting; Offsite Roadway Improvements Design

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN THIS CONTRACT (From Section E, Block 13)	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below before completing table. Place "X" under project key number for participation in same or similar role.)									
		1	2	3	4	5	6	7	8	9	10
Vincent Yarina, PG,CEM	Project Manager	X	X	X	X	X	X	X	X	X	
Daniel Spector, PG, LEP	Assessment/Hydrogeology	X	X	X	X	X	X		X	X	
Fangmei Zhang, PhD, PE	Remediation		X	X					X	X	
Raymond Lees, PE	Remediation		X					X			
Roger Archabal, PE	Geotechnical	X	X	X	X						X
John Magnavita, PE	Geotechnical	X	X								
Lenny Rodriguez, PE	Site/Civil		X		X						X
Michael Carr, PE, LEED AP	Site/Civil		X		X	X					X
Stewart Abrams, PE	QA/QC							X			

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	**Biscayne Landing** North Miami, Florida	6	**Pompano Beach Municipal Golf Course** Pompano Beach, Florida
2	**151 Biscayne** North Miami, Florida	7	**Morgan's Point Remediation Project** Southampton, Bermuda
3	**Landfill Groundwater Monitoring** Monroe County, Florida	8	**Roscoe Warren Park Environmental Services** Homestead, Florida
4	**Cascades Park** Tallahassee, Florida	9	**Trademark Metals Recycling – Sunshine Facility** Opa-Locka, Florida
5	**Ryder Methane Mitigation Services** Doral, Florida	10	**Coconut Creek Promenade** Coconut Creek, Florida

Integrated Solutions. Measurable Value

Langan Engineering & Environmental Services provides site development engineering and environmental consulting for private developers, public agencies, property owners, and institutional clients around the world.

Founded in 1970, Langan employs nearly 800 professionals in its **Elmwood Park, NJ** headquarters and among regional offices in:

- Miami, FL
- Fort Lauderdale, FL
- New York City, NY
- Trenton, NJ
- Philadelphia, PA
- Bethlehem, PA
- Doylestown, PA
- Pittsburgh, PA
- Oakland, CA
- San Francisco, CA
- Sacramento, CA
- San Jose, CA
- Irvine, CA
- New Haven, CT
- Arlington, VA
- Bismark, ND
- Akron, OH
- Houston, TX

Langan is listed among the Top Design Firms and Top Green Design Firms in *Engineering News Record (ENR)*.

Langan International, the firm's wholly-owned subsidiary headquartered in New York City, provides all firm services for projects in the Middle East, Eastern Europe, Latin America, and the Caribbean. Langan International regional locations are in:

- Abu Dhabi
- Athens
- Doha
- Dubai
- Istanbul

On November 1, 2010, Langan acquired **Treadwell & Rollo,** a nationally recognized environmental, geotechnical, and earthquake engineering consulting firm serving private and public clients throughout California and beyond.

Landfill Remediation and Redevelopment
Capping, Cleaning, and Re-Creating Communities

Few local firms possess the in-house capabilities or experience offered by Langan's team of professionals. Our recognition as a "developer's consultant," instills confidence among land developers across the United States. Our team has over 40 years of consulting experience and is recognized as the choice for landfill remediation and redevelopment. Langan has established the respect of the Florida Department of Environmental Protection as well as other local regulatory agencies as a trustworthy technical consultant that understands the regulations and cares about community.

We continue to help property owners, developers, and municipalities overcome the challenges associated with capping or redeveloping landfills using best practices. Development options for landfills range from recreational to renewable energy to commercial projects, as well as residential projects. Langan experts have seen and handled virtually every aspect related to a landfill project, including comprehensive sub-surface investigations, baseline ecological evaluations, methane venting and leachate conveyance systems, ground improvement programs, and site planning and permitting.

Langan Landfill Remediation Services:

- Capping and closure design and engineering
- Subsurface containment / cut-off walls
- Slope stabilization
- Leachate collection and treatment
- Landfill Disruption Permitting
- Closure Plans and regulatory approval
- Green capping, including phytoremediation and habitat restoration
- FDEP Permitting
- Wetlands and Waterfront Development Permitting

Brownfield Redevelopment
Urban Core Revitalization

Since the 1970s, decades before the advent of the "Brownfield" initiative, Langan has provided comprehensive services for the reuse of urban sites, the decommissioning and subsequent redevelopment of large industrial facilities, and the investigation and remediation of hazardous waste sites.

Langan's value engineering and cost-saving solutions in Brownfield Redevelopment have led to an unparalleled track record of award-winning reuse projects. We have negotiated precedent-setting regulatory agreements, utilized risk-based site closure strategies, provided technical assistance during grant application submission, and served as Technical Program Manager for National Brownfield Pilot programs. Langan has also played a key role in the success of numerous public/private reuse partnerships that facilitated fast-

track, large-scale redevelopment projects. Furthermore, we were actively involved with the ASTM E-50.03 Task Group that developed the Standard Guide to the Process of Sustainable Brownfield Redevelopment.

Environmental Engineering

Technical and Regulatory Knowledge

Langan works with project teams to provide leading-edge, focused, streamlined investigations and risk-based remediation. We excel in promoting and gaining regulatory acceptance of risk based strategies to obtain cost effective site closures. Langan possesses expertise in a wide variety of projects including state Voluntary Programs, Brownfields, RCRA, State and Federal Superfund, Manufactured Gas Plants (MGP) and Storage Tank programs.

Langan Environmental Services:

- Risk-Based Corrective Action
- Brownfields
- Storage Tank Management
- Due Diligence Support
- Environmental Assessments
- Site Characterization
- Permitting/Regulatory
- Approvals
- Remediation Design/
- Oversight
- Water Resources/Supply
- Hydrological Investigations
- Wastewater and Stormwater Permitting
- Air Modeling
- GIS/Database Management
- Environmental Impact Statements (EIS)
- Manufactured Gas Plant
- Remediation Services
- Asbestos/Lead-Based Paint Abatement
- Management of PCB-Containing Materials
- Indoor Air Quality/Mold
- Demolition
- Waste Management
- Compliance Auditing
- Ecological Risk Assessment
- Human Health Risk Assessment
- Site Feasibility Studies
- Remediation by Natural Attenuation
- Expert Witness
- Exposure Assessments
- Free Product Volume and Mobility Modeling

Geotechnical Engineering

Foundations You Can Trust

Langan was founded as a geotechnical consulting company in 1970, and geotechnical engineering remains a core discipline at Langan today. We work closely with our clients and the design and construction team to engineer cost-effective geotechnical solutions appropriate for proposed structures and the governing site conditions.

Our reputation as a premier geotechnical consultant has been earned by managing hundreds of projects involving complex, technically challenging sites where highly specialized site preparation, foundations, and fast-track engineering solutions are required.

Langan Geotechnical Services:

- Subsurface Investigations
- Foundation Design
- Materials Analysis
- Soil and Rock Mechanics
- Retaining Structures
- Slope Stabilization
- Soil Improvement/Ground Modification
- Dewatering Design and Permitting
- Subsurface StructureDesign
- Excavation Support and Underpinning Design
- Earthquake/Seismic
- Geological Mapping of Rock Slopes
- Mine Investigations/Studies
- Hydrogeology
- Earth and Rock Fill Dams
- Tunnels/Microtunneling
- Seawalls, Piers and Bulkheads
- Dredging
- Vibration Monitoring
- Pre-Construction Conditions Surveys
- Value Engineering
- Construction Documents
- Contractor Support Services
- Engineering Services During Construction
- Forensic Engineering/Expert Testimony
- Cost Estimates

Hazardous Materials

Safety First

Asbestos

Langan routinely performs buildings investigations for city, state and federal agencies for asbestos-containing materials (ACM). Our ACM surveys typically include review of original design documents, construction records, review of environmental reports for the property, site assessment, and the collection and analysis of bulk samples. In occupied buildings, the survey typically will not include intrusive means of access such as puncturing the walls, ceilings, or core sampling of roofing materials. Samples are typically collected following the AHERA regulations and are analyzed using Polarized Light Microscopy (PLM).

H. ADDITIONAL INFORMATION

Intrusive investigation of concealed spaces is performed only upon receiving written authorization.

Non-friable organically bonded (NOB) materials, such as roofing, Vinyl tiles, etc., which may present difficulty in identifying asbestos by PLM, are re-analyzed using Transmission Electron Microscopy (TEM), in accordance with the State requirements. All sampling is performed by Langan asbestos professionals, who are certified Asbestos Hazard Emergency Response Act (AHERA) inspectors under USEPA and licensed to practice in individual state.

Lead-Based Paint

Lead-based paint surveys are also routinely performed when directed by our clients. Langan utilizes a Niton fluorescence (XRF) Spectrum Analyzer to inspect the buildings for the presence of lead-based paint. The results of the inspection are compared to the federal HUD Guidelines governing lead in paint.

The inspections are usually performed to address worker exposure to lead under 29 CFR 1926, and the disposal of demolition/ construction debris under the Federal Resource Conservation and Recovery Act (RCRA).

In addition to LBP screening inspection, we also perform waste characterization study for classification of the demolition debris. The recommended sampling protocols developed by the United States Environmental Protection Agency (USEPA) and those established by the United States Department of the Army's Environmental Hygiene Agency are primarily followed during the characterization study.

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31. SIGNATURE	32. DATE
Vincent D. Yarina	**August 19, 2014**

33. NAME AND TITLE

Vincent D. Yarina, PG, CEM, Senior Associate/Vice President

ARCHITECT-ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (if any): RFQ-4427-14-IS

PART II – CONTRACT-SPECIFIC QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME: **Langan Engineering & Environmental Services**		3. YEAR ESTABLISHED: **1970**	4. DUNS NUMBER: **158920707**
2b. STREET: **Parkside Corporate Center, 15150 NW 79th Court, Suite 200**		5. OWNERSHIP	
2c. CITY: **Miami Lakes**	2d. STATE: **FL** / 2e. ZIP CODE: **33016**	a. TYPE: **Corporation**	
6a. POINT OF CONTACT NAME AND TITLE: **Vincent D. Yarina, PG, CEM, Senior Associate/Vice President**		b. SMALL BUSINESS STATUS: **n/a**	
6b. TELEPHONE NUMBER: **786.264.7200**	6c. E-MAIL ADDRESS: **vyarina@langan.com**	7. NAME OF FIRM *(If block 2a is a branch office)*: **Langan Engineering & Environmental Services**	
8a. FORMER FIRM NAME(S) *(If any)*		8b. YR. ESTABLISHED	8c. DUNS NUMBER

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	c. No. of Employees (2) BRANCH
02	Administrative	132	3
08	CADD Technician	13	1
12	Civil Engineer	130	3
15	Construction Inspector	3	
16	Construction Manager	1	
19	Ecologist	3	
23	Environmental Engineer	77	1
24	Environmental Scientist	36	
27	Foundation/Geotechnical Engineers	105	9
29	GIS Specialist	8	
30	Geologist	44	3
34	Hydrologist	3	
36	Industrial Hygienist	2	1
38	Land Surveyor	32	
39	Landscape Architect	9	
47	Planner: Urban/Regional	1	
55	Soils Engineer	15	2
57	Structural Engineer	1	
58	Technician	8	
60	Transportation Engineer	14	
(OTHER)	Asbestos/Lead/Mold Specialists	8	2
	Total	**645**	**25**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
A10	Asbestos Abatement	1
C07	Coastal Engineering	1
C15	Construction Management	1
D02	Dams *(Earth; Rock)*; Dikes; Levees	1
E01	Ecological /Archeological Investigations	2
E06	Embassies and Chanceries	2
E09	Envir. Impact Studies, Assessm'ts	4
E12	Environmental Remediation	4
G04	GIS... and Data Collection	1
L02	Land Surveying	3
L03	Landscape Architecture	1
P06	Planning (Site, Installation, Project)	1
S05	Soils/Geologic Studies; Foundations	5
S11	Sustainable Design	1
T03	Traffic & Transportation Eng.	1
W02	Water Resources; Hydrology...	1
Z01	Zoning; Land Use Studies	2
	Site/Civil Engineering	5
	Due Diligence	2

a. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS *(Insert revenue index number shown at right)*

a. Federal Work	1
b. Non-Federal Work	6
c. Total Work	6

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

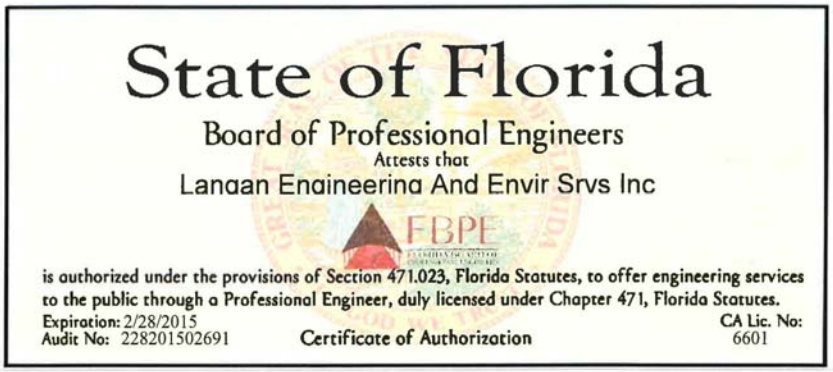
The foregoing is a statement of facts.

a. SIGNATURE: Vincent D. Yarina

b. DATE: **August 19, 2014**

c. NAME AND TITLE
Vincent D. Yarina, PG, CEM
Senior Associate/Vice President

Certificate of Authorization and Licenses



State of Florida

Board of Professional Engineers

Attests that

Langan Engineering And Envir Srvs Inc

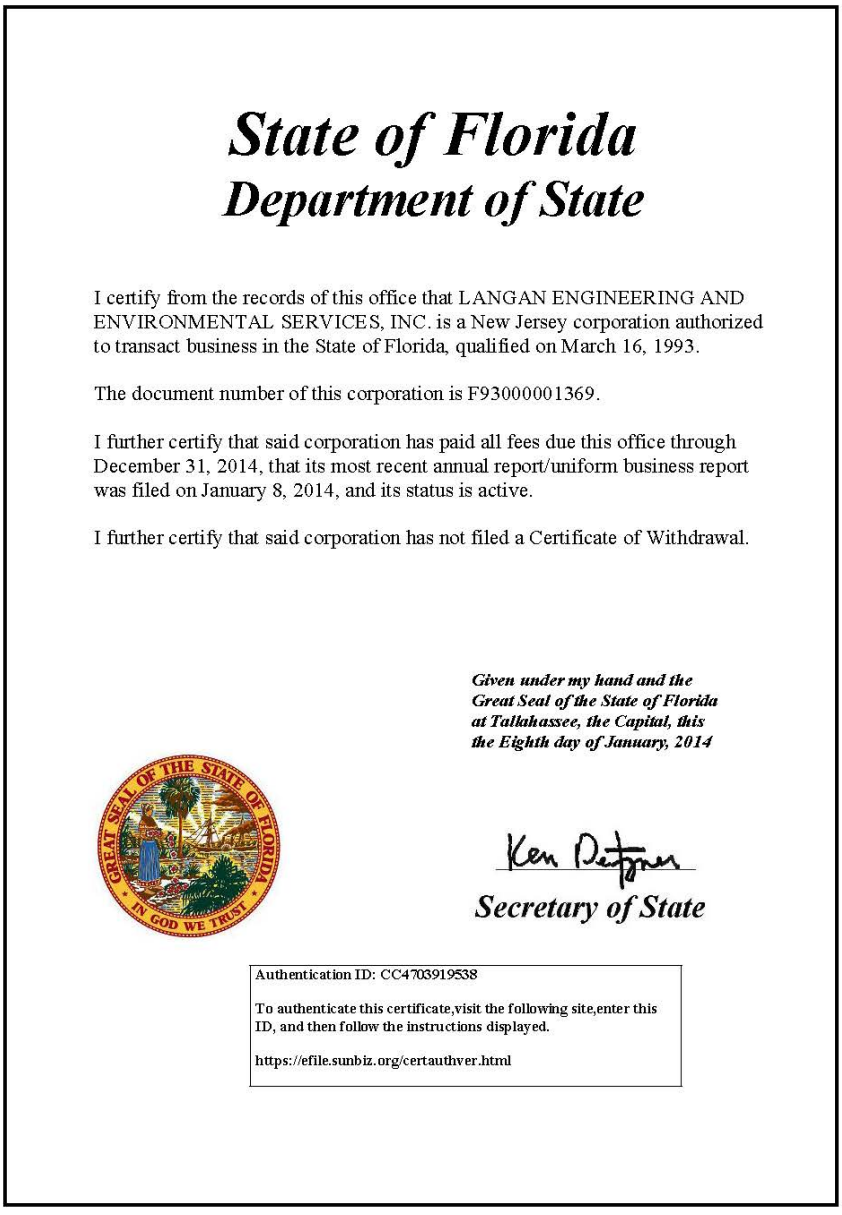
FBPE

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: 228201502691

Certificate of Authorization

CA Lic. No: 6601



State of Florida

Department of State

I certify from the records of this office that LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. is a New Jersey corporation authorized to transact business in the State of Florida, qualified on March 16, 1993.

The document number of this corporation is F93000001369.

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 8, 2014, and its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Eighth day of January, 2014

Ken Detzner

Secretary of State

Authentication ID: CC4703919538

To authenticate this certificate,visit the following site,enter this ID, and then follow the instructions displayed.

https://efile.sunbiz.org/certauthver.html

Contract History

Langan confirms that it has never had a contract/agreement relationship terminated/cancelled/ suspended.

Administrative/Judicial History

Langan confirms that it has never filed an administrative or judicial action with any state Agency or state court.

Financial Statement

Langan does not wish for the confidential information contained in our audited financial reports to become part of public record and as such have provided balance sheets for the last three years. Langan's balance sheets and disclosure statement are included under Appendix 1 at the end of this section.

Surety Information

Langan confirms that neither a surety nor a bonding company has ever been required to perform upon due to default by Langan or any entity previously owned or controlled by Langan.

Bankruptcy Information

We hereby confirm that neither Langan nor any entity previously owned or controlled by Langan has ever been declared bankrupt.

Pending Litigation

Langan is a large firm and is involved in over 5,000 projects per year. Many of these are large and complex construction projects, which typically generate a variety of construction-oriented arguments, adjacent property complaints, etc, some of which evolve into formal legal complaints. These lawsuits typically name every firm involved in the project whether or not the firm has any responsibility regarding the claim. Langan has occasionally been named in these type of lawsuits, many of which the firm has little or no responsibility. All of these suits are considered to be insignificant to our business. No claims have been validated and dismissal of most is expected.

EEO Statement

Langan is an Equal Employment Opportunity Employer fully committed to providing equal opportunity in all areas of employment practices. The Firm includes the EEO Statement in the Employee Handbook, Intranet, Website, Applicant Tracking System and articulates this message to staffing agencies and sub-contractors. For your reference, our EEO Statement is included as Appendix 2 at the end of this section.

Proof of Insurance

Langan certifies that we carry all insurance policies and limits noted in the RFQ and will produce valid, timely insurance specimens upon selection. For your reference, we have included copies of our current certificates of insurance as Appendix 3 at the end of this section.

References

Name: Robert Zucker
Firm: Premier Supplies
Title: Account Representative
Address: 357 West 36th Street, New York, NY 10018
Telephone: 201.981.0369
Nature and magnitude of purchase, sale, loan, business association, etc.: Langan purchases office supplies for our offices located in the Northeastern United States from this vendor.

Name: Bob Wolfe
Firm: J.B. Roberts
Title: Account Representative
Address: 492 Rockaway Valley Road, Boonton, NJ 07005
Telephone: 973.316.6855
Nature and magnitude of purchase, sale, loan, business association, etc.: Langan purchases large format media supplies for our offices located in the Northeastern United States from this vendor.

Name: Lisa Kopff
Firm: JP Morgan Chase
Title: Account Representative
Address: 695 Route 46 West, Fairfield, NJ 07004
Telephone: 973.439.5006
Nature and magnitude of purchase, sale, loan, business association, etc.: Financial institution with whom Langan transacts all commercial banking transactions.

Name: Connie Shaw
Firm: Citizen's Bank
Title: Account Representative
Address: 1 Citizens Plaza, Providence, RI 02903
Telephone: 412.867.2179
Nature and magnitude of purchase, sale, loan, business association, etc.: Financial institution with whom Langan transacts commercial banking transactions.

Declaration

The aforementioned, as Proposer (herein used in the masculine singular, irrespective of actual gender and number) declares, under oath that no other person has any interest in this Proposal or in any resulting agreement to which this Proposal pertains, that this Proposal is made without connection or arrangement with any other persons and without collusion or fraud. The Proposer further declares that he has complied in every respect with all the instructions to Proposers, that he has read all addenda, if any, issued prior to the opening of Submissions, and that he has satisfied himself fully relative to all matters and conditions with respect to the general conditions of the agreement and all relevant information to which this proposal pertains.

Langan Engineering and Environmental Services, Inc.		Vince Yarina,PG, CEM
Company Name	Authorized Signature	Print Name

Disclosure of Conflict of Interest

Each Proposer shall disclose below, to the best of his or her knowledge, any City of Hollywood officer or employee, or any relative of any such officer or employee as defined in Section 112.3135, Florida Statutes, who is an officer, partner, director or proprietor of, or has a material interest in the Proposer's business or its parent company, any subsidiary, or affiliated company, whether such City official or employee is in a position to influence this procurement or not. Failure of a Proposer to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City of Hollywood Purchasing Ordinance.

Name	**Relationship**
N/A	
N/A	

Hold Harmless and Indemnity Clause

The Proposer and his representatives shall indemnify, defend and hold harmless the City of Hollywood, its elected and appointed officials, employees and agents for any and all suits, actions, legal or administrative proceedings, claims, damage, liabilities, interest, attorney's fees, costs of any kind whether arising prior to the start of activities or following the completion or acceptance and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part by reason of any act, error or omission, fault or negligence whether active or passive by the contractor, or anyone acting under its direction, control, or on its behalf in connection with or incident to its performance of the contract.

Langan Engineering and Environmental Services, Inc.		Vince Yarina,PG, CEM
Company Name	Authorized Signature	Print Name

Corporation Statement

If Proposer is incorporated, answer the following:

1. When incorporated? 1970
2. Where incorporated? New Jersey
3. Is the corporation authorized to do business in Florida? Yes
4. The corporation is held: Privately

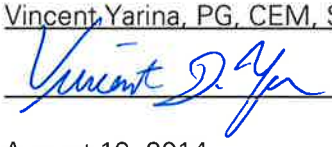
RFQ Checklist

Please check each line item after the completion of the appropriate item.

- ✓ I have submitted one (1) original, seven (7) copies, and one (1) electronic copy (either CD or disk) of the entire proposal with addendums, in a sealed package, in 8 1/2" x 11" format, inclusive of K1-K6, prior to the prescribed time and date specified.
- ✓ I verify that the signature on page number one (1) is the signature of the person authorized to bind the agreement. (Preferably in blue ink)
- ✓ I acknowledge reading and signing the Hold Harmless Statement.
- ✓ I have included all information, certificates, licenses and additional documentation as required by the City in this RFQ document.
- ✓ I have checked for any addendums to this RFQ, and will continue to check for any addendums up to the due date and time of this RFQ.
- ✓ I have verified that the outside address label of my RFQ package is clearly marked to include my company's name, address, RFQ number and date of RFQ opening.
- ✓ I have read and completed (if applicable) the "Disclosure of Conflict of Interest".
- ✓ I am aware that a Notice of Intent to award this bid shall be posted on the City's website at www.hollywoodfl.org and on the Procurement Services bulletin board in room 303 at City Hall, and that it is my responsibility to check for this posting. Also, I have provided my email address, as the City, at its discretion, may provide me information by such means regarding this procurement process.

Name of company: Langan Engineering and Environmental Services, Inc.

Proposer's Name: Vincent Yarina, PG, CEM, Senior Associate/VP

Proposer's Authorized Signature: 

Date: August 19, 2014

City of HOLLYWOOD FLORIDA

ACKNOWLEDGMENT AND SIGNATURE PAGE

This form must be completed and submitted by the date and the time of bid opening.

Legal Company Name (include d/b/a if applicable): See below Federal Tax Identification Number: 22-3167382
Langan Engineering and Environmental Services, Inc.

If Corporation - Date Incorporated/Organized: 1970

State Incorporated/Organized: New Jersey

Company Operating Address: 15150 NW 79 Court, Suite 200

City Miami Lakes State FL Zip Code 33016

Remittance Address (if different from ordering address):

City State Zip Code

Company Contact Person: Vince Yarina, PG Email Address:
vyarina@langan.com

Phone Number (include area code): 786.264.7214 Fax Number (include area code): 786.264.7201

Company's Internet Web Address: www.langan.com

IT IS HEREBY CERTIFIED AND AFFIRMED THAT THE BIDDER/PROPOSER CERTIFIES ACCEPTANCE OF THE TERMS, CONDITIONS, SPECIFICATIONS, ATTACHMENTS AND ANY ADDENDA. THE BIDDER/PROPOSER SHALL ACCEPT ANY AWARDS MADE AS A RESULT OF THIS SOLICITATION. BIDDER/PROPOSER FURTHER AGREES THAT PRICES QUOTED WILL REMAIN FIXED FOR THE PERIOD OF TIME STATED IN THE SOLICITATION.

Bidder/Proposer's Authorized Representative's Signature: Date 08/19/14

Type or Print Name: Vince Yarina, PG, CEM, Senior Associate/VP

THE EXECUTION OF THIS FORM CONSTITUTES THE UNEQUIVOCAL OFFER OF BIDDER/PROPOSER TO BE BOUND BY THE TERMS OF ITS PROPOSAL. FAILURE TO SIGN THIS SOLICITATION WHERE INDICATED BY AN AUTHORIZED REPRESENTATIVE SHALL RENDER THE BID/PROPOSAL NON-RESPONSIVE. THE CITY MAY, HOWEVER, IN ITS SOLE DISCRETION, ACCEPT ANY BID/PROPOSAL THAT INCLUDES AN EXECUTED DOCUMENT WHICH UNEQUIVOCALLY BINDS THE BIDDER/PROPOSER TO THE TERMS OF ITS OFFER.

Bid/RFP/RFQ Number: RFQ-4427-14-IS Title: Environment Engineering Services

SOURCE OF INFORMATION

How did you find out about this solicitation? Check all that apply.

1. www.hollywoodfl.org	☐	
2. www.bidsync.com	☒	
3. Daily Business Review	☐	
4. The Miami Herald	☐	
5.Referral/word- of mouth	☐	Specify Source:
6.Search Engine/Internet search	☐	
7.E-mail, newsgroup, online chat	☐	Specify Source:
8.Banner or Link on another website	☐	
9.Flyer, newsletter, direct mail	☐	Specify Source:
Other	☐	Specify Source:

Bid/RFP/RFQ Number: RFQ-4427-14-IS Title: Environment Engineering Services

Procurement Services Division
2600 Hollywood Boulevard, Room 303
Hollywood, Florida 33020

City of Hollywood, Florida

PROCUREMENT SERVICES RM. 303
P. O. BOX 229045 ZIP 33022-9045

NOTICE TO PROPOSERS

NOTICE IS HEREBY GIVEN, that the City Commission of the City of Hollywood, Florida is advertising for Sealed Request for Qualifications, which will be received by the City Clerk of the City of Hollywood, Florida until **3:00 P.M., August 19, 2014**, at which time they will be opened and publicly read in the Procurement Services Division, Room 303, City Hall, 2600 Hollywood Boulevard, Hollywood, Florida. FOR: **Environment Engineering Services - RFQ-4427-14-IS.**

RFQ NO. 4427-14-IS
ADDENDUM NO. 2

Please make the following changes (additions, deletions or corrections) in the above named RFQ.

Questions submitted in regards to the above RFQ and corresponding answers:

Q1: Clarification regarding: A. Submission Requirements, Section 6: Related Experience and References, found on page 27 of the solicitation document. Do the five relevant projects have to have been completed in the last three years, or can we include ongoing projects?

A1: While a Proposer may submit a list of ongoing projects, it is in the best interest of the Proposer to provide examples of completed projects in order to demonstrate verifiable outcomes. The relevant projects do not have to have been completed in the last 3 (three) years.

Q2: Will the City please provide the link to the Environmental Assessment and other relevant reports?

A2: Environmental Assessment are available with the RFQ documents in BidSync, as addendum 1.

Q3: If a boundary survey and/or a topographical survey is available for the project area, will the City please provide?

A3: Topographical survey is available with the RFQ documents in BidSync as addendum 3 and 4.

Q4: Who is the City's project manager for this project?

A4: Vielka Quintero, Economic Development Representative.

Q5: For item J3 on page 33 of the RFP (Hold Harmless and Indemnity Clause/Insurance Requirements), can we replace that language with language we have successfully used on past City of Hollywood contracts and to be in compliance with Section 725.06 of the Florida Statutes?

A5: No, the language shall not be altered.

RFQ NO. 4427-14-IS
ADDENDUM NO. 1

Q6: Can we submit only the required hard copies instead of submitting via BidSync?
A6: Yes, you should submit as stated on page 5 of the RFQ documents.

Q7: In the outline of submission requirements, Section 3 is missing. Is information missing or should we just skip that section and renumber accordingly?
A7: There is no Section 3, this was a typographical error.

Q8: Does the City currently anticipate holding a pre-bid meeting for this solicitation? If so, when?
A8: No, there is no pre-bid meeting scheduled.

Q9: Section 6, page 27: The RFQ states the proposers are to submit up to 5 relevant projects. Please clarify if 5 will be the minimum, or if any number less than 5 will be accepted?
A9: Five (5) relevant projects is the minimum requirement.

Q10: Page 26, Section 3: Would the City like any information included within Section 3 of the response?
A10: There is no Section 3, this was a typographical error.

Q11: Item 4, page 30: The RFQ states that the projects completed for the City and other state or federal agencies will be considered. Will this also include other cities and counties?
A11: Yes, you may include other cities and counties projects.

Q12: What is the City's budget for this project?
A12: The project cost will be determined based upon the final approved scope of services.

All other specifications, terms & conditions remain the same.

MAILED RFQ'S
If you have already submitted your printed Request for Proposals, it will be retained in the City Clerk's Office until the Proposal opening time and date. If you wish to pick up your RFQ that has already been submitted, you can do so by showing proper identification, in the Office of the City Clerk, 2600 Hollywood Blvd, Room 221, Hollywood, Florida 33020.

Please sign and return with your RFQ.

COMPANY NAME: Langan Engineering and Environmental Services, Inc.

PROPOSER'S SIGNATURE _____

Dated this 14th day of August, 2014

Appendix 1: Financial Statement

LANGAN

Memorandum

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
River Drive Center 1 619 River Drive Elmwood Park, NJ 07407 T: 201.794.6900 F: 201.794.0366

Re: Langan 2013, 2012 and 2011 Consolidated Balance Sheets

The attached consolidated balance sheets for the years ended December 31, 2013, 2012 and 2011 have been examined by our independent public accountants, Anchin, Block & Anchin LLP and O'Connor Davies Munns & Dobbins, LLP.

The information contained in these documents is proprietary and confidential. It is only to be used for the purpose stated in the request for such information. Under no circumstances may this document to be provided to any third party without the express prior written consent of Langan.

Langan Engineering, Environmental, Survey and Landscape Architecture, D.P.C.

LANGAN ENGINEERING, ENVIRONMENTAL, SURVEYING AND LANDSCAPE ARCHITECTURE, D.P.C. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2013	2012
ASSETS		
Current Assets:		
Cash and cash equivalents	**$ 1,333,288**	$ 1,126,172
Accounts receivable, net of allowance for doubtful accounts of $4,848,000 and $2,960,000, respectively	**55,314,338**	50,870,188
Fees earned but not billed, net of allowance of $630,000 and $550,000, respectively	**4,187,862**	3,650,437
Prepaid expenses and other current assets	**2,642,895**	1,628,798
Total Current Assets	**63,478,383**	57,275,595
Property and Equipment, Net	**4,974,047**	5,115,116
Other Assets:		
Goodwill	**5,904,705**	5,904,705
Loan receivable, stockholder	**230,986**	258,069
Security deposits and other assets	**706,430**	264,539
Total Other Assets	**6,842,121**	6,427,313
Total Assets	**$ 75,294,551**	$ 68,818,024
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Bank loan payable, line of credit	**$ 3,000,000**	$ 5,430,960
Current portion of long-term debt	**1,725,713**	1,597,603
Current portion of deferred compensation	**457,553**	448,363
Accounts payable	**5,795,851**	7,599,637
Accrued payroll, bonuses and related expenses	**6,489,947**	4,476,177
Accrued stockholder distributions	**3,500,000**	2,000,000
Accrued expenses	**4,150,455**	2,558,086
Deferred income taxes payable, net	**814,783**	620,189
Total Current Liabilities	**25,934,302**	24,731,015
Long-Term Liabilities:		
Long-term debt, less current portion	**2,996,767**	3,712,671
Deferred compensation, less current portion	**10,977,183**	10,996,636
Deferred rent	**1,035,067**	1,224,617
Deferred landlord reimbursement	**402,915**	486,032
Fair value of interest rate swap	**82,135**	160,048
Total Long-Term Liabilities	**15,494,067**	16,580,004
Total Liabilities	**41,428,369**	41,311,019
Stockholders' Equity:		
Common stock	**100,000**	100,000
Additional paid-in capital	**655,677**	763,962
Retained earnings	**34,929,448**	28,763,804
Employee stock notes receivable	**(124,176)**	(63,078)
Treasury stock	**(2,112,347)**	(1,897,635)
Accumulated other comprehensive income (loss)	**417,580**	(160,048)
Total Stockholders' Equity	**33,866,182**	27,507,005
Total Liabilities and Stockholders' Equity	**$ 75,294,551**	$ 68,818,024

See the accompanying Notes to the Consolidated Financial Statements.

LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEET

DECEMBER 31, 2012

ASSETS

Current Assets:		
Cash and cash equivalents	$ 1,126,172	
Accounts receivable, net of allowance for doubtful accounts of $2,960,000	50,870,188	
Fees earned but not billed, net of allowance of $550,000	3,650,437	
Prepaid expenses and other current assets	1,628,798	
Total Current Assets		$ 57,275,595
Property and Equipment, Net		5,115,116
Other Assets:		
Goodwill	5,904,705	
Loan receivable, stockholder	258,069	
Security deposits and other assets	264,539	
Total Other Assets		6,427,313
Total Assets		$ 68,818,024

LIABILITIES AND STOCKHOLDERS' EQUITY

Current Liabilities:		
Bank loan payable, line of credit	$ 5,430,960	
Current portion of long-term debt	1,597,603	
Current portion of deferred compensation	448,363	
Accounts payable	7,599,637	
Accrued payroll, bonuses and related expenses	4,476,177	
Accrued stockholder distributions	2,000,000	
Accrued expenses	2,558,086	
Deferred income taxes payable, net	620,189	
Total Current Liabilities		$ 24,731,015
Long-Term Liabilities:		
Long-term debt, less current portion	3,712,671	
Deferred compensation, less current portion	10,996,636	
Deferred rent	1,224,617	
Deferred landlord reimbursement	486,032	
Fair value of interest rate swap	160,048	
Total Long-Term Liabilities		16,580,004
Total Liabilities		41,311,019
Stockholders' Equity:		
Common stock	100,000	
Additional paid-in capital	763,962	
Retained earnings	28,763,804	
Employee stock notes receivable	(63,078)	
Treasury stock	(1,897,635)	
Accumulated other comprehensive loss	(160,048)	
Total Stockholders' Equity		27,507,005
Total Liabilities and Stockholders' Equity		$ 68,818,024

Langan Engineering & Environmental Services, Inc. and Subsidiary

Consolidated Balance Sheet
December 31, 2011

ASSETS	
Current Assets	
Cash	$ 935,103
Accounts receivable, net of allowance of $4,868,300	45,966,364
Unbilled fees, net of allowance of $830,770	3,444,232
Prepaid expenses and miscellaneous receivables	1,172,294
Total Current Assets	51,517,993
Note receivable	500,000
Cash surrender value of life insurance	100,701
Security deposits	241,508
Property and equipment, net	8,190,351
Goodwill	5,904,705
Other assets	20,615
	$ 66,475,873
LIABILITIES AND STOCKHOLDERS' EQUITY	
Current Liabilities	
Current portion of notes payable	$ 1,614,550
Accounts payable	6,515,005
Accrued expenses	4,673,021
Deferred income taxes	1,140,157
Deferred charges	854,734
Taxes payable	37,400
Security deposit	27,426
Total Current Liabilities	14,862,293
Fair value of interest rate swap liability	223,183
Notes payable, net of current portion	10,741,864
Deferred income taxes	227,842
Total Liabilities	26,055,182
Stockholders' Equity	
Capital stock, no par value,100,000 shares authorized and issued, 92,720 shares outstanding	100,000
Additional paid-in capital	646,667
Retained earnings	41,596,686
Treasury stock, 7,280 shares at cost	(1,699,479)
Accumulated other comprehensive loss	(223,183)
Total Stockholders' Equity	40,420,691
	$ 66,475,873

Appendix 2: Certificate of Insurance

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 8/7/2014

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

Greyling Insurance Brokerage
450 Northridge Parkway
Suite 102
Atlanta GA 30350

CONTACT NAME: Jerry Noyola
PHONE (A/C, No, Ext): (770)552-4225
FAX (A/C, No): (866)550-4082
E-MAIL ADDRESS: jerry.noyola@greyling.com

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

INSURED

Langan Engineering &
Environmental Services, Inc.
619 River Drive Center 1
Elmwood Park NJ 07407

COVERAGES CERTIFICATE NUMBER: 14-15 (Langan) REVISION NUMBER:

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

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT X LOC			GL09242433-02	4/1/2014	4/1/2015	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS			BAP9242432-02	4/1/2014	4/1/2015	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
B	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 0			AUC-9242434-02	4/1/2014	4/1/2015	EACH OCCURRENCE AGGREGATE	$ 12,000,000 $ 12,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N: N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		WC9242431-02	4/1/2014	4/1/2015	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
The City of Hollywood is named as an Additional Insured with respects to General & Automobile Liability where required by written contract. Umbrella Follows Form with respects to General, Automobile & Employers Liability Policies.

CERTIFICATE HOLDER

City of Hollywood, Florida

CANCELLATION

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

AUTHORIZED REPRESENTATIVE

Gregg Bundschuh/JERRY

Appendix 3: EEO Statement

EQUAL EMPLOYMENT OPPORTUNITY

LANGAN is an Equal Employment Opportunity employer fully committed to providing equal opportunity in all areas of employment practices. As such, we make employment decisions on the basis of ability, effort, and individual merit. It is the policy of the Firm that:

- there shall be no discrimination with respect to employment, or any of the terms and conditions of employment, because of an individual's race, color, religion, creed, sex, gender, gender identity or expression (transgender status), affectional or sexual orientation, age, ancestry, national origin, citizenship status, physical or mental disability, medical condition, HIV status, genetic information, veteran status, marital status (including Civil Unions), domestic partner status or any other basis protected by law. This policy applies to every aspect of employment, including, but not limited to: hiring, advancement, transfer, demotion, lay-off, termination, compensation, benefits, training and working conditions. The Firm also prohibits unlawful discrimination based on the perception that anyone has any of those characteristics, or is associated with a person who has or is perceived as having any of those characteristics. All such discrimination is unlawful.

It is the obligation of every employee to adhere to the spirit as well as the letter of the policy. Fulfillment of the Firm's Equal Employment Opportunity commitment is part of the ongoing responsibility of all employees and the full cooperation of all employees is essential to the achievement of this objective.

It is the Firm's policy not to discriminate against any qualified employee or applicant with regard to any terms or conditions of employment because of such individual's disability record or perceived disability so long as the employee can perform the essential functions of the job with or without reasonable accommodation. In accordance with applicable law, the Firm will provide reasonable accommodation to qualified individuals with a disability who have made the Firm aware of their disability, provided such accommodation does not constitute an undue hardship on its business or operations.

LANGAN encourages individuals with disabilities to come forward and request reasonable accommodation(s). Employees with a disability who believe they need a reasonable accommodation to perform the essential functions of their job should contact the Vice President of Human Resources.

An employee who has questions regarding this policy or believes that they have been discriminated against based on a disability or wrongfully denied accommodations, should notify the Vice President of Human Resources. All such inquiries or complaints will be treated as confidential to the extent permissible by law.