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22 June 2015

City of Fort Lauderdale City Hall Division of Procurement Services 100 N. Andrews Avenue, Room 619 Fort Lauderdale, FL 33301

Re: **General Environmental Engineering Services Continuing** Contract - Bid #256-11587

To Whom It May Concern:

Langan Engineering and Environmental Services, Inc. is pleased to submit one original, five copies, and one electronic version on USB thumb drive of our proposal for Bid 256-11587 to the City of Fort Lauderdale to provide Environmental Engineering Services. We have made ourselves completely familiar with the contents of the RFQ and the potential type of work which could be offered.

Langan's South Florida operations were founded in 1974. Today, we have offices in Fort Lauderdale and Miami Lakes and have more than 41 professionals providing environmental, geotechnical, and site/civil engineering services across Florida, the Southeast, the Caribbean, and Latin America. Our Fort Lauderdale office is two blocks from City Hall! 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 more than 900 professionals.

Vincent Yarina, PG, CEM will serve as the point of contact and project manager authorized to make representations for the firm. Vince is a Senior Associate and Vice President and leads Langan's environmental practice in Florida. He has more than 23 years of experience providing environmental engineering services to a national client base that includes public agencies, Fortune 500 companies, land developers, financial institutions, attorneys, and institutional investors. Vince also 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 will be supported by Chip Day. Chip has 15 years of experience working on various natural resources-related project types and ecosystems throughout South Florida. He is very familiar with the unique regulatory hurdles associated with Broward County, and how to get over them! The most notable hurdles are associated with potential impacts to the regulated natural resources within the County, such as seagrass, wetlands, mangroves, coral and other protected unique habitats.

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 and workshops as well as robust on-line sharing platforms such as our intranet.

In addition to our qualified staff, we have assembled a team of trusted, local subconsultants whom we have worked with on previous projects and will call in as needed to meet the needs of the City.

The contact information for Mr. Yarina is provided below:

Vincent D. Yarina, PG, CEM
Langan Engineering & Environmental Services, Inc.
110 East Broward Boulevard, Suite 1500
Fort Lauderdale, FL 33301

D: 954.320.2110 F: 954.320.2101 E: <u>vyarina@langan.com</u>

We appreciate the opportunity to submit our qualifications and look forward to working with the City of Fort Lauderdale. We trust that the expertise and qualifications displayed in this response to the City's RFQ for professional services will garner your support. We are confident that our knowledge and experience providing environmental engineering services will serve the best interests of the City and its residents and stakeholders.

Sincerely,

Langan Engineering & Environmental Services, Inc.

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

STATEMENT OF QUALIFICATION CERTIFICATION

Please Note: All fields below must be completed. If the field does not apply to you, please note N/A in that field.

If you are a foreign corporation, you may be required to obtain a certificate of authority from the department of state, in accordance with Florida Statute §607.1501 (visit http://www.dos.state.fl.us/).

Company: (Legal Registr	ation)angan Engineering ar	d Environmental Services, Inc.
Address:110 East Brown	d Boulevard, Suite 1500	
City:Fort Lauderdale		State: _FL Zip: _33301
Telephone No	FAX No. 954.32	0.2101 Email: vyarina@langan.com
Does your firm qualify for	r MBE or WBE status:	MBE WBE
ADDENDUM ACKNOWL are included in the propo		knowledges that the following addenda have been received a
Addendum No. N/A	<u>Date Issued</u>	Addendum No. Date Issued
submitting your respons		citation. If this section does not apply to your bid, simply mark N//IDSYNC you must click the exception link if any variation aditions.
instructions, conditions, spe attachments including the s contract if approved by the below signatory also hereb shall the City's liability for profits arising out of this co visits, evaluations, oral pres	cifications addenda, legal adversed pecifications and fully underst City and such acceptance or agrees, by virtue of submitti respondent's indirect, incider ampetitive solicitation process, sentations, or award proceeding	ng article(s) or services at the price(s) and terms stated subject to entisement, and conditions contained in the bid/proposal. I have read and what is required. By submitting this signed proposal I will acceivers all terms, conditions, and specifications of this bid/proposal. In go rattempting to submit a response, hereby agrees that in no extal, consequential, special or exemplary damages, expenses, or including but not limited to public advertisement, bid conferences, gs exceed the amount of five hundred dollars (\$500.00). This limitate of indemnification or the City's protest ordinance contained in
Submitted by:		Vincent D. Yarina
Vincent Yarina		2.
Name (printed)		Signature
June 20, 2015 Date:		Senior Associate/Vice President Title
· · · ·		* *** =



Qualifications of the Firm

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 900 professionals in its Elmwood Park, NJ headquarters and among regional offices in:

- Fort Lauderdale, FL
- Miami, 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
- Atlanta, GA

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
- Asbestos, LBP, Indoor Air Quality/Mold Consulting
- Geotechnical Engineering
- Foundation Design
- Site/Civil Engineering
- Earthquake/Seismic
- Survevina
- 3D Laser Scanning

- Building Information Modeling (BIM)
- Landscape Architecture + Planning
- Transportation/Traffic Engineering
- GIS/Data Management Services
- Demolition Engineering

Regional Capabilities







Global Presence. Local Expertise.

Langan is a New Jersey corporation authorized to transact business in Florida. Our team includes more than 41 technical engineers and scientists, many of whom have worked on some of the largest and complex projects across South Florida since 1974. 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 Fort Lauderdale with the highest level of technical and professional excellence throughout the project.

Lead Contact Vincent Yarina, PG, CEM

D: 954.320.2110 F: 954.320.2101

E: vyarina@langan.com www.langan.com

Primary Office 110 E. Broward Boulevard, Suite 1500

Fort Lauderdale, FL 33301

Distance to City: 0.3 Miles

Support Services 15150 NW 79 Court, Suite 200

Miami Lakes, FL 33016

Distance to City: 25.3 miles

FL License Number 6601

Services









Technical and Regulatory Knowledge

Langan's broad range of services includes the following:

- Environmental Engineering
- Natural Resources Assessments & Permitting
- Asbestos, LBP, Indoor Air Quality/Mold Consulting
- Remediation Technologies
- 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
- Demolition Engineering

Your Environmental Advocate

Who We Are

Langan is a nationally recognized "hands on", multi-disciplined engineering firm with expertise in environmental compliance and remediation for the petroleum industry. Our reputation has been forged by providing innovative, cost-effective solutions to some of the most difficult environmental and engineering challenges confronting our clients within numerous industries, including petroleum, chemical, pharmaceutical, telecommunications, utilities, and manufacturing.

Our ability to integrate our environmental expertise with complementary core disciplines such as geotechnical and engineering, natural resources and permitting, survey and mapping, provides a streamlined approach to project management that positively affects your bottom line. Additionally, our environmental staff possesses wide and deep knowledge of numerous regulatory programs and relevant legislative matters that are critical to our clients. Langan technical leaders often play key advocacy roles in the shaping of state environmental policies and guidelines, which in turn helps us work collegially with regulatory bodies and enables us to be proactive with engineering solutions that are progressive, practical and permanent.

Through four decades of providing our comprehensive subsurface investigation and remediation services from conception through completion, Langan is continually recognized as a leader in our field, earning major awards for engineering excellence and technical innovation.

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



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). 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.



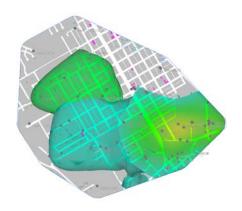






Groundwater Modeling





Modeling of groundwater and surface water is the science of using computers as tools to predit and illustrate the flow of water and/or contaminants over time. Langan recognizes that modeling is a valuable tool for understanding the hydrologic system, ground water resource management, and remediation deisgn.

Langan has the capabilities to provide cities and agencies with groundwater flow and transport models to assess the interaction of contaminant plumes and potential remediation approaches. Our modeling projects rely upon various groundwater modeling platforms and codes to provide a series of snapshots over time which are then interpreted and animated using CTech's EVS software. This offers a clearly presented model that synthesizes a number of highly technical and complex tasks from which recommendations can be made.

The following summarizes Langan's model applications for groundwater and surface water resources management, fate and transport evaluations, and litigation and mediation:

- Simulating groundwater flow
- Evaluating contaminant fate and transport
- Managing Regional aquifer systems with multiple users
- Evaluating impacts of waste disposal from landfills and mining activities
- Assessing the efficiency of aquifers
- Identifying optimal design for groundwater remediation systems

- Assessing saltwater intrusion into coastal aquifers
- Evaluating impact of hydraulic barriers for site dewatering, seawater intrusion, and contaminant migration
- Evaluating multi-party responsibility in litigation arising from disputes with regard to water supply and groundwater contamination
- Optimizing groundwater supply system energy use

Health Risk Assessment

Identifying Risk-Based Alternatives

Langan works with project teams to focus areas of investigation and identify risk-based alternatives for reducing remediation costs. We excel in promoting and gaining regulatory acceptance for human health risk assessments spanning a broad range of potential land use scenarios, including recreational, residential, commercial, and industrial. Langan places specific emphasis on stakeholder engagement and communication during the risk assessment planning and implementation process to facilitate acceptance of methods and conclusions. We possess 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 HRA Services:

- Multipathway Risk Assessment
- Risk-Based Alternative Remediation Standards
- Baseline Human Health Risk Assessment
- Exposure Assessment
- Vapor Intrusion Modeling
- Evaluation of Background Concentrations
- Sampling Strategies
- Statistical Data Evaluation
- Toxicity Assessment
- Derivation of Exposure Point Concentrations
- Regulatory Negotiations
- Chemical Fate and Transport Modeling
- Multiple Descriptors of Risk
- Screening Level Human Health Risk Assessment
- Uncertainty Analysis
- Risk Communication
- Long-term Risk Management









Indoor Air Quality



Most people are aware that outdoor air pollution can damage their health, but many do not know that indoor air pollution can also have significant health effects. USEPA studies of human exposure to indoor air pollutants may be 2 to 5 times, and occasionally more than 100 times, higher than outdoor levels. These levels of indoor air pollutants may be of particular concern because most people spend 90% of their time indoors.

Energy conservation measures for office buildings instituted during the early 1970s have minimized the infiltration of outdoor air and have subsequently contributed to the build-up of indoor air contaminants. Additionally, concern about indoor exposure to mold has been increasing as the public becomes aware that exposure to mold can cause a variety of health effects and symptoms.

Langan provides an experienced team of qualified professionals committed to the highest level of technical excellence and client responsiveness. Our approach is to provide cost-effective practical engineering and environmental services to guide projects to successful completion.

Langan currently provides a variety of services relating to indoor air quality concerns. Examples of these include:

- Indoor air quality profiles
- Microbial contamination assessments
- Environmental engineering/investigation
- Construction and/or renovation inspection and oversight
- Health and safety monitoring
- Risk analysis
- Environmental compliance
- Remedial plans/specifications/contract documents
- Project management
- Indoor air quality testing
- Industrial hygiene studies
- Indoor Air Quality training programs to address building occupants concerns

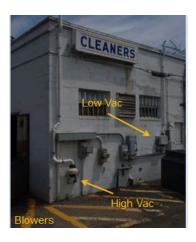








Vapor Intrusion Evaluation and Mitigation









Experts in Vapor Intrusion

Langan's environmental staff are experienced with evaluating and mitigating vapor intrusion, the migration of volatile chemicals from the subsurface into overlying buildings. In the mid-1990's vapor intrusion became more widely recognized by the environmental regulatory community as warranting specific attention. Since that time, Langan has been active in both state and federal regulatory programs in helping develop guidance for the various stages of vapor intrusion including receptor evaluation, investigation, remediation, monitroing, and closure. Our environmental technical staff are familiar with established protocols for investigating the vapor intrusion pathway including the recommeded number of sub-slab soil gas and and indoor air samples based on the size of the building footprint and numerous other building and site-specific technical factors.

Langan has developed an in-house vapor intrusion training program focusing on the following aspects of vapor intrusion:

- General vapor intrusion concepts
- Field sampling demonstrations
- Field methods and analyses
- Data evaluation (including modeling)
- Remedial methods

Langan's Vapor Intrusion Services Include:

- Screening for property transactions (ASTM E2600-10)
- Receptor evaluations
- Soil gas sampling (sub slab and near slab)
- Indoor air sampling
- Background/ambient sampling
- Off-site residential sampling and mitigation programs
- Community interaction for VI evaluation programs
- VI Modeling
- Industrial, commercial, and residential mitigation systems
 - Barriers
 - passive ventilation
 - active depressurization
- Operation and maintenance monitoring

Natural & Cultural Resources

Navigating Policy and Nature







- Many Marcellus Shale gas sites cause earth disturbances which in turn affects natural resources. Improper management can lead to project delays or shutdowns. Langan has developed strong relationships with the federal, state and local regulators through our experience with over 1,000 wetland and natural resource permitting projects throughout the U.S. We specialize in PA, NJ and NY regulations. Langan's Natural & Cultural Resource staff consists of certified professional wetland scientists, ecologists, planners, wildlife biologists, and archaeologists with practical experience. Our experienced staff includes permitting specialists who 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 and cultural resources issues early in the design process and our in-depth understanding of regulatory programs and policies results in an expedited application and approval process. Our natural resource experts can provide the oil and gas industry with the following relevant services:
- NEPA Compliance
- Wetland Delineations & Functional Assessments
- Wetland Mitigation Design, Banking, & Monitoring
- Army Corps of Engineers Section 10/404 Permitting
- Land Use Permitting
- Stormwater and Industrial Discharge Permitting
- Environmental Assessment/Environmental Impact Statement (EA/WIS)
- Alternatives Analysis
- Stream Restoration & Bioengineering

- Floodplain Analysis
- GIS Land-Use Mapping
- Wildlife & Ecological Surveys
- Threatened and Endangered Species Surveys
- Historic Structures
 Surveys and Recordation
- Archaeological Investigations
- Coastal/Waterfront Development Permitting and Planning
- Baseline Ecological Evaluations (BEE)
- Ecological Risk Assessment

Carbon Footprinting



Langan has performed greenhouse gas emissions inventories, also known as carbon footprint analyses, for several environmental clients within California and the United States. Carbon footprint analysis is an accounting of the direct and indirect emissions of greenhouse gasses associated with an activity, such as a remediation project. Langan is well versed in carbon footprinting tools and protocols, including the Sustainable Remediation Tool (SRT) and the SiteWise Tool.

Demonstrating the business value for green and sustainable remediation (GSR) begins with a method for adequately measuring "value" and allowing businesses to weigh that value against other business priorities, most notably cost. Langan uses carbon footprint analyses as a decision tool for businesses, which have improved the impact and value of sustainable business actions.

Langan has performed carbon footprint analyses for the following example clients and projects:

- Semiconductor manufacturing facility
- Petroleum production company
- Industrial site remediation
- In Situ bioremediation processes
- In Situ thermal remediation processes
- Water treatment processes
- Landfill remediation
- Construction, operation, and maintenance









Landfill Remediation & Redevelopment

Capping, Cleaning, and Re-Creating Communities

Few firms possess the in-house capabilities and experience of Langan to address the subsurface, remedial, and regulatory challenges of landfill redevelopment projects. Over 40 years in business has forged our reputation as a 'go-to' engineer to balance the concerns of both the developer and the community on these project assignments. Our commitment to technical excellence and practical experience allows us the ability to develop elegant solutions for complex sites.

During those decades, Langan has established the respect of the various state and federal 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 for a range of end uses 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 subsurface investigations, baseline ecological evaluations, methane venting and leachate conveyance systems, ground improvement programs, and site planning and permitting.

Langan Landfill Remediation Services:

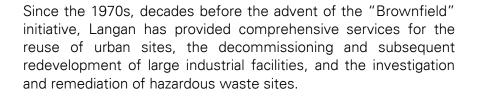
- Capping and closure design and engineering
- Subsurface containment / cut-off walls
- Slope stabilization
- Leachate collection and treatment
- Landfill Disruption Permitting
- Closure plans and regulatory approval
- Green capping, including phytoremediation and habitat restoration
- Wetlands and Waterfront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





Brownfield Redevelopment

Urban Core Revitalization



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.



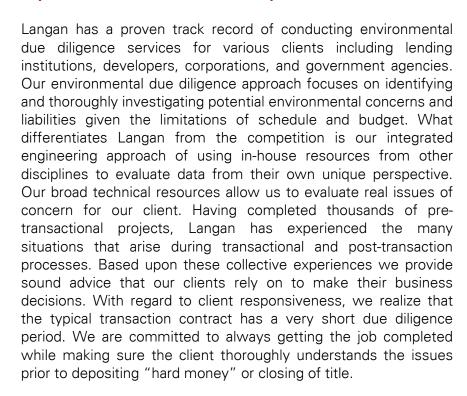






Environmental Due Diligence

Experience and Advice You Can Rely On



Environmental due diligence typically begins with the primary due diligence service, the Phase I ESA, which is widely used as the initial level of inquiry into a property. Typically the goal with any Phase I ESA is to determine if Recognized Environmental Conditions (RECs) are present based on visual observations and review of available records and historical information in accordance with ASTM E1527-05. However, understanding our clients' objectives up front allows us to modify the scope of work identify additional concerns that could impact their development or exit strategy. Langan's services also include: asbestos, lead paint and lead in drinking water, mold, radon and indoor air quality investigations; wetlands and endangered species; regulatory compliance; cultural resources, Phase II ESAs and remedial cost and alternatives evaluations. Langan's approach to environmental due diligence is sound and our clients have successfully used our advice to make informed business decisions for many years.







Green and Sustainable Remediation

Langan is a leader in the practice of Green and Sustainable Remediation (GSR). GSR involves the application of sustainable practices to environmental investigation, remedial feasibility studies, remedial design, and remedy implementation. A GSR approach strikes a balance between economic viability, and impacts the quality of life of the community in which the remediation takes place. A GSR approach considers impacts on a local, regional, and global scale.

Langan has directly applied principles of GSR to projects, producing identifiable benefits and savings for our clients. We have performed remedial system carbon footprints to assist clients evaluating the sustainability of remediation approaches, performed remediation system optimization using GSR principles, assisted clients in reusing construction materials on projects, and incorporated natural alternative remediation alternatives. For example, TreeWells were used for groundwater extraction and practicality and science, economics and sustainability, to do the right thing the right way on projects.

Langan was the first corporate member of the Sustainable Remediation Forum (SURF), a non-profit professional society incorporated in 2010 and devoted to promoting and developing SURF. Responsibilities include leading a committee to identify metrics that can be used to track the sustainability of a remediation project, leading a committee to develop a rating system for verifying the sustainability of a remediation project, serving as the mentor for the Stanford University chapter of SURF, and serving on the SURF Board of Trustees.

Langan is also actively involved in the Interstate Technology Regulatory Council's (ITRC) Green and Sustainable Remediation Task Force. In 2011 and 2012, Langan and ITRC co-sponsored one-day seminars focused on sustainable remediation; bringing together leaders in sustainable remediation across the government, academia, industry, clients, and partners.

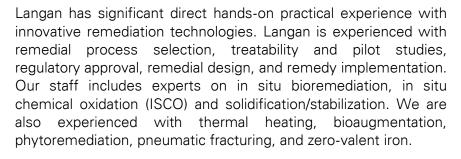
Langan's leadership in GSR extends to presenting this topic at industry conferences. Langan personnel have chaired sessions focused on GSR at the Symposium on Bioremedation and Sustainable Environmental Technologies in 2011, and the Conference on Remediation of Chlorinated and Recalcitrant Compounds in 2012. Langan presented numerous platform and poster presentations at these and other conferences, where presentation topics included the demonstration of carbon footprinting for remediation projects, use of carbon footprinting for sustainable decision-making, and case studies of projects that used GSR principles.

As a leader in sustainable design, Langan has over 125 professionals who are LEED Accredited Professionals or LEED Green Associates. We also have personnel accredited as Envision Sustainability Professionals. These accreditations demonstrate our commitment to sustainability of all our professional services.

Remediation Technologies

Innovative Permanent Solutions







Langan works closely with clients to determine the optimal remedial approach for each site. Short-term, long-term and life cycle costs are considered. Future uses of the site and the remediation technology selection, design and implementation. Conventional technologies are always used as a benchmark in our remedial evaluation. Langan considers the proper role of treatability and pilot studies, understanding the up-front costs that these scientific studies represent.

Langan's innovative remediation solutions include:

hydrocarbons



• ISCO using either permanganate, persulfate or peroxide in overburden and bedrock formations for both chlorinated solvent and gasoline constituents

Biosparging for the treatment of dissolved phase petroleum

 Design of innovative containment systems including sheeted excavations and slurry walls and as well as active bioremediation technologies, including bioaugmentation, both for hydrocarbons and chlorinateds



- Experience with in situ hexavalent chromium stabilization, Unique experiences applying stabilization and solidification technologies to chemically and physically improve soil quality for site development, and to eliminate unacceptable exposure to leachable constituents
- Extensive work using American Petroleum Institute (API) subsurface modeling techniques to evaluate separate

Design & Implementation of Remediation Systems

Technical Knowledge and Experience

Langan is a full service organization capable of managing every aspect of any remediation project from the initial investigation to the remedial alternatives evaluation, treatability and pilot studies, remedial design, implementation, and eventual site closure. Langan has vast hands-on experience designing and implementing the following in-situ remedial technologies:

- In-Situ Chemical Oxidation
- Bioremediation
- Air Sparging & Soil Vapor Extraction
- Chemical Reduction and Stabilization
- Multi-Phase Extraction
- Pump & Treat
- Solidification and Stabilization

The site investigation findings lead directly to an evaluation of remedial alternatives. Once a technology has been selected, often a treatability or pilot-scale study is conducted to define the performance of the technology. A full-scale engineering design of the remedy is then developed and implemented. Langan's capabilities allow for "one stop shopping" and provides a cost effective, efficient, and sustainable design and implementation. In many cases, we "design-build" or "self-perform" full scale implementation.



Langan has directly managed a number of significant remedy design and full-scale implementation projects in 2013:

- Injection of thousands of pounds of permanganate to address VOC impacted groundwater in bedrock through an enhanced fracture network.
- An innovative design and implementation of a large air sparge system for treatment of VOCs, SVOCs, and arsenic in a complex geologic setting.
- MPE and SVE systems implementation to remove light nonaqueous phase liquid (LNAPL) from the subsurface at a former manufacturing facility.
- P&T system implementation to prevent the migration of a VOC plume into the pumping zone of a nearby municipal drinking water supply well.





Langan has designed and built complex process systems.

Ecological Risk Assessment

Experts in Ecosystems

Langan's ecological risk assessment staff is experienced with identifying ecologically relevant contaminants. properly environmentally sensitive natural resources, and impacts to ecological receptors. Our scientifically-designed ecological field studies use assessment and measurement tools that effectively evaluate the bioavailability of contaminants due to ecological Pairing these skills with our expertise in exposures. environmental engineering and remediation, sustainable habitat restoration, natural resource permitting, and site development has allowed Langan to provide cutting edge sustainable solutions that help protect ecosystems as well as human health.

Langan Ecological Risk Assessment Services:

- Screening Level Ecological Risk Assessments
- Ecological Risk Assessment
- Wildlife Exposure Modeling
- Sediment Characterization
- Biomonitoring
- Bioavailability Assessments
- Wildlife Habitat Assessments
- Threatened and Endangered Species Surveys
- Natural Resource Damage Assessment
- Habitat Restoration and Sustainable Design
- GIS/Database Management

- Wetland Delineation
- Environmental Impact Statements
- Streambank Restoration
- Remediation Design/ Oversight
- Environmental Assessments
- Site Characterization
- Management of PCB-Containing Materials
- Human Health Risk Assessment
- Site Feasibility Studies
- Remediation by Natural Attenuation



In-Situ Soil Stabilization/Solidification







Technical and Regulatory Knowledge

Langan has substantial experience in soil remediation using in-situ soil stabilization/solidification (ISS) technology. This specialized knowledge is critical to the efficient preparation of design documents and successful implementation of ISS remediation technology to address metals, PCBs, volatile and semi-volatile organic compounds in soil and sediment. We are illustrating our relevant experience by providing several brief project descriptions in the following pages, which represent a subset of our work in specific areas of interest.

Langan Environmental Services:

- Site Characterization
- Groundwater Sampling and Monitoring
- Vapor Mitigation
- Remedial Selection and Treatability/Bench-scale Testing
- Construction Plans & Specifications
- Wetland Permitting
- Remedial Construction Bidding
- Construction Oversight
- Remedial Design
- Construction Management and Oversight
- Closure Documentation and Reporting

Sediment Characterization and Remediation

Dredging through Complexities

Langan maximizes our service capabilities to provid multidisciplined approaches toward sediment characterization and remediation. Our engineers and scientists have extensive knowledge of the biological, chemical, and physical mobility of contaminants in sediment and the effect of other mechanistic influences on sediment mobility. Langan's understanding of these sediment functions is a critical element to our ability to successfully design and implement complex and innovative sediment investigations and remediation projects in various types of waterways and wetland settings. Our intergrated team approach toward sediment remediation has allowed us to restore the health of sediments based on sustainable risk management strategies, yielding immediate and long-term benefits.

Langan Sediment Characterization and Remediation Services:

- Sediment Investigations
- Sediment Remediation
- Environmental Engineering
- Hydrological Testing
- Fate and Transport Modeling
- Structural Design
- Permitting/Regulatory Approvals
- Low Impact Stormwater Design
- Streambank Restoration

- Environmental Assessment
- Remediation
 Design/Oversight
- Green Remediation
- Bioengineering Design
- Feasibility Analysis
- Soil Erosion and Sediment Control Planning
- Habitat Restoration and Sustainable Design
- GIS/Database Management
- Wetland Delineation

Specialty Chemical/ Petrochemical

Two Decades Tackling Challenges

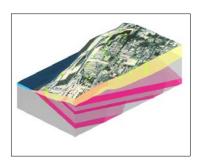
Due to the high demand for petroleum products and strict regulation of the petroleum industry, it is a challenge for environmental managers to achieve their remedial objectives while complying with ever-changing regulations. Langan has a proven history of helping petroleum managers achieve their objectives at complex sites by developing remedial programs that focus on compliance and risk-based remedial decisions.

Our team of petroleum specialists includes professional geologists, hydrogeologists, engineers and compliance specialists that have been serving the specialty chemical and petroleum industries for two decades. This core team is complemented by an array of in-house services that include site/civil, geotechnical, and natural resource engineering. These broad capabilities allow us to maintain the creativity and technical knowledge required to solve environmental and engineering problems at challenging petroleum sites.

Our Petroleum Services include:

- Site Investigation & Characterization
 - o Geologic and Hydrogeologic Characterization
 - o Expedited Site Characterization
 - o Groundwater and Soil Sampling
 - Comprehensive Database and GIS Development & Management
 - Groundwater, LNAPL and Surface Water Modeling
 - Detailed Site Conceptual Model Development
- Remediation Engineering
 - o Remedial Cost & Feasibility Analysis
 - o Bench and Pilot-Scale Remedial System Evaluations
 - o NAPL Recoverability Testing
 - o Groundwater/NAPL Recovery System Selection, Design and Optimization
 - o Remedial System Performance Evaluations
 - Lagoon Investigation and Closure
- Regulatory Compliance
 - o RCRA Corrective Action and Environmental Indicators
 - Clean Air Act Compliance (Title V, MACT, RACT, NESHAPs)
 - o Toxic Release Inventory Reporting (Form R & A)
 - o Groundwater Protection Program Plans
 - o Soil Reuse Plan Development







Sustainable Design

LEEDing the Way

With more than **125 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







Geotechnical





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



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 & 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







Similar Experience









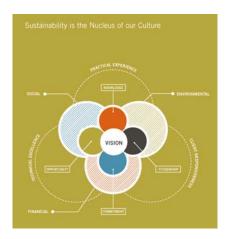
Solving Challenging Technical Issues

We have provided environmental engineering services similar to those requested by the City of Fort Lauderdale. 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.

Some of our public-agency clients have included:

- The City of Hollywood HIAD
- The City of Pompano Beach
- The City of Lauderhill
- The City of Coconut Creek
- The Monroe County Solid Waste Management Division
- The City of Homestead
- 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

Sustainable Business Practices



Fostering Positive Change

With over 100 Leadership in Energy and Environmental Design Accredited Professionals (LEED APs and GAs) on staff, sustainable design weaves through all Langan services. Our diverse portfolio of intelligent site planning, design, and engineering coupled with our of the sustainable design movement. Langan has been an instrumental player on dozens of LEED and sustainable design projects. Our expertise allows us to make significant contributions in developing sustainable sites with an emphasis on stormwater management, low landscapes. brownfield redevelopment. impact remediation, materials recycling, energy conservation, and renewable energy design. Langan's technical services involve best practices that lead to a sustainable future. We believe that individuals and organizations will thrive in a future built on the principles of sustainability.

We are committed to helping build that future through our technical expertise in sustainable matters, as well as our internal operations and corporate environmental stewardship.

To support Langan's corporate sustainability vision, we are setting measurable goals that correspond with our company's core values and the three pillars of sustainability: financial, environmental, and social. We have already accomplished a lot and now we are taking Langan's Sustainability Program to the next level by making it an integral part of our corporate culture. Such integration will require specific commitments within the three pillars of sustainability which can be further reviewed in the Langan Corporate Sustainability Plan, under Appendix 1.

Firm Licenses

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, 2015, that its most recent annual report/uniform business report was filed on February 5, 2015, 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 Fifth day of February, 2015

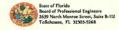


Secretary of State

authentication ID: CC9048579238

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

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



Langan Engineering And Envir Srvs Inc 15150 NW 79TH COURT STE. 200 PARKSIDE CORPORATE CENTER MIAMI, FL 33016

Each licensee is solely responsible for notifying the Florida Board of Professional Engineers in writing the licensee's current address.

Name changes require legal documentation showing name change. An original, a certified copy, or a duplicate of an original or certified copy of a document which shows the legal name change will be accepted unless there is a question about the authenticity of the document raised on its face, or because the genuineness of the document is uncertain, or because of another matter related to the application.

At least 90 days prior to the expiration date shown on this license, a notice of renewal will be sent to your last known address. If you have not yet received your notice 60 days prior to the expiration date, please call (850) 521-0500, or write, Florida Board of Professional Engineers, 2639 North Monroe Street, Suite B-112, Tallahassee, FL 32303-5268 or e-mail: board@fbpe.org. Our website address is http://www.fbpe.org.

State of Florida

Board of Professional Engineers

Langan Engineering And Envir Srvs Inc



is authorized under the provisions of Section 471,023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes.

CA Lic No. Expiration: 2/28/2017 GOD WE

Audit No: 228201702299

Local Business Tax Receipt

Miami-Dade County, State of Florida

BUSINESS NAME/LOCATION RECEIPT NO.
LANGAN ENGINEERING & ENVIRONMENTAL SERVICE PREMIEWAL
15150 NW 79 CT 200 570870 MIAMI LAKES FL 33016

EXPIRES

SEPTEMBER 30, 2015

LANGAN ENGR & ENVIRO SVCS INC Employee(s)

\$45.00 08/07/2014

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit of a certification of the helder's qualifications, to do business. Holder must comply with any governmental or magnetimental regulatory laws and requirements which apply to the business.

ve must be displayed on all commercial vehicles - Miami-Dado Code Sec 8a-276.



IS CERTIFIED under the provisions of Ch 492 FS.
Exercision date: All 31, 2016 L1407260001729

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS



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



ISSUED: 07/28/2014

RICK SCOTT, GOVERNOR

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

DISPLAY AS REQUIRED BY LAW

SEQ# L1407280001729

ARCHITECT - ENGINEER QUALIFICATIONS PART I - CONTRACT-SPECIFIC QUALIFICATIONS A. CONTRACT INFORMATION 1. TITLE AND LOCATION (City and State) General Environmental Engineering Services 2. PUBLIC NOTICE DATE 3. SOLICITATION OR PROJECT NUMBER June 04, 2015 256-11587 **B. ARCHITECT-ENGINEER POINT OF CONTACT** 4. NAME AND TITLE Vincent Yarina, PG, CEM, Senior Associate/Vice President 5. NAME OF FIRM Langan Engineering and Environmental Services, Inc. Fort Lauderdale, Florida TELEPHONE NUMBER 7. FAX NUMBER 8. E-MAIL ADDRESS 954.320.2100 954.320.2101 vyarina@langan.com C. PROPOSED TEAM (Complete this section for the prime contractor and all key subcontractors.) (Check) SUBCON-TRACATO PARTNER 9. FIRM NAME 10. ADDRESS 11. ROLE IN THIS CONTRACT PRIME Langan Engineering and Environmental 110 E. Broward Boulevard Environmental Engineering Suite 1500 Services, Inc. Fort Lauderdale, FL 33301 a. Χ CHECK IF BRANCH OFFICE ARS Environmental, Inc. 10097 Cleary Boulevard, #305 Radon Site Testing, Assessment and Plantation, FL 33324 Remediation Plans Χ ☐ CHECK IF BRANCH OFFICE b. The Chappell Group, Inc. 714 E McNab Road Endangered Species Evaluation and Pompano Beach, FL 33060 relocation, Wetland Delineations, ☐ CHECK IF BRANCH OFFICE HUD/NEPA Assessments and Χ Remediation Plans, Benthic Surveys, C. Wetlands and Wetlands Landscape Design Engineered Environmental Solutions, Inc. 601 N East Coast Avenue Storage tank contamination testing and evaluation Lantana, FL 33462 Χ d. ☐ CHECK IF BRANCH OFFICE Envirodrill, Inc. 6900 SW 21 Court, Suite 13 Environmental drilling Davie, FL 33317 Χ ☐ CHECK IF BRANCH OFFICE e. The Goldstein Environmental Law Firm One SE Third Avenue, Suite 2120 Environmental/social justice evaluations, Miami, FL 33131 Ordinance and guideline review and Χ ☐ CHECK IF BRANCH OFFICE development, compliance with regulation

3610 Park Central Boulevard N.

Pompano Beach, FL 33064

D. ORGANIZATIONAL CHART OF PROPOSED TEAM

Pace Analytical Services, Inc.

CHECK IF BRANCH OFFICE

and ordinances

services

AUTHORIZED FOR LOCAL REPRODUCTION

Χ

f.

g.

STANDARD FORM 330 (6/2004)

Environmental sampling and analytical

20. EXAMPLE PROJECT KEY NUMBER

DL11

(Present as many projects as requested by the agency, or 10 projects, if not specified.

Complete one Section F for each project.)

21. TITLE AND LOCATION (City and State)

Fort Lauderdale/Hollywood International Airport, T-4 Remediation,

Fort Lauderdale, Florida

PROFESSIONAL SERVICES 2015

CONSTRUCTION (if applicable) 2015

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER
James A. Cummings, Inc.

b. POINT OF CONTACT NAME Mike Lanciault c. POINT OF CONTACT TELEPHONE NUMBER 954.733.4211

22. YEAR COMPLETED

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

Langan provided geotechnical and environmental services during utility construction in a petroleum-impacted area near the western gate of Fort Lauderdale/Hollywood International Airport.

Services included:

- Characterizing soil before excavation to determine which soil can be reused and which soil must be removed for off-site disposal
- Providing a geotechnical evaluation of soil conditions;
- Developing a comprehensive work plan for the entire project
- Developing a baseline of groundwater quality in advance of construction
- Abandoning monitoring wells in the construction footprint
- Observing the removal and segregation of impacted soil
- Sparging the open excavation to remove volatile petroleum compounds
- Reinstalling and sampling monitoring wells after construction





	25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT						
a.	(1) FIRM NAME Langan Engineering & Environmental Services	(2) FIRM LOCATION (City and State) Miami Lakes, Florida	(3) ROLE Work Plan Development, Geotechnical Evaluation of Soil Conditions, Soil Pre-Characterization, Well Installation & Abandonment, Open-excavation Air- sparging, Environmental Observation During Construction.				

(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

21. TITLE AND LOCATION (City and State)

Border Patrol at Dania Beach City of Dania Beach, Florida

22. YEAR COMPLETED **PROFESSIONAL** SERVICES

2006-2009

CONSTRUCTION (if applicable)

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER WSSA Florida, LLC

b. POINT OF CONTACT NAME John Sabty

c. POINT OF CONTACT TELEPHONE NUMBER 810.239.1551

2009

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

The Border Patrol at Dania Beach is a privately owned commercial building, designed for the lease and use of the Department of Homeland Security. The project site encompasses 4.4 acres and is located in the City of Dania Beach, Broward County, Florida, directly east of the Ft. Lauderdale-Hollywood International Airport. The facility consists of a 30,000 square foot building with associated parking and infrastructure.

Langan provided all major engineering services for this project including site/civil engineering & permitting, natural resources permitting, and geotechnical and environmental services.

Langan prepared the site plan; utility plans; paving, grading, and drainage plans; and coordinated the preparation of the plat, landscape plan, and lighting plan. Langan also coordinated the project approval with the client, other consultants, attorneys, and government officials.



This project's extensive filling of wetlands required close coordination between Langan's geotechnical engineers, environmental engineers and natural resources permitting specialists. Geotechnical challenges included monitoring of the import fill operations so that the finished subgrade was suitable for supporting the building and the site improvements. Much of the imported fill was recycled construction waste and Langan provided the environmental oversight to ensure contaminated materials were not being brought onto the property.

Langan's permitting specialists accomplished the complex wetland permitting. The site is located in a tidal floodplain, and mangrove wetlands within much of the development area. Langan conducted a Phase I Environmental Site Assessment along with a wetland delineation of the site.

A major challenge in the project was to get approval to fill 4.4 acres of mangroves. In addition to the application for a permit under Sec. 404, Federal Clean Water Act, and a Wetland Resource License from Broward County, Langan also prepared a detailed alternative analysis and public interest guidelines. Langan also evaluated the wetland impact and computed mitigation required according to state guidelines. In the absence of suitable areas for off-site mitigation within Broward County, Langan proposed using the Everglades Mitigation Bank to obtain the credits required to mitigate the unavoidable impact to the existing habitat.

Langan performed a subsurface investigation 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.

	25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT						
(1) FIRM NAME (2) FIRM LOCATION (City and State) (3) ROLE							
a.	Langan Engineering & Environmental	Miami Lakes, Florida	Site/Civil Engineering; Geotechnical Engineering;				
	Services		Environmental Engineering; Natural Resources;				
			Permitting				

F. EXAMPLE PROJECTS V QUALIFICAT		20. EXAMPLE PROJECT KEY NUMBER						
(Present as many projects as requ Complete o	ested by the agency, or 10 projects, if not ne Section F for each project.)	t specified.	3					
21. TITLE AND LOCATION (City and State)		22. Y	/EAR COMPLETED					
MANDELA PARKWAY Oakland, California		PROFESSIONAL SERVICES 2010	CONSTRUCTION (if applicable)					
	23. PROJECT OWNER'S INFORMA	ATION						
a. PROJECT OWNER Balco Properties	b. POINT OF CONTACT NAME Reed Westphal	c. POINT OF COI 510.663.6184	NTACT TELEPHONE NUMBER					
24. BRIEF DESCRIPTION OF PROJECT AND REL	EVANCE TO THIS CONTRACT (Include s	scope, size, and cost)						
The project site contained a leaking fuel unbeneath a large existing commercial building strategy or site closure.								
Langan prepared a conceptual site model an evaluation of remedial alternatives, Langan prepared a Feasibility Study and Corrective A	n developed a recommended plan	for long-term containm	·					
Remediation of soil under the existing b implementation and financially. Through dili human and environmental receptors were remediation, but rather long-term containment	igent research and analysis, Langan of incomplete and proved that the	demonstrated that all ma	ajor risk pathways to potential					
Langan performed a sustainability analysis a The analysis indicated that the containment within acceptable levels as compared to the	approach exhibited significantly redu							

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

(3) ROLE

Permitting

(2) FIRM LOCATION (City and State)

Miami Lakes, Florida

(1) FIRM NAME

Services

a.

Langan Engineering & Environmental

STANDARD FORM 330 (6/2004)

Site/Civil Engineering; Geotechnical Engineering;

Environmental Engineering; Natural Resources;

(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

21. TITLE AND LOCATION (City and State) 22. YEAR COMPLETED

321 Development Project (Former Fashion Mall),

Plantation, Florida

PROFESSIONAL SERVICES 2010 CONSTRUCTION (if applicable) N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNERUS Capital Holdings Group

b. POINT OF CONTACT NAME Jerry Jiang

c. POINT OF CONTACT TELEPHONE

NUMBER 954.693.8880

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



Langan provided asbestos consulting services for US Capital Holdings Group prior to the planned renovation of the three- level mall complex which includes former Lord & Taylor and Macy's department stores, parking garages and seven-story executive office building that was constructed in the early to mid 1980s. The client planned to renovate the entire mall complex in multiple phases.

Langan performed a pre-renovation asbestos survey for the entire mall complex, including the department stores and office building. The purpose of the asbestos survey was to identify the presence, condition and extent of asbestos-containing material (ACM) in accessible areas of the facility. The pre-renovation asbestos survey was intended to meet the NESHAP (10-day) notification requirement and local building permitting requirements prior to conducting any planned renovation. Our certified asbestos inspector identified approximately 36,000 ft2 of non-friable ACM throughout the facility.

Langan also assisted the client in selecting an asbestos abatement contractor and provided FL Administrative Code mandated independent asbestos abatement project monitoring throughout the initial phase of the planned renovation of the property. This service consisted of preparing a work plan, full-time inspection by Langan's AHERA certified project monitors of the asbestos removal activities, air testing, and preparing closure reports in compliance with federal regulations for asbestos, such that the asbestos abated areas can be re-occupied.

Langan also assisted the abatement contractor in developing an abatement strategy for the removal of the mirror mastic from elevator bank exterior walls that were approximately 50-feet in height.

	25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT						
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE				
a.	Langan Engineering & Environmental	Miami Lakes, Florida	Asbestos Survey; Asbestos Abatement Monitorir				
	Services, Inc.						

(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

21. TITLE AND LOCATION (City and State)

Homestead City Hall

Homestead, Florida

22. YEAR COMPLETED **PROFESSIONAL**

SERVICES 2008

CONSTRUCTION (if applicable) N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER City of Homestead

b. POINT OF CONTACT NAME Ana Alvarez, City of Homestead Public Works and Engineering Department

c. POINT OF CONTACT TELEPHONE NUMBER

305.224.4772

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

The Homestead City Hall project consists of a new 3-story, approximately 80,000-SF building housing the administrative facilities for the City of Homestead Municipal Government, including a 230-seat auditorium and council chambers. The project also includes an open plaza and new surface parking lots.

Langan performed Phase I and Phase II Environmental Site Assessments (ESA) as part of an on-going continuing services contract with the City of Homestead. The Phase I ESA identified some potential environmental concerns associated with both on-site and off-site recognized environmental conditions. A limited Phase II ESA was performed to evaluate the potential impact to the site from these conditions.

Langan also performed a subsurface investigation and provided foundation recommendations for the design of the new facilities. Economical shallow spread footing foundations were recommended for support of the structure. In addition, percolation tests were performed to obtain the soil permeability data required for the design of the stormwater drainage system.





25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

(1) FIRM NAME Langan Engineering & Environmental Services, Inc.

(2) FIRM LOCATION (City and State) Miami Lakes, FL

Phase I and Phase II Environmental Site Assessments (ESA); Geotechnical Subsurface Investigation; Geotechnical Engineering and Foundation Recommendations

(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**

21. TITLE AND LOCATION (City and State)

Fontainebleau Hotel Environmental, Asbestos, and Geotechnical Services Miami Beach, Florida

22. YEAR COMPLETED PROFESSIONAL **SERVICES** 2009

CONSTRUCTION (if applicable) 2009

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER Fontainebleau Hotel, LLC b. POINT OF CONTACT NAME Leo Carrillo

c. POINT OF CONTACT TELEPHONE NUMBER

786.276.1315

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

This renovation and expansion project at the famous Fontainebleau Resort in Miami Beach, FL began in 2002 and was completed by the end of 2009. Langan provided integrated cost effective foundation and site preparation recommendations for this billion dollar project including environmental, geotechnical, and asbestos services. On-site technical support and testing services prior to and during construction throughout the almost 1,000,000 sf of floor space comprised a four-story convention center; 15 and 17-story towers; two, 10-story structures; three levels of the fully-occupied Fontainebleau Hilton Hotel Chateau Building; and host of groundlevel amenity features that included a shopping mall, restaurants, resort back-ofhouse areas, spa facility, and dinner theater.



A Phase I and Phase II Environmental Site Assessment (ESA) was also conducted

at this hotel-resort property. As part of this ESA, a geophysical investigation was performed to map the existence of utility lines, foundations, or other buried structures. Additionally, Langan conducted asbestos surveys of the entire property to meet permit and regulatory requirements for existing on-site structures planned for renovation and demolition. The surveys consisted of detailed mapping and cataloging of asbestos-containing material (ACM) throughout the property. Langan assisted the building owner with demolition permitting, abatement contractor selection, and regulatory issues regarding proper project notification and asbestos removal. The approximate cost of removing the ACM was \$3M.

Langan also provided, Florida Administrative Code mandated, independent asbestos abatement project monitoring and provided final closure reports to regulatory agencies to validate that the asbestos abated areas were ready for reoccupancy. This service consisted of full-time inspections conducted by Langan's AHERA-certified project inspectors during the demolition and renovation of all structures and included asbestos removal activities, air quality testing, and area closure activities. Langan proactively worked with the building

owner and was responsive such that the abatement was completed properly and

according to the planned construction schedule for this massive project.

Geotechnical services included designs and recommendations for dewatering foundation excavations, which required close coordination with the environmental team to assure subsurface contaminants from on-site and off-site concerns were appropriately mitigated. The geotechnical engineering study of the 36-story tower evaluated the use of long and short augercast piles for foundation support necessary to successfully coordinate the connection between the tower and an adjoining 6-level podium and 2-level garage. Langan's comprehensive and innovative pile load testing program and evaluation of the results of the load test led to further shortening of the piles.



Complementary coastal and environmental regulatory consulting services addressed mandatory permitting requirements in accordance with Florida Department of Environmental Protection (FDEP). This required close coordination with the architects, owner, and FDEP to assure that the design and construction of structures and hardscapes east of the Coastal Construction Control Line (CCCL) were in compliance with FDEP coastal regulations.

25. FIRMS FROM SECTION C INVOLVED WITH TH	S PROJECT

(1) FIRM NAME Langan Engineering & Environmental a. Services, Inc.

(2) FIRM LOCATION (City and State) Miami Lakes, Florida

(3) ROLE

Environmental and Geotechnical Engineering; Asbestos Services

(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**

21. TITLE AND LOCATION (City and State)

City of Hallandale Beach Hydrogeological Services

Hallandale Beach, Florida

22. YEAR COMPLETED PROFESSIONAL **SERVICES** Ongoing

CONSTRUCTION (if applicable)

23. PROJECT OWNER'S INFORMATION

c. POINT OF CONTACT TELEPHONE a. PROJECT OWNER b. POINT OF CONTACT NAME City of Hallandale Beach **NUMBER** Shaun Bamforth Calvin, Giordano and Associates, Inc. 954.921.7781

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

Langan provided hydrogeological services in support of the city's plan to install pressurized right-of-way stormwater drainage wells to alleviate street flooding. Langan's scope of work included supervising five 150-ft. test holes in the 120-acre Northeast Quadrant project area and five 200-ft. test holes in the 120-acre Southwest Quadrant project area; evaluating geology and water quality (total dissolved solids); and performing a specific capacity test in potential production zones in the Southwest Quadrant project area. Langan completed both project areas and provided reasonable assurance reports that met the requirements of Chapter 62-528, Florida Administrative Code, as part of the permit package for the new stormwater drainage wells.

Langan determined that the geological and total dissolved solids data in the Northeast Quadrant provided reasonable assurance that properly constructed production wells cased to -80 ft. NGVD on the eastern side of the project area, to -100 ft. NGVD in the central portion of the project area, and to -120 ft. NGVD on the western side of the project area would meet the criteria for reasonable assurance. Langan's minimum well casing depth for the Southwest Quadrant ranged from -170 ft. NGVD on the northeastern and northwestern sides of the project area, to -140 ft. NGVD in the central portion of the project area, and to -135 ft. NGVD on the southeastern side.

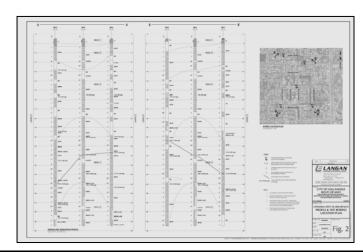
The specific capacity test consisted of pumping groundwater, and monitoring the flow rate, the drawdown, and the elapsed time. Langan recommend a design flow rate of 130 gallons per minute per foot of head for the Southwest Quadrant area.

Initial Construction Estimate: N/A Initial Contract Award: N/A

Total Number of Change Orders: N/A Total Value of Change Orders: N/A

Amount of Initial Design Fees Associated with the Project: \$136,000 Change Orders to Design Contract and Total Value: None/\$136,000





25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

(1) FIRM NAME Langan Engineering & Environmental Services

(2) FIRM LOCATION (City and State) Miami Lakes, Florida

Environmental Engineering

(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**

21. TITLE AND LOCATION (City and State)

Pompano Beach Municipal Golf Course

Pompano Beach, Florida

22. YEAR COMPLETED PROFESSIONAL **SERVICES** 2011

CONSTRUCTION (if applicable) 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, which is now in progress under a separate purchase order.





Services

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT							
(1) FIRM NAME Langan Engineering & Environmental							
Services							

(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)

Marlins Ballpark and Parking Garages

Miami, Florida

PROFESSIONAL SERVICES 2009

CONSTRUCTION (if applicable) 2011

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER Florida Marlins, LP/Hunt Moss JV b. POINT OF CONTACT NAME Pat Delano c. POINT OF CONTACT TELEPHONE NUMBER 305.325.0577

22. YEAR COMPLETED

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

The project involved the construction of the Marlins Ballpark and surrounding four parking garages. The site, the former Orange Bowl, was contaminated by arsenic in the soil and groundwater. The groundwater was very shallow and required dewatering to enable construction. Excavations were to occur in the Miami Limerock, which is highly permeable but not suitable for many methods of dewatering.

Multiple contractors retained Langan to provide dewatering design and permitting services for multiple phases of the foundation and utility construction at the entire project site. Langan designed a construction dewatering system that treated the highly turbid dewatering effluent for both suspended solids and arsenic. The system consisted of open sump pumps that were pumped into onsite exfiltration trenches or deep wells.

Langan permitted the dewatering system with the Miami Dade County Department of Environmental Resources Management and

South Florida Water Management District. The team also permitted the use of drainage



Photo Courtesv of David Brantlev

wells to receive the effluent with the Florida Department of Environmental Protection. In addition, Langan provided consultation and testing services regarding the management of on-site contaminated soils and imported fill. Langan's services allowed the project begin on time and the system worked successfully, allowing dewatering to continue without ceasing for permit violations. The work was conducted on a highly accelerated schedule to comply with Major League Baseball's opening day requirements.

	25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT						
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE				
a.	Langan Engineering & Environmental	Miami Lakes, Florida	liami Lakes, Florida Construction Dewatering Consultation, Design &				
	Services		Permitting, Environmental Consulting, NPDES				
			Stormwater Permitting				

	QUALIFICAT (Present as many projects as requ	WHICH BEST ILLUSTRATE PROPOSED TEAL FIONS FOR THIS CONTRACT ested by the agency, or 10 projects, if not specific Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER 10	
21.	TITLE AND LOCATION (City and State)	o decision religions	22. Y	EAR COMPLETED	
	n 1640 (aka Auto Toy Store – Alpine J a t Lauderdale, Florida	aguar)	PROFESSIONAL SERVICE 2104	S CONSTRUCTION (if applicable) 2015	
		23. PROJECT OWNER'S INFORMATION	N		
	ROJECT OWNER dential Real Estate Investors	c. POINT OF CONTA 404.704.3786	ACT TELEPHONE NUMBER		
The Lan Due of t A P vert con imp Moi and Lan and that	Project is the development of a 4.5-a gan was contracted to perform a Phase of Diligence phase of the acquisition. The he Auto Toy Store, Alpine Jaguar and twhase II ESA discovered residual volatile dically and horizontally delineate the cosultant to prepare the remedial action elementation of the RAP. The RAP wanitoring. Langan oversaw and managed to underground storage tanks. gan also performed construction deward also soil management during construction	NCE TO THIS CONTRACT (Include scope, size, and cre mixed-use apartment complex along a I Environmental Site Assessment (ESA Phase I ESA identified numerous enviror to service stations all of which used petrogranic and petroleum contamination on antamination and prepare a remedial couplan (RAP) on their behalf. Langan reviews successful in attaining GCTLs and the removal and disposal of numerous hypering permitting and monitoring during conton to ensure contaminated soils were not rices, Langan conducted asbestos survey has exceeded \$500,000.	g Sunrise Blvd near and Geotechnical lamental concerns in pleum products and the site. Langan contest estimate. The pewed the RAP and the site is currently draulic lifts, oil water construction in accordance.	Engineering Study during the that the site was the location generated hazardous wastes. Inducted a Site Assessment to property owner contracted a conducted oversight of the in Post-Active Remediation separators, contaminated soil dance BC EPDGM protocols,	
	25.	FIRMS FROM SECTION C INVOLVED WITH THIS	PROJECT		
a. Langan Engineering & Environmental (2) FIRM LOCATION (City and State) (3) ROLE Asbestos Assessment, Environmental					

Services

STANDARD FORM 330 (6/2004) PAGE 3

Replacement

Studies, Environmental Impact Assessment, Hazardous Materials, Mitigation Services, Storage Tank Testing, Removal and

		G. KEY PERSONNEL PARTIC	IPATIO	V IN EX	KAMPL	E PRO	IECTS					
2	26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN THIS CONTRACT (From Section E, Block 13)	.CT (Fill in "Example Projects Key" section below before completing ion E, table. Place "X" under project key number for participation in same or similar role.)									
Vince	nt Yarina, PG, CEM	Project Manager	1 X	2 X	3	4 X	5 X	6 X	7 X	8 X	9 X	10 X
		, ,	^	^		^	^	^	^	^	^	^
Chip [Day	Assistant Project Manager										
	y Spector	Remediation, Site Assessment /Hydrogeology	Х	Х		Х	Х	Х	Х	Х	Х	Х
	n Ponciano	Senior Staff Geologist	Х	Х		Х	Х	Х	Х	Х	Х	Х
Roger	r Simon	Senior Staff Geologist	Х	Х		Х	Х	X	Х	Х	Х	Х
	ory Firely	Senior Project Scientist/Grants Assistance										
John	Magnavita	Senior Project Manager/IAQ	X	Х		X	X	X	X	Х	X	X
Vijay I	Patel	Hazmat Project Manager						X				
Ivan Z	Zapata	Environmental Technician	Х	Х		Х	Х	Х	Х	Х	Х	Х
Brian	Feury	CIH						X				
Micha	ael Szura	Sustainability										
Christ	topher Hager	Sustainability										
Christ	topher Glenn	Sustainability			Х							
Laura	Miner	Environmental Compliance										
Raym	ond Lees	Remediation										
Fangr	nei Zhang	Remediation	Х	Х		Х	Х	Х	X	Х	Х	Х
Stewa	art Abrams	Remediation						Х				
		29. EXAMPLE	E PROJ	ECTS K	ŒΥ							
NO.	TITLE OF EXAMPLE PR	OJECT (FROM SECTION F)	NO.	TITL	E OF E	XAMPL	E PRO	JECT (F	ROM S	SECTIO	N F)	
1	Fort Lauderdale/Hollywood International Airport T-4 Remediation Fort Lauderdale, Florida		6	and	Geot	oleau l echnic ach, Flo	al Ser		nment	al, Asl	bestos	5,
2			7	City of Hallandale Beach Hydrogeological Services Hallandale Beach, Florida								
3	3 Mandela Parkway Oakland, California		8	Por	npano		h Mun	icipal	Golf C	ourse		
4	4 321 Development Project (Fashion Mall) Plantation, Florida		9		lins B mi, Flo	allparl orida	k and	Parkin	g Gar	ages		
5	Homestead City Hall Homestead, Florida		10	Elan 1640 (aka Auto Toy Store – Alpine Jaguar) Fort Lauderdale, 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 more than 850 professionals in its **Elmwood Park, NJ** headquarters and among regional offices in:

- 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
- Miami, FL

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.

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

Transportation

Safe. Efficient. Innovative.

Access is critical to any facility and Langan possesses decades of experience in total transportation engineering and planning services. In fact, from hospitals to universities to shopping centers to stadiums, we have developed programs, designs, and creative solutions that enhance access and circulation for facilities and major transportation systems throughout the United States.

Langan's transportation engineering and planning work includes highway and local street design, as well the design of parking, transit, and non-motorized transportation facilities. For the planning and design of these types of facilities we have provided simulation modeling, master plans, traffic impact studies, operational analysis, signal design, traffic calming measures, signage and wayfinding studies, origin/destination surveys, travel demand modeling, corridor studies, urban transportation plans, transit station and route planning, terminal planning, bikeway planning, and permitting services through counties, municipalities, and the various transportation agencies.

Langan Transportation Services Include:

- Vehicular Traffic Studies
- Stadium and Event Planning
- Traffic Modeling & Simulation
- Master Planning
- Transit Studies
- Station Planning
- Environmental Impact Statements
- Parking Studies
- Corridor Studies
- Site Access / Site
- Engineering
- Airport Studies
- Site Feasibility Studies
- Streetscape Improvements

- Traffic Calming
- Value Engineering
- Bicycle & Pedestrian Safety
- Studies
- Toll Facilities
- Urban Development
- Grading & Roadway Design
- Infrastructure Rehabilitation
- Cost Estimates
- Contract Documents
- Construction Administration
- & Inspection
- Permit Application Packages
- Technical Specification
- STEPS
- SimTraffic
- Paramics
- VISSIM

Site / Civil Engineering

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 **125 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

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 Structure Design
- Excavation Support and Underpinning Design
- Earthquake Analysis
- 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

Landscape Architecture & Planning

Sense of Place

Langan Landscape Architects and Planners understand what makes places work. We shape effective design solutions that range from regional or city scale down to the most intimate courtyards and garden spaces. In every project we strive to identify and enhance the "sense of place," which makes every site unique and memorable. This places us at the forefront of the rebirth of our cities and aging downtowns, guiding their revitalization as destinations where people live, work, shop and play.

Langan Landscape Architecture + Planning Services:

- Site Feasibility and Yield Studies
- High Performance Site Planning
- Land Development Approvals
- Brownfield Redevelopment
- Waterfront Design
- Park and Playground Design
- Complete Streets, Streetscape Design and Traffic Calming
- Landscape Planting and Irrigation Design
- Landscape Restoration Design
- Contract Documents
- Rooftop Garden Design
- Site Lighting Design
- Water Feature Design
- Construction Administration and Inspection
- Expert Testimony and Zoning Reviews
- Community Outreach

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 who 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

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

3D Laser Scanning Work in the Data, Not on the Data

Laser Scanning is changing the surveying/mapping industry and Langan is leading the revolution. Since the addition of High Definition Laser Scanning services in 2003, Langan has offered the most accurate and highly detailed existing conditions surveys possible. This advanced technology allows for the collection of millions of data points in less time and with lower overall cost than traditional techniques. Laser Scanning equipment allows end users to accomplish project objectives more efficiently and accurately at all stages, in turn minimizing overall project costs and reducing turn around time, while achieving a higher level of detail.

Our ability to offer a combination of High Definition Laser Scanning and conventional surveying methods allow Langan to deliver a complete product. As with all of our surveying services, the scanning effort is overseen by Professional Land Surveyors who bring experience and knowledge of traditional methods to this cutting-edge technology.

In scanning, the data collected is known as a "point cloud" which contains a 3D database of the entire project area and allows the measurement of any surface information that is visible in the cloud to be used during the entire project lifecycle. After processing, the data from the "point cloud" can be utilized to produce dimensionally correct 3D models and/or 2D dimensional plans, with outputs to Microstation, AutoCAD or a host of other platforms. The registered data can also be used as a base to create highly detailed site visualizations or mass models. The end data can be used for BIM support, forensics studies, to determine possible construction conflicts, to validate construction/fabrication dimensions, or even to model major motion picture sets.

With prior technologies the end user had to work on the data. High Definition Laser Scanning allows the end user the ability to work in the data and be "on site virtually" with the push of a button.

Building Information Modeling (BIM)

Langan has been utilizing the information modeling process long before the current BIM revolution. Langan's adaption of forward-thinking technologies has enabled us to provide our clients with BIM-based deliverables for the past several years.

These deliverables have included models representing interior building spaces, exterior building facades, mechanical rooms, civil surfaces, and underground utilities. These models have also been used in support model based facility management systems to reduce downtime and improve work order planning.

Langan's BIM expertise grew from our 3D laser scanning services, where our architect client's requested that the 3D point clouds be delivered in Revit format. This provided our clients with an accurate survey-based BIM model of their site's existing conditions, perfectly complimenting their design models. Langan has the tools and expertise to manipulate these massive 3D point clouds and to generate true Revit elements, such as walls, floors, doors, windows, pipes, HVAC etc.

Langan currently uses AutoCAD Revit's 2010 suite of BIM software, which included Architecture, MEP and Structure. We also use AutoCAD Civil 3D 2010 and have the expertise to convert the surface models into Revit. Our base design will be performed in Civil 3D.

Some of our satisfied clients where we have provided BIM deliverables for their projects include:

- The Royal Bank of Scotland, New York 3D Laser Scanning of the building interior and ceiling utilities.
 Deliverables created in Revit Architecture and MEP.
- Confidential Government Building, Puerto Rico 3D Laser Scanning of a large mechanical room. Used Revit Architecture and MEP to build models.
- Madison Square Garden, New York, Interior and partial exterior scan and model using scanning based software and AutoCAD 3D
- Union Street Station, Philadelphia, On-going project using scanning based software and AutoCAD 3D.
- Long Island North Shore Hospital, New York Interior surveying of several floors, 3D laser scanning of exterior façade. Used Revit Architecture to build interior and exterior models for an expansion project.
- New York City Police Academy, New York Site design using Civil 3D and methane venting system using Revit MEP

I. AUTHORIZED REPRESENTATIVE	_
The foregoing is a statement of facts.	
31. SIGNATURE + () Warma	32. DATE
(/mone))- operation	June 20, 2015
33. NAMÉ AND TITLE /	
Vincent Yarina, PG, CEM, Senior Associate/Vice President	

ARCHITECT-ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (if any)

General Environmental Engineering Services

PART II _	CONTRACT-SPECIFIC	CHALIFICATIONS
FAIX I II —	CONTINACT-SELCITIC	WUALII ICA I ICINO

(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					5. OWNE	RSHIP		
110 East	t Broward Boulevard, Suite	1500			a. TYPE			
2c. CITY 2d. STATE Fort Lauderdale FL				ZIP CODE 33301	Corporation			
6a. POINT OF CONTACT NAME AND TITLE Vincent Yarina, PG, CEM, Senior Associate/Vice President					b. SMALL BUSINESS STATUS n/a			
6b. TELEPHONE NUMBER 954.320.2110 6c. E-MAIL ADDRESS vyarina@langan				m	7. NAME OF FIRM (If block 2a Langan Engineering Services			
	8a. FORMER FIRM	NAME(S) (If any)			8b. YR. ESTABLISHED	8c. DUNS NUMBER		
9. EMPLOYEES BY DISCIPLINE 10.					10. PROFILE OF FIRM'S EXPERIENCE AND			
				AN	NNUAL AVERAGE REVENUE FOR L	AST 5 YEARS		
a. Function b. Discipline c. No. of Employee		Employees	a. Profile	b. Experience	c. Revenue Index			
Code (1) FI		(1) FIRM	(2) BRANCH	Code		Number (see below)		

	3. EINI EOTEEO DI DIOON ENVE	-	ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS			
a. Function	b. Discipline	c. No. of	Employees	a. Profile	b. Experience	c. Revenue Index
Code		(1) FIRM	(2) BRANCH	Code		Number (see below)
02	Administrative	161	3	A10	Asbestos Abatement	3
08	CADD Technician	14	1	C07	Coastal Engineering	1
12	Civil Engineer	191	6	C15	Construction Management	3
15	Construction Inspector	3		D02	Dams (Earth; Rock); Dikes; Levees	1
16	Construction Manager	1		E01	Ecological /Archeological Investigations	3
19	Ecologist	4		E06	Embassies and Chanceries	4
23	Environmental Engineer	98	3	E09	Envir. Impact Studies, Assessm'ts	6
24	Environmental Scientist	65	7	E12	Environmental Remediation	6
27	Foundation/Geotechnical Engineers	178	14	G04	GIS and Data Collection	1
29	GIS Specialist	9		L02	Land Surveying	5
30	Geologist	43		L03	Landscape Architecture	3
34	Hydrologist	3		P06	Planning (Site, Installation, Project)	3
36	Industrial Hygienist	1		S05	Soils/Geologic Studies; Foundations	6
38	Land Surveyor	34		S11	Sustainable Design	1
39	Landscape Architect	11		T03	Traffic & Transportation Eng.	3
47	Planner: Urban/Regional	1		W02	Water Resources; Hydrology	3
55	Soils Engineer	19		Z01	Zoning; Land Use Studies	4
57	Structural Engineer	1			Site/Civil Engineering	7
58	Technician	8			Due Diligence	4
60	Transportation Engineer	12	1			
(OTHER)	Asbestos/Lead/Mold Specialists	8				
	TOTAL	865	35			
-						

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

(Insert revenue index number shown at right)

a. Federal Work

b. Non-Federal Work

c. Total Work

10

- 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.

b. DATE

June 20, 2015

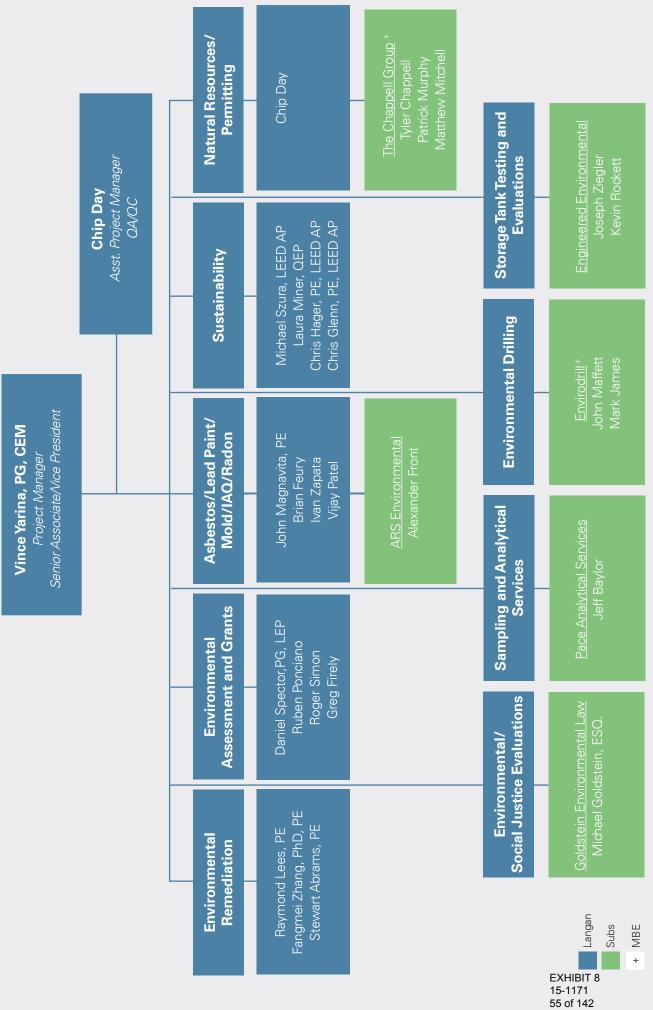
Vincent Yarina, PG, CEM, Senior Associate/Vice President

AUTHORIZED FOR LOCAL REPRODUCTION

a. SIGNATURE



The City of Fort Lauderdale Bid #256-11587 for General Environmental Engineering Serivces



	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)							
12	NAME	13. ROLE IN TH		rkey pers		YFAR	S EXPERIENCE	
	cent D. Yarina, PG, CEM	Project Manager					T	
		,			a. TOTAL 23		b. WITH CURRENT FIRM 16	
15.	FIRM NAME AND LOCATION (City and Sta	te) Lang	an Engineering & Env	ironment	al Services, Inc., M	iami Lal	kes, Florida	
Pen	Pennsylvania State University, BS in Earth Science, 1992 Drexel University, MS in Engineering Geology, 1999 Certified Florida Environment Control of Con				OFESSIONAL REGISTRATION (STATE AND DISCIPLINE) ional Geologist in Florida (No. 2077) and Pennsylvania (No. 3260-E) vironmental Assessor (No. 248) ental Professional (No. 73) ental Manager in Nevada (No. 2104)			
18.	18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)							
	19. RELEVANT PROJECTS							
	(1) TITLE AND LOCATION (City and State)				(2) YE	AR CO	MPLETED	
	Fontainebleau Resort Miami Beach, Florida			PROFE 2009	SSIONAL SERVICE		ONSTRUCTION (if applicable)	
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE					ld abatements associated with ed solvents was identified on- to a depth of 30 ft. Under Mr.			
	(1) TITLE AND LOCATION (City and State)		(2) YE	AR CO	MPLETED			
	151 Biscayne North Miami, Florida			PROFE Ongoin	SSIONAL SERVICE	-	ONSTRUCTION (if applicable)	
b.	(3) BRIEF DESCRIPTION (Brief scope, size Project Manager; This project involves the a guard house, a pool, a one-story event roarea. The scope of work includes the design	amenities comple oom, one-story me	ex of a residential dev en's and women's sho	velopmen ower and	bathroom facilities	ormer la an athl	ndfill. The complex will include etic court, and a children's play	
	(1) TITLE AND LOCATION (City and State)				(2) YE	AR COI	MPLETED	
	Cascades Park Remediation Project Tallahassee, Florida			PROFE 2007	SSIONAL SERVICE	S C	ONSTRUCTION (if applicable)	
C.	(3) BRIEF DESCRIPTION (Brief scope, size Project Manager; Langan was responsible Project, a coal gasification plant and landfil Consent with USEPA. Langan prepared the specifications and drawings were develope permeability liner within the excavated are	for design consult I Superfund site the Removal Action and for the removal	ing and engineering on the art underwent remedi Work Plan which rece of in excess of 47,00	oversight ation by to eived USE 10 cubic y	the City of Tallahas: EPA approval in a o rards of contaminat	M Casca see und ne mont ed soil,	ades Park Remediation er an Administration Order of th time period. Design and the construction of a low	
	(1) TITLE AND LOCATION (City and State)				(2) YE	AR CO	MPLETED	
	Pompano Beach Municipal Golf Course Pompano Beach, Florida			PROFE 2011	SSIONAL SERVICE		ONSTRUCTION (if applicable)	
e.	(3) BRIEF DESCRIPTION (Brief scope, size Project Manager; The City of Pompano Beand groundwater are contaminated with ar contracted Langan to help negotiate a final current status of the contamination.	ach Municipal Golf senic; the site has	FCourse is considered been undergoing ass	d by Brov sessment	t and evaluation for	be a co a numb	ontaminated site in which soil er of years. The city	
	(1) TITLE AND LOCATION (City and State)				(2) YE	AR CO	MPLETED	
	Border Patrol at Dania Beach Broward County, Florida				SSIONAL SERVICE		ONSTRUCTION (if applicable)	
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm.							
	·				•		TANDARD FORM 330 (6/2004)	

	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)						
12.	NAME		THIS CONTRACT	key perso		ARS EXPERIENCE	
Irvir	g M. "Chip" Day IV	Assistant Proj	ect Manager		a. TOTAL	b. WITH CURRENT FIRM	
					15	1	
15.	FIRM NAME AND LOCATION (City and Sta	te): Langan En	gineering & Environmen	tal Servic	ces, Fort Lauderdale, FL	33301	
	EDUCATION (DEGREE AND SPECIALIZATI	ON)			L REGISTRATION <i>(STA</i>	•	
	A – International Business Development . – Environmental Science		· ·		ation - Pre-certified: Pro uation Assessment, En	tected Species Determination,	
	- Urban and Regional Planning - Urban and Regional Planning		Preparation	pact Evai	uation Assessment, En	vironinental Document	
18.	OTHER PROFESSIONAL QUALIFICATIONS						
	ect Manager Certification; FERC Process Ce oise Agent (Permit #: GTA-12-00040); HAZW					ced OW/Nitrox; Certified Gopher	
	19. RELEVANT PROJECTS						
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	OMPLETED	
	Marina Expansion and Dredging			PROFE	SSIONAL SERVICES	CONSTRUCTION (if applicable)	
	Fort Lauderdale, Florida			2013		N/A	
a.	(3) BRIEF DESCRIPTION (Brief scope, size				Check if project perform		
	Environmental Manager; This multiphased harmonization with the City of Ft. Lauderda						
	expansion. The project proposes dredged a						
	the Florida Inland Navigation District (FIND						
	Habitat Assessments, Essential Fish Habit navigation studies, bathymetric analysis, so						
	design and the environmental resource per						
	Protection and Growth Management Depa					,	
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	COMPLETED	
	Emergency Seawall Repairs and Beach I Sandy, Fort Lauderdale, Florida	Rehabilitation	– Post Hurricane		SSIONAL SERVICES	CONSTRUCTION (if applicable)	
	(3) BRIEF DESCRIPTION (Brief scope, size	cost ota \ ANI	D SDECIEIC BOI E	2013		Ongoing	
b.	Mr. Day prepared the Physical Monitoring						
	conducted by the City of Fort Lauderdale, I						
	were utilized during the emergency permit Coordinating and commenting agencies inc					toring during construction.	
	(1) TITLE AND LOCATION (City and State)			(2) YEAR COMPLETED			
	Broward County Aviation Department (•••	-	PROFESSIONAL SERVICES		CONSTRUCTION (if applicable)	
	International Airport Expansion Program	n, Fort Lauderd	ale, Florida	2013			
C.	(3) BRIEF DESCRIPTION (Brief scope, size			☐ Check if project performed with current firm. uding wetland mitigation construction and exotic species control			
	oversight, threatened and endangered wild						
	activities. In addition, responsible for the	performance	of five years of quarte	erly mitig	ation monitoring and r	maintenance activities (includes	
	contractor management and oversight) to e (1) TITLE AND LOCATION (City and State)	ensure compliar	nce with Federal, State a	and Coun		ts. COMPLETED	
	I-95 Project Development and Environm	ent Study fron	n Oakland Park to	DROEE	SSIONAL SERVICES	CONSTRUCTION (if applicable)	
	Glades Road, Broward County, Florida			2008 - 1		N/A	
	(3) BRIEF DESCRIPTION (Brief scope, size	, cost, etc.) AN	D SPECIFIC ROLE		Check if project perform	ned with current firm.	
d.	Mr. Day was the Environmental Project M	0	,		,	0 0	
	the project corridor. Mr. Day was responsurveys, 100% gopher tortoise survey, be						
	EFH, NSR, ESBA, and WER), budget, coo	ordination and t	ask management along				
	harmonization with the separate projects to	the north and	south.	l	(0) \(\(\(\) \\ \(\) \(\) \(\)	ON ADJUSTED	
	(1) TITLE AND LOCATION (City and State) Everglades Landscape Processes (ELP)			DD0==		COMPLETED	
	Monroe, Miami-Dade, Broward, and Palm I	Beach Counties	, Florida	2008	SSIONAL SERVICES	CONSTRUCTION (if applicable) N/A	
	(3) BRIEF DESCRIPTION (Brief scope, size	, cost, etc.) AN	D SPECIFIC ROLE		Check if project perform	ned with current firm.	
e.	This long-term research project is a compo			•	•		
	largest wetland restoration project in the assessment of soil dynamics and vegeta						
	structure complexity, seedling recruitmen	nt, leaf litter de	ecomposition, groundwa	ater hydi	rology, microclimatolog	y, micro-topography and exotic	
	species intrusion on tree islands — tree isl						
	addition to field efforts, controlled environment work was performed within the Loxahatchee Impounded Landscape Assessment (LILA) area where working physical models of tree islands, sloughs and ridges can be examined under varying hydrological conditions.						

	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)							
12	. NAME	13. ROLE IN THIS CON		n key pe		YEARS EXPERIENCE		
Da	niel Spector, PG, LEP	Remediation, Site Asse	ssment /		a. TOTAL	b. WITH CURRENT FIRM		
		Hydrogeology			22	10		
	FIRM NAME AND LOCATION (City and Sta		-		al Services, Miami La			
Нι	Hunter College, CUNY, BA, Geology Florida International University, M.S., Geosciences Registered Licensed I				ESSIONAL REGISTR. nal Geologist, Florida al Geologist, Alabama ntal Professional, Flori	ATION <i>(STATE AND DISCIPLINE)</i> da		
18	. OTHER PROFESSIONAL QUALIFICATIONS	6 (Publications, Organizati						
		19. REI	_EVANT PRO	JECTS				
	(1) TITLE AND LOCATION (City and State)				(2) YE	AR COMPLETED		
	Fort Lauderdale/Hollywood Internation Lauderdale, Florida	al Airport, T-4 Remed	liation , Fort		SSIONAL SERVICES	CONSTRUCTION (if applicable)		
				2015		2015		
а	(3) BRIEF DESCRIPTION (Brief scope, size, Project Manager; This project consisted of Fort Lauderdale/Hollywood International Ai Pre-Characterization, Well Installation & Aba	environmental services du rport. Langan's services	uring utility co include Work	nstruction Plan De	n in a petroleum-impa velopment, Geotechr	ical Evaluation of Soil Conditions, Soil		
	(1) TITLE AND LOCATION (City and State)	·	· -		(2) YE	AR COMPLETED		
	Marlins Ballpark and Parking Garages,			PROFE	SSIONAL SERVICES	CONSTRUCTION (if applicable)		
	Miami, Florida					2011		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE					ges. The site, the former Orange Bowl, and dewatering to enable construction. ds of dewatering. Multiple contractors			
	(1) TITLE AND LOCATION (City and State)				(2) YE	AR COMPLETED		
	Sunny Isles Hydrogeological Investigation Sunny Isles Beach, Florida			PROFESSIONAL SERVICES 2008		CONSTRUCTION (if applicable) n/a		
С	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE							
	(1) TITLE AND LOCATION (City and State)				(2) YE	AR COMPLETED		
	City of Hallandale Beach, Drainage Impro Hallandale Beach, Florida	ovements		PROFE 2011	SSIONAL SERVICES	CONSTRUCTION (if applicable) n/a		
d (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm. Project Manager; Langan provided hydrogeological services in support of the city's plan to install pressurized right-of-way stormwater drainage alleviate street flooding. Langan's scope of work included supervising five 150-ft. test holes in the 120-acre Northeast Quadrant project area 200-ft. test holes in the 120-acre Southwest Quadrant project area; evaluating geology and water quality (total dissolved solids); and perf specific capacity test in potential production zones in the Southwest Quadrant project area. Langan completed both project areas and reasonable assurance reports that met the requirements of Chapter 62-528, Florida Administrative Code, as part of the permit package for stormwater drainage wells.						nt-of-way stormwater drainage wells to ortheast Quadrant project area and five tal dissolved solids); and performing a eted both project areas and provided art of the permit package for the new		
	(1) TITLE AND LOCATION (City and State)	o Miousi luteres stere il A				AR COMPLETED		
	Tenant Environmental Compliance Audit Miami, Florida	s, Miami international A	urport	PROFE 2007	SSIONAL SERVICES	CONSTRUCTION (if applicable) n/a		
е	(3) BRIEF DESCRIPTION (Brief scope, size, Project manager; This project at Miami Inthazardous materials storage and disposal properties and compared the tenant's practices and state and local rules and regulations.	ternational Airport involve rocedures, permit complia	d the evaluat ince, environn	ion of se nental ma	even tenants' UST an anagement systems,	and oil pollution management systems.		
					STAND	ARD FORM 330 (6/2004) PAGE 2		

	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)							
12.	NAME	13. ROLE IN THIS CONTE		ncy person.)	14. Y	EARS EXPERIENCE		
Ru	ben Ponciano	Senior Staff Geologis	st	a. TOT	AL 20	b. WITH CURRENT FIRM		
15.	FIRM NAME AND LOCATION (City and State)	Langan Engineering	& Environme	ntal Services,		akes, Florida		
Yor	York College, The City University of New York, New York OSHA 40-ho OSHA 8-hou			RENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) -hour Health and Safety our Health and Safety for Hazardous Waste Operations our Hazardous Material Supervisor/Management				
18.	OTHER PROFESSIONAL QUALIFICATIONS (Pub.	olications, Organizations, Train	ning, Awards, etc.)					
		19. RELE	EVANT PROJEC	CTS				
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED		
	Avis / Budget Rent a Car San Juan, Puerto Rico			PROFESSIONAL 2008	SERVICES	CONSTRUCTION (if applicable) n/a		
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cos Senior Staff Geologist; Responsible for im investigation. Responsibilities included soi	plementing Phase I and II	Environmental a	Assessments c		roundwater and soil sampling		
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED		
	Marlins Ballpark and Parking Garages Miami, Florida			PROFESSIONAL 2011	SERVICES	CONSTRUCTION (if applicable) 2011		
	Orange Bowl, was contaminated by arsenic in the soil and groundwater. The groundwater was very shallow and required dewatering to enable construction. Excavations were to occur in the Miami Limerock, which is highly permeable but not suitable for many methods of dewatering. Multiple contractors retained Langan to provide dewatering design and permitting services for multiple phases of the foundation and utility construction at the entire project site. Langan designed a construction dewatering system that treated the highly turbid dewatering effluent for both suspended solids and arsenic.							
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED		
	Fontainebleau Hotel Miami Beach, Florida			PROFESSIONAL SERVICES 2009		CONSTRUCTION (if applicable) 2009		
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cos Senior Staff Geologist; Responsible for im tetrachloroethene and trichloroethene cove sampling more than 40 direct-push and so	plementing a groundwate ering approximately 50 sq	r and soil sampl uare feet to a d	ling site assessr epth of 30 feet.	The site asses	sampling identified a plume of sment included installing and		
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED		
	University of Miami Life Science & Miami, Florida	Technology Park		PROFESSIONAL 2009	SERVICES	CONSTRUCTION (if applicable) 2011		
d.		million SF research and coarking structures. Langar	levelopment cor	☐ Check if project performed with current firm. complex was constructed in phases and consists of numerous midnental group performed a Reasonable Assurance Report required for				
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED		
	Metropolitan Miami Miami, Florida			PROFESSIONAL SERVICES Ongoing		CONSTRUCTION (if applicable) Ongoing		
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Staff Geologist; This is a mixed-use development covering three downtown Miami city blocks. Langan performed environmental studies to determine the extent of petroleum and creosote impacted soils due to a former marine bulkhead that traversed the property. Langan successfully completed two soil and groundwater remediation projects at the site, and obtained regulatory closure. Langan also performed mold surveys during construction of the interiors for the Met 1 and Met 2 projects.							
	STANDARD FORM 330 (6/2004) PAGE 2							

	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)							
12.	NAME		HIS CONTRACT	у рогос		ARS EXPERIENCE		
Rog	er Simon	Senior Staff C	Geologist		a. TOTAL	b. WITH CURRENT FIRM		
15.	FIRM NAME AND LOCATION (City and State)	Langan Eng	gineering & Environmer	ntal Se	7 rvices. Miami Lakes.	Florida 3		
			-					
16.	EDUCATION (DEGREE AND SPECIALIZATION)		17. CURRENT PROFESSION	ONAL RI	EGISTRATION (STATE AN	D DISCIPLINE)		
B.S.	Geophysical Science, University of Chicago		40-hour OSHA Hazardou NIOSH 582 Microscopy		e Operations and Emerg	gency Response Certificate		
			NIOSH 562 MICIOSCOPY					
10	18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)							
10.	OTHER PROFESSIONAL QUALIFICATIONS (PUB	iicatioris, Organiz	alions, Training, Awards, etc.)					
		19	. RELEVANT PROJECT	TS				
	(1) TITLE AND LOCATION (City and State) The Heritage at Boca Raton		_		(2) YEAR C			
	Boca Raton, Florida			PROFES	SSIONAL SERVICES	CONSTRUCTION (if applicable) N/A		
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost		CIFIC ROLE	⊠ c	Check if project performed w	ith current firm.		
a.	Technical Team Member; This project consisted of a Phase I Environmental As containing building materials sealed in the interstitial spaces of the newly reno							
place and facilitated the sale of the property, the largest real estate transaction recorded in Palm Beach County in 2011.						2011.		
	(1) TITLE AND LOCATION (City and State)			(2) YEAR COMPLETED				
	Met Miami Mixed-Use Development				SSIONAL SERVICES	CONSTRUCTION (if applicable)		
	Miami, Florida (3) BRIEF DESCRIPTION (Brief scope, size, cost	oto) AND SDEC		Ongoin ☑ c	g Check if project performed w	Ongoing ith current firm		
b.	Technical Team Member; This project cons	sisted of a Phas	se I Environmental Assess	ment th	nat revealed the presenc	e of historical arsenic-impacted		
	fill material. Subsequent characterization u tons of fill material from select areas and c	•		ical ana	lysis resulted in delineat	ion and disposal of over 400		
	(A) TITLE AND LOCATION (City and State)				(2) VEAD C	OMPLETED		
	(1) TITLE AND LOCATION (City and State) Biscayne Landing			PROFES	(2) YEAR C	CONSTRUCTION (if applicable)		
	North Miami, Florida			2011	N/A			
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost Technical Team Member; Implemented La				Check if project performed w			
	Simon performed landfill gas monitoring ar	d prepared nur	merous Landfill Gas Monito	oring Re	eport (GMR) to FDEP, th	e Miami-Dade Department of		
	Environmental Resources Management (D Quality Monitoring Program for the site co				·	e vvater and Groundwater		
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	OMPLETED		
	PortMiami Tunnel			PROFES	SSIONAL SERVICES	CONSTRUCTION (if applicable)		
	Miami, Florida			2010		2014		
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost Technical Team Member; Coordinated and				Check if project performed with a data, assisted in the			
	management plan for large volumes of spo							
	classification.							
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	OMPLETED		
	Monroe County Landfill Groundwater N Cudjoe Key, Long Key, and Key Largo, Flor	•		PROFES Ongoin	SSIONAL SERVICES	CONSTRUCTION (if applicable) N/A		
	(3) BRIEF DESCRIPTION (Brief scope, size,		SPECIFIC ROLE	<u> </u>	Check if project performed	d with current firm.		
e.	Technical Team Member; Responsible for Largo – as part of the county's solid waste							
	samples from 11 monitoring wells and one							
					STANDADI	D FORM 330 (6/2004) PAGE 2		

	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)								
	NAME	13. ROLE IN THIS CONTR				ARS EXPERIENCE			
	Gregory M. Firely	Senior Project Scienti	st/		a. TOTAL	b. WITH CURRENT FIRM			
		Grant Assistance			16	5			
15.	FIRM NAME AND LOCATION (City and State)	Langan Engineering	& Environme	ental Serv	vices, Inc., Doylestov	vn, PA			
16.	EDUCATION (DEGREE AND SPECIALIZATION)	ON)	17. CURREI	NT PROFE	SSIONAL REGISTRATI	ON (STATE AND DISCIPLINE)			
	xel University, Philadelphia, Pennsylvan								
Bac	chelor of Science degree in Environmen	tal Science, 2000							
18.	18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)								
19. RELEVANT PROJECTS									
	(1) TITLE AND LOCATION (City and State)				(2) YEAR (COMPLETED			
	Taylor Colliery Redevelopment Program – US EPA Brownfields Grant Management, Taylor, Pennsylvania			PROFES	SSIONAL SERVICES	CONSTRUCTION (if applicable)			
				2009		N/A			
a.	(3) BRIEF DESCRIPTION (Brief scope, size	e, cost, etc.) AND SPECIF	FIC ROLE	□с	heck if project performe	ed with current firm.			
	Submitted successful US EPA Brownfields								
	facility. Served as Program Manager for characterizations with the approval of the L	•	•						
			•						
	(1) TITLE AND LOCATION (City and State) Taylor Brownfield Program – US EPA Brownfields Grant Management,			· · · · · · · · · · · · · · · · · · ·		COMPLETED			
	Taylor, Pennsylvania	ownfields Grant Ivianage	ement,		SSIONAL SERVICES	CONSTRUCTION (if applicable)			
				2013		N/A			
b.	(3) BRIEF DESCRIPTION (Brief scope, siz				heck if project performe				
	Submitted successful US EPA Brownfields assessment of community wide brownfield		JOO, TOT THE CIE	запир от а	150-acre abandoned co	dai mining / processing facility and			
	•								
	(1) TITLE AND LOCATION (City and State) Montgomery County Redevelopment Au		afioldo		, ,	COMPLETED			
	Consulting,	ithority – 03 EFA Blown	illelus	PROFESSIONAL SERVICES 2008		CONSTRUCTION (if applicable) N/A			
	Montgomery County, Pennsylvania			2000		NA			
c.	(3) BRIEF DESCRIPTION (Brief scope, size				heck if project performe				
	Pilot brownfields program funded by the throughout the county. All work funded								
	reporting requirements.	amought oo zivi zioiiiii	iolao glant pi	ogram ama	. 600,600 10 00 21 / 1	rogiani approvato, galdonilos and			
	(1) TITLE AND LOCATION (City and State)	<u> </u>		1	(2) VEAD (COMPLETED			
	City of Philadelphia – US EPA Brownfield			DDOEES	SSIONAL SERVICES	CONSTRUCTION (if applicable)			
	Philadelphia, Pennsylvania	3 ,		2008	SSIONAL SERVICES	N/A			
	(3) BRIEF DESCRIPTION (Brief scope, siz	e, cost, etc.) AND SPECIF	FIC ROLE	□с	heck if project performe	ed with current firm.			
d.	Brownfields program funded by the US throughout the county. All work funded								
	reporting requirements.	Ullough US EFA Blownin	ieius grant pri	ograffi affo	subject to US EFA p	rogram approvais, guidelines and			
				1					
	(1) TITLE AND LOCATION (City and State)				, ,	COMPLETED			
	Bucks County Redevelopment Authority Bucks County, Pennsylvania	– US EPA Brownfields (Consulting,	PROFESSIONAL SERVICES CONSTRUCTION (if a		CONSTRUCTION (if applicable)			
	(3) BRIEF DESCRIPTION (Brief scope, siz.	e cost etc.) AND SPECIE	FIC ROLE		heck if project performe				
e.	Brownfields program funded by the US	EPA performed identifica	ation, assessr	ment, rem	nediation, and redevelo	opment of brownfield properties			
	throughout the county. All work funded reporting requirements.	through US EPA Brownf	ields grant pr	ogram and	d subject to US EPA p	rogram approvals, guidelines and			
	reporting requirements.								
					STANDARI	D FORM 330 (6/2004) PAGE 2			

	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)							
12.	NAME		HIS CONTRACT	key persi		ARS EXPERIENCE		
Joh	n Magnavita, PE	Senior Projec	t Manager (Indoor Air Qu	uality)	a. TOTAL	b. WITH CURRENT FIRM 23		
15.	FIRM NAME AND LOCATION (City and State)	Langan Engi	neering & Environmental	Services	23 s, Inc., Miami Lakes, Flo			
16.	EDUCATION (DEGREE AND SPECIALIZATION)				GISTRATION (STATE AND E	DISCIPLINE)		
Univ	versity of Florida, BSCE 1992, Masters in Eng	gineering,			ngineer (PE No. 54826) sultant (License No. AX-	70		
	2002				·	anagement Planner and Building		
	Inspector							
18.	OTHER PROFESSIONAL QUALIFICATIONS (Public	ations, Organizati	ons, Training, Awards, etc.)					
	American Society of Civil Engineers							
		1	9. RELEVANT PROJEC	CTS				
	(1) TITLE AND LOCATION (City and State) Auto Toy Store					OMPLETED I		
	Fort Lauderdale, Florida			2012	SSIONAL SERVICES	CONSTRUCTION (if applicable)		
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Project Manager; Performed a pre-demolition asbestos survey for a clust SF of floor space.				check if project performed w sales and service store			
	(1) TITLE AND LOCATION (City and State)				(2) YEAR COMPLETED			
	The 321 Development Project (Former Fashion Mall) Plantation, Florida			PROFES	SSIONAL SERVICES	CONSTRUCTION (if applicable) N/A		
b.	b. (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.							
	(1) TITLE AND LOCATION (City and State)		_		(2) YEAR C	OMPLETED		
	Opa Locka Abandoned Water Treatment Opa Locka, Florida	: Plant Demoli	tion	PROFESSIONAL SERVICES 2010		CONSTRUCTION (if applicable) N/A		
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost,			☐ Check if project performed with current firm. on specifications, asbestos/Lead-based paint consulting, and				
	environmental hazard assessments for the responsible for supervising and coordination precluded the demolition specification prepared to the second specificati	nis 80-year-old ng the asbesto	water treatment facility	y that ha	ad been abandoned for	25 years. Mr. Magnavita was		
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	OMPLETED		
	Fontainebleau Resort Miami Beach, Florida			PROFES 2009	SSIONAL SERVICES	CONSTRUCTION (if applicable) 2009		
d.	(3) BRIEF DESCRIPTION (Brief scope, size Senior Project Manager; This project invabatements services for the entire 1,000,0 and site work as well as preparation and report of the asbestos surveys, organized monitoring services, and prepared final clean	olved geotech 100-sf Fontaine management of client/regulator	nical, environmental du bleau Resort complex. N f the asbestos surveys. y meetings regarding di	e diligen Ar. Magn He also p sposition	navita was responsible for prepared comprehensive n of asbestos materials, iility.	diation and asbestos and mold or the geotechnical investigation maps of asbestos materials as managed asbestos abatement		
	(1) TITLE AND LOCATION (City and State)					OMPLETED I		
	Cipriani (Formerly Saxony Hotel) Miami Beach, Florida			PROFES 2005	SSIONAL SERVICES	CONSTRUCTION (if applicable) N/A		
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Project Manager; This project involved asbestos consulting and geotechnical engineering services for this \$550-million revival of Miami' Saxony Hotel. Mr. Magnavita performed an extensive asbestos survey of the 200,000-SF property, prepared the asbestos survey report, assiste our client in selecting an abatement contractor, managed the asbestos abatement project monitoring, prepared final clearance documen performed geotechnical engineering foundation and site preparation design work, and developed foundation and dewatering strategy that facilite regulatory permitting.				s \$550-million revival of Miami's asbestos survey report, assisted ared final clearance document,			
	<u> </u>				STANDARI	FORM 330 (6/2004) PAGE 2		

	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT								
12. NA		13. ROLE IN THIS CONTRACT		14. Y	'EARS EXPERIENCE				
Vijay	<i>r</i> Patel	Hazmat Project Manage Designer/Inspector/Inve		a. TOTAL 26	b. WITH CURRENT FIRM 23				
15. FIF	RM NAME AND LOCATION (City and State)	Langan Engineering & Env	ironmental Ser	vices/New Haven, C	Γ				
16. ED	DUCATION (DEGREE AND SPECIALIZATION)		17. CURRENT P	ROFESSIONAL REGISTRAT	TION (STATE AND DISCIPLINE)				
B.S.	Mechanical Engineering			AHERA Inspector/Ma pervisor/Project Moni	nagement Planner/ tor/Air Sampling Technician				
18. OT	THER PROFESSIONAL QUALIFICATIONS (Publications)	ations, Organizations, Training, Award	ls, etc.)						
	19. RELEVANT PROJECTS								
	(1) TITLE AND LOCATION (City and State)			(2) YEAR	COMPLETED				
	The New York City School Construction 5 Boroughs of New York City	on Authority On-Call	PROFE Ongo	ESSIONAL SERVICES	CONSTRUCTION (if applicable) N/A				
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cosposition of the project Manager for on-going work rooms, exterior restoration, into conducted asbestos investigation the cost estimates for the abaten	ork as a part of the heat rusion alarm system inst ns, prepared investigation	ing and boile tallation, and report and a	the science labo batement documer	n, installation of computer ratory upgrading projects,				
	(1) TITLE AND LOCATION (City and State)				COMPLETED				
	New Jersey School Construction Corporation Various locations, NJ			ESSIONAL SERVICES	CONSTRUCTION (if applicable) N/A				
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost Project Manager; Currently working on not renovations of the existing schools, and cabatement design documents, cost estin quality.	umerous school construction pro construction of new school. Wor	ojects throughou k includes prepa	aration of comprehensive	ey in connection with e reports of findings, asbestos				
	(1) TITLE AND LOCATION (City and State)			(2) YEAR	COMPLETED				
	Caribbean West Apartment Complex Miami, Florida		PROFE 2009	ESSIONAL SERVICES	CONSTRUCTION (if applicable) N/A				
Ċ.	(3) BRIEF DESCRIPTION (Brief scope, size, cost Project Manager; Langan conducted a Lepaint survey was conducted in accordance Revised Addition. Based on the guideline common areas, and 16 of the 22 exterior sampling for lead-based paint throughout following the protocol as stated in the HU	ead-Based Paint Survey at the Cope with HUD's Guidelines for the set for multi-family housing, Langa sides of the buildings. Langan uthe apartment complex. The res	aribbean West a Evaluation and an inspected 25 Ised an X-Ray Flo	Control of Lead-Based F of the 102 units within to prescence (XRF) instrum	iami, Florida. The lead-based Paint Hazards in Housing, 1997 the development, 16 of the 24 nent to conduct non-invasive				
	(1) TITLE AND LOCATION (City and State)			(2) YEAR	COMPLETED				
	Federal Hall Building New York City, New York		PROFE Ongo	ESSIONAL SERVICES ing	CONSTRUCTION (if applicable) N/A				
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm. Che								
	(1) TITLE AND LOCATION (City and State)			(2) YEAR	COMPLETED				
	Fontainebleau Resort Miami Beach, Florida		PROFE 2009	ESSIONAL SERVICES	CONSTRUCTION (if applicable) 2009				
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm. Project Manager; Conducted and managed asbestos surveys and asbestos abatement monitoring for this one million square foot project that was built in the 1950s and had undergone numerous renovations. The asbestos surveys were conducted while the facility was occupied, which required extensive coordination with the owner and operations management such that the inspections could be conducted thoroughly and efficiently. The asbestos survey required about two months of inspection work. Significant quantities of asbestos-containing material (ACM) were identified throughout the facility. The asbestos abatement of this facility required about 11 months and costs were in excess of \$2.5 million.								

	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)							
	NAME		HIS CONTRACT	,,	14. YE	ARS EXPERIENCE		
lva	n Zapata	Environmen	ital Technician		a. TOTAL 13	b. WITH CURRENT FIRM 10		
15.	FIRM NAME AND LOCATION (City and State)	Langan Engi	neering & Environmental	Service	s, Inc., Miami Lakes, Flo	orida		
16.	EDUCATION (DEGREE AND SPECIALIZATION)				EGISTRATION (STATE AN & AHERA Building Inspe			
Mia	mi-Dade Community College, Computer Sci	ence	· ·		0 1	York (License No. 08-19997)		
NIOSH 582 Phase Contrast Microscopy Certification						, , , , , , , , , , , , , , , , , , , ,		
			OSHA 40-Hour Hazardo	ous Was	te Operations Training			
18.	18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)							
		19	. RELEVANT PROJEC	TS				
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	OMPLETED		
	The 321 Development Project (Former F Plantation, Florida	ashion Mall)		PROFES 2011	SSIONAL SERVICES	CONSTRUCTION (if applicable) N/A		
a.	Environmental reclinician, this project included a three-lever mail, se			fice build		ge. The scope of work included		
	the visual inspection of the facility to ider Zapata conducted the asbestos surveys t							
	visual inspection of the facility and asbestos survey report preparation. Mr. Zapata coordinated and conducted oversight of ACM removal pri the planned renovation of the facility. Abatement oversight activities included visual inspections of asbestos abatement areas to ensure tha					ersight of ACM removal prior to		
	the planned renovation of the facility. Aba abatement contractor's removal work pra	U						
	abatement air sampling of asbestos abatement areas; and abatement clearance reports.							
	(1) TITLE AND LOCATION (City and State)		-		(2) YEAR C	OMPLETED		
	Hialeah Park Horse Racetrack Hialeah, Florida			PROFES 2011	SSIONAL SERVICES	CONSTRUCTION (if applicable) N/A		
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cos Environmental Technician; This project ir equipment structure, and a warehouse. N the facility to identify the presence, condit	ncluded a three 1r. Zapata condu	l-level clubhouse, five-stoucted an asbestos survey	ory back of this	facility which involved p	ur-level grandstand, mechanical performing a visual inspection of		
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	OMPLETED		
	Metropolitan One				SSIONAL SERVICES	CONSTRUCTION (if applicable)		
	Miami, Florida			2011		N/A		
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cos Environmental Technician; This project inv				Check if project performed w f all accessible areas to			
	materials utilizing a moisture meter. Mr.	Zapata conduc	ted a water intrusion inv	estigatio	on of the 41-story cond	ominium tower and prepared a		
	summary of observations using photograp	hic documentat	ion of impacted areas col	llected f				
	(1) TITLE AND LOCATION (City and State) JC Penney Department Stores		-	DDOEE	SSIONAL SERVICES	COMPLETED CONSTRUCTION (if applicable)		
	in Miami-Dade, Palm Beach, Hillsborough	and Pinellas Co	unty, Florida	2010	SSIONAL SERVICES	N/A		
اء	(3) BRIEF DESCRIPTION (Brief scope, size, cos	t, etc.) AND SPEC	CIFIC ROLE		Check if project performed w	·		
d.	Environmental Technician; This project in impacted building materials utilizing a m	•				· · · · · · · · · · · · · · · · · · ·		
	abatement contractor performed re-cablin					-		
	with the work plan, and phase contrast n							
	also conducted a water intrusion investig using photographic documentation of impa		, ,			y of observations was prepared		
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	OMPLETED		
	Fontainebleau Resort Miami Beach, Florida			PROFES 2009	SSIONAL SERVICES	CONSTRUCTION (if applicable) 2009		
	(3) BRIEF DESCRIPTION (Brief scope, size, cos	. ,			Check if project performed w			
e.	Environmental Technician; This project in associated with the Fontainebleau Reso							
	required extensive coordination with the	•		•				
	efficiently. Mr. Zapata was responsible f	or performing	the asbestos survey for	this 1,0	000,000-sf resort that v	vas built in the 1950s and had		
	undergone numerous renovations.				STANDAD	D FORM 330 (6/2004) PAGE 2		

	E. F	RESUMES OF KEY PERSONNE	L PROPOSED FOR THIS	S CONTRACT	
			on E for each key person.)	1	
	NAME	13. ROLE IN THIS CONTRACT			EARS EXPEREINCE
Bri	an Feury, CIH	Certified Industrial Hygien	ıst	a. Total	b. With Current Firm
4.5	FIRM MANAGANID LOCATON (C')	1000		18	14
	FIRM NAME AND LOCATON (City and	nstate) Inmental Services, Inc., Elmv	rood Park Now Jorson	1	
			17. CURRENT PROFESSION		and Disciplinal
	EDUCATION (Degree and Specialization		Certified Industrial H		e and Discipline)
	S – Occupational Safety/ind S – Environmental Science	ustriai i rygierie	Certified iridustrial iri	rygieriist	
		IONS (Publications, Organizations, Traini	na Awards etc.)		
		ouncil; American Board of In			
		ernmental Industrial Hygienis			
7 (11	Terredit contended of dove		ANT PROJECTS		
	(1) TITLE AND LOCATION (City and			(2) YEAF	R COMPLETED
	Broward County Courthouse			PROFESSIONAL	CONSTRUCTION (if
	Fort Lauderdale, FL			SERVICES	applicable)
a.				2014	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE				erformed with current firms
		es included daily monitoring and ir eekly coordination of field inspectio			
	quality issues.	eekly coordination of field inspection	ns, reporting and oversignt	or independent contra	actors relating to indoor all
	(1) TITLE AND LOCATION (City and	State)		(2) YEAF	R COMPLETED
	Betsy Ross Hotel			PROFESSIONAL	CONSTRUCTION (if
	Miami Beach, Florida			SERVICES	applicable)
b.				2006	
		e, size, cost, etc.) AND SPECIFIC ROLE		. —	erformed with current firms
		industrial hygiene investigation with responsible for the daily coordination			
			Тот пеіа інэресцона, соотаі		
	(1) TITLE AND LOCATION (City and a Mixed-Use Residential/Comm			(2) YEAF PROFESSIONAL	COMPLETED CONSTRUCTION (if
	Miami, Florida	ercial bulluling		SERVICES	applicable)
	ivilarii, i iorida			2005	
C.	(3) BRIEF DESCRIPTION (Brief scope	e, size, cost, etc.) AND SPECIFIC ROLE		Check if project p	erformed with current firms
		remediation activities at 1101 Bricl			
		and coordination with the building m	nanagement company and s	ubcontractors was req	uired to complete job on
	schedule.			(-1.1	
	(1) TITLE AND LOCATION (City and	State)			R COMPLETED
	JL Audio Miramar, Florida			PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
	iviliamai, Florida			2015	
d.	(3) BRIEF DESCRIPTION (Brief scope	e, size, cost, etc.) AND SPECIFIC ROLE		Check if project p	erformed with current firms
u.	Senior Project Manager; Respor	nsible for the company's annual air p	permitting requirements. Tas	sks included data revie	w, emission calculations
	and regulatory reporting requirer	ments.			
	(1) TITLE AND LOCATION (City and	State)		(2) YEAF	R COMPLETED
	Fontainebleau Resort			PROFESSIONAL	CONSTRUCTION (if
	Miami Beach, FL			SERVICES	applicable) 2009
e.	(a) PRIEE PEOOPISTICAL (2.1	· · · · · · · · · · · · · · · · · · ·		2009	
		e, size, cost, etc.) AND SPECIFIC ROLE	ata a da ata ante en esta en esta esta esta esta esta esta esta esta	. —	erformed with current firms
	,	Supervisor; Responsible for conduct included the collection of air samp	. ,		
		e for the daily coordination with an o			

	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)							
12. NA	ME	13. ROLE IN THIS CONTRACT	л еасп К	ey persor	•	EARS EXPERIENCE		
Mich	ael Szura, CLA, ASLA, LEED AP	Sustainability			a. TOTAL 21	b. WITH CURRENT FIRM		
	15. FIRM NAME AND LOCATION <i>(City and State)</i> Langan Engineering & Environmental Services, New Haven, CT							
	16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)							
MFA Landscape Architecture BS Business/Minor Botany Certified Landscape Architect: New Jersey, Delaware, New York and Pennsylvania					New Jersey, Delaware,			
18. OT	HER PROFESSIONAL QUALIFICATIONS (Publicati	ons, Organizations, Training, Award	ls, etc.)					
		19. RELEVANT	PROJEC ⁻	ΓS				
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED		
	Camp Niantic Niantic, Connecticut			PROFES 2010	SIONAL SERVICES	CONSTRUCTION (if applicable) 2011		
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Landscape Project Manager; The first phase of this project includes the construction of an 81,917 SF, \$28,758,411 regional training facility for the Connecticut Army National Guard. The proposed building includes multi-use activities including billeting (dormitory), classrooms, office and meeting space, and kitchen and dining facilities. Design challenges include conformance to the DOD's Anti-Terrorism/Force Protection security requirements, achieving LEED silver. Project was facilitated by the Connecticut Department of Public Works.							
	(1) TITLE AND LOCATION (City and State) (2) YEAR COMPLETED							
	U.S. Embassy Compound Juarez, Mexico					CONSTRUCTION (if applicable) 2009		
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, Landscape Project Manager; Langan was fast-fast track international project poser requirements, time constraints and the standards.	a key component of the design d numerous challenges for a	ıll desigr	am for a and en	gineering disciplines	ompound in Juarez, Mexico. This due to site conditions, security		
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED		
	New Embassy Compound Panama City, Panama			PROFES 2005	SIONAL SERVICES	CONSTRUCTION (if applicable) 2008		
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE							
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED		
	Metroplex Plymouth Meeting, Pennsylvania			PROFES 2006	SIONAL SERVICES	CONSTRUCTION (if applicable) N/A		
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost,				Check if project performed			
u.	Landscape Project Manager; Land develop feet of Class "A" office space on a 25-acr was partially filled with asbestos-tainted m	e site. The project involved loc						

	E. RES	SUMES OF KEY PERSONNEL (Complete one Section E						
12. NAME Christopher Hager, PE, LEED AP		13. ROLE IN THIS CONTRACT Sustainability/Resiliency			YEARS EXPERIENCE			
				a. TOTAL 21	b. WITH CURRENT FIRM 21			
15.	15. FIRM NAME AND LOCATION (City and State) Langan Engineering and Environmental Services, Inc., Philadelphia, PA							
B.S M.S	EDUCATION (DEGREE AND SPECIALIZATION) 5. Civil Engineering 6. Hydraulics/Hydrology OTHER PROFESSIONAL QUALIFICATIONS (Pub.	blications, Organizations, Training, A	Professiona LEED Accre	PRRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) ssional Engineer (PA, NJ, NY, DE) Accredited Professional				
		40 PELEVANIT						
		19. RELEVANT	PROJECTS					
	(1) TITLE AND LOCATION (City and State) Stockton Station Park and Greenwa Camden, NJ	ay	PRC 201	FESSIONAL SERVICES	CONSTRUCTION (if applicable) 2010			
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cos Project Manager; Prepared site desig a 16-acre park and greenway walking with a 0.5-mile jogging-biking path. stormwater management design.	n construction drawings for and biking path with assoc	r demolition o	ies. The park is conne	nt complex and construction of ected with Dudley Grange Park			
	(1) TITLE AND LOCATION (City and State)			(2) YEAF	R COMPLETED			
	Arbours at Eagle Pointe Philadelphia, PA			FESSIONAL SERVICES 14	CONSTRUCTION (if applicable) 2009			
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE							
	(1) TITLE AND LOCATION (City and State)			(2) YEAF	R COMPLETED			
	Saint Joseph's University Retail and Parking Garage Philadelphia, Pennsylvania			FESSIONAL SERVICES 17	CONSTRUCTION (if applicable) 2008			
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager; Prepared land development permitting and construction plans for the urban street-side retail complex and parking garage. Design included substantial stormwater management improvements, including porous paving, underground detention and native vegetation for compliance with strict Philadelphia regulatory requirements.							
	(1) TITLE AND LOCATION (City and State)			(2) YEAF	R COMPLETED			
	Sustainable Brownfields Development Study Trenton, New Jersey			FESSIONAL SERVICES	CONSTRUCTION (if applicable) N/A			
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager; Participated in a study to provide the City of Trenton with specifications for environmentally appropriately development for three brownfield sites located along the Assunpink Creek. One goal of the study was to support smart growth ensuring that environmentally sensitive areas in the city are developed appropriately to improve environmental quality. A sec study goal was to appropriately manage development pressure. Langan's contribution focused primarily on stormwater reter and detention design, and floodplain management.								
	(1) TITLE AND LOCATION (City and State) Capital Improvement and Infrastructure Master Plan Camden, New Jersey			(2) YEAF	R COMPLETED			
			PRO 200	FESSIONAL SERVICES	CONSTRUCTION (if applicable) N/A			
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE							
	development within Camden. Infrastructure systems included over 145 miles of water mains, 180 miles of combined sewers, 28 combined sewer outfalls, 3 water treatment plans, and a wastewater treatment plant.							

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)							
12. NAME 13. ROLE IN THIS						ARS EXPERIENCE	
	istopher Glenn, PE, LEED Green	Sustainability		а	. TOTAL	b. WITH CURRENT FIRM	
	ociate			1		7	
15.	FIRM NAME AND LOCATION (City and Sta	te) Langa	an Engineering & Env	rironmental S	Services, Inc., Oakla	nd, CA	
 16. EDUCATION (DEGREE AND SPECIALIZATION) B.S., Biological and Engineering Sciences, Washington University 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISTRICTION) Professional Engineer (PE) in California, Oregon, and Washington LEED Green Associate OSHA Training (40-Hour HAZWOPER, HAZWOPER On-Site Safety Aid/CPR) 					d Washington		
	OTHER PROFESSIONAL QUALIFICATIONS tainable Remediation Forum (SuRF)	s (Publications, Or	ganizations, Training,	Awards, etc	c.)		
		19.	RELEVANT PROJE	ECTS			
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Former George Air Force Base Victorville, California			PROFESS 2009	IONAL SERVICES	CONSTRUCTION (if applicable)	
a.	(3) BRIEF DESCRIPTION (Brief scope, size Project Manager and Lead Engineer; Fac former Air Force base. Responsibilities i extraction systems, a bioventing system, groundwater system. Performed landfill n and contaminant transport modeling effort	lity-wide remedia ncluded project m and a groundwate naintenance and m	tion program conduction program conductions and enginer pump and treat system and treat system and the conduction of the	ted by the aneering assortem. Designering stems of this stem is the stem of th	Air Force Center fo ociated with constru- gned and managed co ite. Also served as	acting and operating two soil-vapor construction of an expansion to the	
	(1) TITLE AND LOCATION (City and State)			(2) YEAR (COMPLETED	
	Remedial Design, National Semiconductor Corporation, Santa Clara County, California			PROFESSIONAL SERVICES 2009		CONSTRUCTION (if applicable)	
b.	(3) BRIEF DESCRIPTION (Brief scope, size Lead Engineer; Biological remediation of cremediation technologies including reducing lemented, and monitored a vegetable of	hlorinated compositive dechlorination	unds at the National S n, zero-valent iron v	Semiconduc wall injectio	ctor property. Perfor on, air sparging, an	d chemical oxidation. Designed,	
	(1) TITLE AND LOCATION (City and State)			(2) YEAR COMPLETED			
	Hunter's Point Naval Shipyard – Remediation Reviewer San Francisco, CA			PROFESS 2013	IONAL SERVICES	CONSTRUCTION (if applicable)	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE						Shipyard, responsibilities included results to evaluate effectiveness.	
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Remedial Design, Sunnyvale Town Center Sunnyvale, California			PROFESSIONAL SERVICES CONSTRUCTION (if ap		CONSTRUCTION (if applicable)	
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE						
	(1) TITLE AND LOCATION (City and State) City of Lodi Lodi, CA		(2) YEAR		COMPLETED		
				PROFESS 2011	IONAL SERVICES	CONSTRUCTION (if applicable) N/A	
e.	(3) BRIEF DESCRIPTION (Brief scope, size Project Manager; Lead engineering for the California. Responsibilities include engineer design and installation of a dual-phase well maintenance of a soil vapor extraction syst	design of a dual-pering associated w , permitting coord	hase extraction syste vith dual-phase syster ination, and oversight	em to remed m design, co t of contract	liate PCE and TCE fr ollection of groundwa ors. Also the lead e	ater and vapor chemical data, ngineer for the operation and	

	E. R	ESUMES OF KEY PERSONNEL F (Complete one Section E fo					
12. NAME Laura Miner, QEP		13. ROLE IN THIS CONTRACT Senior Project Manager, Environmental Compliance				ARS EXPERIENCE	
						b. WITH CURRENT FIRM	
15. FIRM NAME AND LOCATION (City and State) Langan Engineering and Environmental Services, Inc., Doylestown, PA							
B.A. Chemistry, Minor: Environmental Science Qualifie						ION (STATE AND DISCIPLINE) ΩEP), Certification Number	
	THER PROFESSIONAL QUALIFICATIONS <i>(Public</i> A Hazwoper 29 CFR 1910.120; Board of Di			te Manao	jement Δssoc (Δ&\\/\/\/	Δ)	
00117	That woper 20 of it 1010.120, Board of Bill	19. RELEVANT F			Jernent / teedes. (/ teevil	, ,	
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Greenhouse Gas (GHG) Recordkeepin Multiple Facilities	g, Reporting, and Permitting		PROFESSIONAL SERVICES 2010-Present		CONSTRUCTION (if applicable) N/A	
а.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager; Responsible for preparing Greenhouse Gas (GHG) applicability determinations, inventories, recordkeeping and reporting using the EPA eGGRT online system for multiple facilities subject to EPA's Greenhouse Gas Reporting Rule (74 FR 56260). Developed GHG reduction strategies in support of climate action plans and sustainability reporting. Calculated GHG emissions for permit applications and evaluated permitting requirements and applicability to the EPA Tailoring Rule. Fees varied according to project.						
	(1) TITLE AND LOCATION (City and State)					COMPLETED	
	Global Reporting Initiative (GRI) Repo Siemens Demag Delaval Turbomachin	_		PROFESSIONAL SERVICES 2000-Present		CONSTRUCTION (if applicable) N/A	
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager; Responsible for providing comprehensive review of sustainability program and assisting the facility in preparing the annual GRI report. Services included documenting baseline for air (carbon footprint), waste, water and energy usage. Researched alternative methods for waste disposal for items such spent sand from blasting operations and solvent wipes. Developed an electronic environmental management system to meet ISO 14001 standard and track compliance with EHS aspects, environmental laws and regulations and task assignments from facility specific permits and plans. Prepared air quality permits in RADUIS, NJPDES stormwater permit, SPCC and PPC Plans. Managed site demolition project, asbestos removal, and ISRA site investigation project. Project fees were approximately \$100,000/year.						
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Cogeneration Plant - Reading Hospita Reading, PA	and Medical Center, GHG Em	ission	PROFES 2010	SIONAL SERVICES	CONSTRUCTION (if applicable) N/A	
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm. Task Manager; Responsible for the preparation of a Plan Approval Application for a new cogeneration plant installed at an existing medical facility in order to allow the facility to power its buildings and equipment while selling excess power back to the grid at a profit. The new cogeneration plant included turbines firing natural gas, waste heat recovery boilers firing waste gas, and an emergency generator firing No. 2 fuel oil. Calculated greenhouse gas (GHG) emissions for the air permit and evaluated offsets with the reduced boiler usage. Project fee was approximately \$35,000.						
	(1) TITLE AND LOCATION (City and State) Comprehensive Multi-Media Environmental Compliance Audit, University of Pittsburgh, Pittsburgh, PA			(2) YEAR C		COMPLETED	
				PROFESSIONAL SERVICES 2002		CONSTRUCTION (if applicable) N/A	
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm. Project Manager; Responsible for conducting a third-party comprehensive multimedia audit of the campus. The audit was conducted in preparation for an EPA Multi-Media audit. The audit included a review of compliance with air quality, stormwater, hazardous waste, residual waste, wastewater discharge, PCB's, and laboratory chemical management. Responsibilities included leading teams that conducted site review, conducted daily de-briefing of findings to the University and implemented corrective actions. The comprehensive compliance audit was conducted over a 4 day period for a fee of approximately \$25,000.						
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Title V Permitting and Air Emission Inventory, University of Arizona Tucson, Arizona			PROFES 1996	SIONAL SERVICES	CONSTRUCTION (if applicable) N/A	
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm. Team Leader; Responsible for collecting data and preparing a campus-wide air emission inventory for air emission sources at the university. The emissions inventory data was then used to prepare a Title V Permit. Sources included the physical plant, cooling towers, maintenance, paint shop operations, and laboratories. The project included a statistical analysis to estimate laboratory emissions based on site inventories and purchasing data. The project also included meeting with Pima County Department of Air Quality and lead to a boiler replacement program to reduce NOx emissions to meet air quality standards. Project Fee was approximately \$120,000.						

	E. P			SED FOR THIS CONTRACT			
12. NAME		(Complete one Section E for each 13. ROLE IN THIS CONTRACT		14. YEARS EXPERIENCE			
	Raymond Lees, PE BCEE, CHMM	Remediation		a. TOTAL	b. WITH CURRENT FIRM		
				25	2		
15.	FIRM NAME AND LOCATION (City and State)	Langan Engineering	g & Environme	ntal Services, Inc., Elmwo	od Park, NJ		
ME	EDUCATION (DEGREE AND SPECIALIZA: , Environmental Engineering, Clemson Univ c., Civil Engineering. Drexel University	•	Professional Environmenta	RRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) ional Engineer FL, DE, NY, PA, OH, NJ, MD; Board Certified mental Engineer (BCEE); Certified Hazardous Materials Manager; New N2 Operator; Certified Underground Storage Tank Professional; e Plant and System Operator; Wastewater Treatment Plant Operator			
Am Am Chi Nat Pro	OTHER PROFESSIONAL QUALIFICATIONS (Publication Academy of Environmental Engineer erican Society of Civil Engineers, Philadelph Epsilon - National Civil Engineering Honor Sional Society of Professional Engineers ject Management Institute ter Pollution Control Federation	s, Chief Examiner nia Section, Chair Env. Gro					
		19. REL	EVANT PROJEC	CTS			
	(1) TITLE AND LOCATION (City and State)			(2) YEA	R COMPLETED		
	Remedial Design New Jersey			PROFESSIONAL SERVICES 2011	CONSTRUCTION (if applicable)		
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost Project Manager; Responsible for remed the 10-acre landfill consisted of multicom wetland mitigation, was integrated into the	ial design for a landfill car ponent RCRA cap, ground	dwater intercept	ion trench, and gabion stabilit	lew Jersey. The remedial design for		
	(1) TITLE AND LOCATION (City and State) Concept Design Pennsylvania			(2) YEAR COMPLETED			
				PROFESSIONAL SERVICES 2011	CONSTRUCTION (if applicable)		
b.	b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager; 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.						
	(1) TITLE AND LOCATION (City and State)			(2) YEA	R COMPLETED		
	151 Biscayne North Miami, Florida			PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (if applicable)		
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE 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.						
	(1) TITLE AND LOCATION (City and State)			(2) YEA	R COMPLETED		
	Morgan's Point Environmental Service South Hampton, Bermuda	S		PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (if applicable)		
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE						
	(1) TITLE AND LOCATION (City and State)			(2) YEA	R COMPLETED		
	RCRA RFI/CMS/CMA Pennsylvania			PROFESSIONAL SERVICES 2010	CONSTRUCTION (if applicable)		
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm. Project Manager; 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		, , 	ARS EXPERIENCE		
	Fangmei Zhang, PhD, PE	Remediation		a. TOTAL	b. WITH CURRENT FIRM		
			V. Fayiraanaan	tal Carriaga Inc. Florusca	d Dark N.I.		
15.	FIRM NAME AND LOCATION (City and State)	Langan Engineering	& Environmen	tal Services, Inc., Elmwoo	a Park, NJ		
	EDUCATION (DEGREE AND SPECIALIZATION)., Civil Engineering, Case Western Reserve		17. CURRENT Professional Er		TION (STATE AND DISCIPLINE)		
	., Environmental Engineering, Tongji Univers		FIOIESSIONAL EI	igineer FL			
B.S.	, Environmental Engineering, Southeast Uni	versity, Nanjing, China					
18	OTHER PROFESSIONAL QUALIFICATIONS (Pub	lications Organizations Train	ning Awards etc.)				
10.	OTHER TROPESSIONAL QUALIFICATIONS (Fub	ilications, Organizations, Train	iing, Awards, etc.)				
		40 DELE	EVANT PROJEC	TC.			
	(A) TITLE AND LOCATION (City and Otale)	19. RELE	VANT PROJEC		COMPLETED		
	(1) TITLE AND LOCATION (City and State) 151 Biscayne			. ,	CONSTRUCTION (if applicable)		
	North Miami, Florida			ROFESSIONAL SERVICES Ongoing	CONSTRUCTION (if applicable)		
_	(3) BRIEF DESCRIPTION (Brief scope, size, cost	, etc.) AND SPECIFIC ROLE	<u>'</u>	☐ Check if project performed v	with current firm.		
a.	RemediationEengineer; This project involvinclude a guard house, a pool, a one-stor						
	children's play area. The scope of work inc						
	landfill.						
	(1) TITLE AND LOCATION (City and State) Roscoe Warren Park Environmental Ser	vices			COMPLETED		
	Homestead, Florida	¥1003		ROFESSIONAL SERVICES Ongoing	CONSTRUCTION (if applicable)		
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost Remediation Engineer; Langan was selected.)						
	and Economic Resources Department for	Environmental Resources					
	park housed on the former Homestead Lar (1) TITLE AND LOCATION (City and State)	natill.		(2) VEAD	COMPLETED		
	Biscayne Landing			PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)		
	North Miami, Florida			2007			
C	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE			☐ Check if project performed with current firm.			
C.	Environmental Engineer; The project consisted of the development of a residential community over a previous municipal waste landfill. Th development consisted of mixed structure types, varying from low-rise single family homes, low-rise townhouse buildings and mid to high-ris						
	towers.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
	(1) TITLE AND LOCATION (City and State)			(2) YEAR COMPLETED			
	Morgan's Point Environmental Services South Hampton, Bermuda			ROFESSIONAL SERVICES	CONSTRUCTION (if applicable)		
	(3) BRIEF DESCRIPTION (Brief scope size cost	etc) AND SPECIFIC ROLE	'	Ongoing ☐ Check if project performed with current firm.			
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Environmental Engineer; Langan is acting as the specialist remediation cor			_ ' ' '			
temporary landfill services, sediment investigations, QA/QC and fill testing, and cave investigations. The scope of work includes vibackground, design and detailing, and tender assistance; and supervising and reporting activities.							
	(1) TITLE AND LOCATION (City and State) (2) YEAR COMPLETED						
	Landfill Groundwater Monitoring			PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)		
	Monroe County, Florida			Ongoing			
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost			Check if project performed values (Cudios Kov			
	Environmental Engineer; Langan is monito of the county's solid waste permits from the				Long Key, and Key Largo – as part		
	, , , , , , , , , , , , , , , , , , , ,				D FORM 330 (6/2004) PAGE 2		

	E. RE	SUMES OF KEY PERSO (Complete one Sec			ONTRACT		
12. NAME Stewart Abrams, P.E.		13. ROLE IN THIS CONTRACT Remediation		14. YEARS EXPERIENCE			
				a. TOTAL	- 29	b. WITH CURRENT FIRM 4	
15.	FIRM NAME AND LOCATION (City and State)	Langan Engineering	& Environme	ntal Services, In	c., Miami La	kes, FL	
M.S Nev 198 B.S 18.	M.S., Environmental Sciences, Rutgers University, 1991 Registe			RENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) red Professional Engineer I NJ rsey Subsurface Evaluator and UST Certification (s, etc.)			
			EVANT PROJEC)TC			
	(1) TITLE AND LOCATION (City and State)	19. KELE	EVANT PROJEC	715	(2) VEAD	COMPLETED	
	(1) TITLE AND LOCATION (City and State) SL Industries, Inc.		_	PROFESSIONAL S		COMPLETED CONSTRUCTION (if applicable)	
	Camden, New Jersey			PROFESSIONAL SERVICES CONSTRUCTION (if applicable) n/a			
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE X Check if project performed with current firm. Served as technical director for major treatability evaluation and pilot study for the use of Calcium Polysulfide as a reducing agent for Cr+6 to Cr+3 in both the unsaturated and saturated zone. Treatability studies involved both microcosm testing and column testing to simulate the actual flow through the aquifer. The field pilot test addressed 2500 square feet down to the water table, approximately 15 ft below ground surface.						
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Confidential Fortune 500 Manufactu Western New York	ırer		PROFESSIONAL S 2010	ERVICES	CONSTRUCTION (if applicable) n/a	
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager and technical director for performance carbon footprint and sustainability evaluations of 3 western New York state Superfund sites. Identified factors contributing to the carbon footprint and recommended strategies to reduce carbon footprint, lower energy costs and improve the sustainability of all three remediation systems.						
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	General Electric Schenectady, New York			PROFESSIONAL S 2007	ERVICES	CONSTRUCTION (if applicable)	
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm. 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.						
	(1) TITLE AND LOCATION (City and State) Honeywell International Groton, Massachussetts				(2) YEAR	COMPLETED	
				PROFESSIONAL SERVICES CONSTRUCTION (CONSTRUCTION (if applicable)	
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE						
	(1) TITLE AND LOCATION (City and State)			(2) YEAR COMPLETED			
	Greenberg Gibbons Commercial Annapolis, Maryland			PROFESSIONAL SERVICES CONSTRUCTION (if applicable) 2008			
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cos Directed the injection of over 300,000 site in Maryland. Extensive use of hor Prudential Real Estate is a significant i) pounds of potassium izontal wells. Work be	n permanganat ing performed	e for chlorinated	d solvent de		
	l				STANDAR	D FORM 330 (6/2004) PAGE 2	

Subconsultant Resumes

		KEY PERSONNEL PI plete one Section E			ст	
12.	NAME	13. ROLE IN THIS CON			14	. YEARS EXPERIENCE
		Vice Preside	ent	a.	TOTAL	b. WITH CURRENT FIRM
	ler Chappell				12	5
	FIRM NAME AND LOCATION (City and State)					
	e Chappell Group, Inc.			ompano Beac		
	EDUCATION (DEGREE AND SPECIALIZATION)		17. CURRENT PRO	FESSIONAL REGIS	TRATION ((STATE AND DISCIPLINE)
	chelor of Science, Texas Christi iversity, August 1997, Environme					
18.	OTHER PROFESSIONAL QUALIFICATIONS (Publications,	Organizations, Training, A	Awards, etc.)			
•	South Florida Association of Env Florida Association of Environme Florida Inland Navigation Distri	ental Profession ict, Broward Co	onals, Past ommissioner	Board Memi		
_	(1) TITLE AND LOCATION (City and State)	19. RELEVANT	PROJECTS		(0) 1/515	
	Children's Reading Center & Mu	geum Davie	FI.	PROFESSIONAL S		COMPLETED CONSTRUCTION (If applicable)
	Children's Reading Center & Mu	iseum Davie,	гц	200		2010
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AN	D SPECIFIC ROLE			_	formed with current firm
a.	(\$100,000) The project consist wetland permitting for a site Center. TCG provided all envir environmental permitting servi	designated for conmental asses	the develo	nmental rev	views a	and jurisdictional dren's Reading
	(1) TITLE AND LOCATION (City and State)	_			(2) YEAR	COMPLETED
	School Board of Broward County Biological Assets	FL	d County,	200	9	CONSTRUCTION (If applicable)
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AN (\$75,000) The project consisted quantification of biological a County. TCG provided biological site inspection and environments.	ed of a pilot p ssets associat l assessment a	ed with exi	the review isting school	w, asse ool sit the pr	tes within Broward roject, along with
	(1) TITLE AND LOCATION (City and State)	_			(2) YEAR	COMPLETED
	SBBC Phase I ESAs	Broward	d County,	PROFESSIONAL S	SERVICES	CONSTRUCTION (If applicable)
		FL		200	8	
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AN	ND SPECIFIC ROLE		X Check if p	project per	formed with current firm
	(\$25,000) TCG provided all ser various schools throughout Bro		to Environm	mental Site	e Asses	ssments for
_	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED
				PROFESSIONAL	SERVICES	CONSTRUCTION (If applicable)
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AN	ND SPECIFIC ROLE		Check if p	project per	formed with current firm
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED
				PROFESSIONAL S	SERVICES	CONSTRUCTION (If applicable)
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AN	ND SPECIFIC ROLE		Check if p	project per	I formed with current firm

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	(Complete one Section		THIS CONTRACT erson.)			
12. NAME	13. ROLE IN THIS	13. ROLE IN THIS CONTRACT			14. YEARS EXPERIENCE	
	Senior P	roject Biolog:	ist a. TO	TAL	b. WITH CURRENT FIRM	
Matthew Mitchell				6	4	
15. FIRM NAME AND LOCATION (City and State)			amana Danah			
The Chappell Group, Inc.			ompano Beach,		(OT ATE AND DIOCIDING)	
Bachelor of Science, Florida S	State Universit		OFESSIONAL REGISTRA	ATION	(STATE AND DISCIPLINE)	
Tallahassee, August 2000, Envi	ronmental Scie	nce				
Master of Science, Nova Southe Fort Lauderdale, October 2006,	Marine Biolog	У				
18. OTHER PROFESSIONAL QUALIFICATIONS (Publication)	-					
 South Florida Association of International Society of Ark 						
	19. RELEV	ANT PROJECTS				
(1) TITLE AND LOCATION (City and State)				-	COMPLETED	
Children's Reading Center	& Museum Dav	ie, FL		VICES	CONSTRUCTION (If applicable	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, e	to I AND SPECIFIC BOLE		2009		2010	
a.			_		rformed with current firm	
(\$100,000) The project con wetland permitting for a s Center. TCG provided all e environmental permitting s	ite designated nvironmental as	for the devel	opment of a (Chilo	dren's Reading	
(1) TITLE AND LOCATION (City and State)			(2) YEAR	COMPLETED	
School Board of Broward Co Biological Assets	FL	ward County,	PROFESSIONAL SER 2009	VICES	CONSTRUCTION (If applicable	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, e	etc.) AND SPECIFIC ROLE		X Check if proj	ect per	rformed with current firm	
(\$75,000) The project cons quantification of biologic County. TCG provided biolo site inspection and enviro	al assets associated assets associated assessment	ciated with ex nt and data an	isting school alysis for th the survyor	sit ne pr of r	tes within Broward roject, along with record.	
(1) TITLE AND LOCATION (City and State)	B				COMPLETED CONSTRUCTION (If applicable)	
SBBC Phase I ESAs	Bro [*] FL	ward County,		VICES	CONSTRUCTION (IT applicable	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, e			2008	oot no	 rformed with current firm	
c. (\$25,000) TCG provided all various schools throughout	services relat					
(1) TITLE AND LOCATION (City and State)			(2) YEAR	COMPLETED	
			-		CONSTRUCTION (If applicable	
	etc.) AND SPECIFIC ROLE		Check if proj	ect per	formed with current firm	
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, 6)						
d.						
					COMPLETED	
d.					COMPLETED CONSTRUCTION (If applicable	

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		KEY PERSONNEL PROP lete one Section E for			ACT				
12.	NAME	13. ROLE IN THIS CONTRA	ACT		14	. YEARS EXPERIENCE			
		Project Biolog	qist	l	a. TOTAL	b. WITH CURRENT FIRM			
Pat	trick Murphy		J		3	3			
	FIRM NAME AND LOCATION (City and State)					-			
The	e Chappell Group, Inc.		Por	mpano Bea	ach, FL				
16.	EDUCATION (DEGREE AND SPECIALIZATION)	17	. CURRENT PROF	ESSIONAL REG	ISTRATION (STATE AND DISCIPLINE)			
	chelor of Science, Nova Southeast iversity, June 2004, Environmenta								
18.	OTHER PROFESSIONAL QUALIFICATIONS (Publications, O	rganizations, Training, Awa	rds, etc.)						
•	South Florida Association of Envi International Society of Arborica Certified Sea Turtle Lighting - N	ulture, Certifie	ed Arboris	st	rtle Su:	rvival, Member			
		19. RELEVANT PR	ROJECTS						
	(1) TITLE AND LOCATION (City and State)			DD OFFOOION A		COMPLETED			
	Children's Reading Center & Mus	seum Davie, FI	Ĺ			CONSTRUCTION (If applicable)			
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND	CDECIFIC DOLE		20		2010			
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND	SPECIFIC ROLE		X Check if	project per	formed with current firm			
	wetland permitting for a site d	(\$100,000) The project consisted of preliminary environmental reviews and jurisdictional wetland permitting for a site designated for the development of a Children's Reading Center. TCG provided all environmental assessment, local, state and federal							
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED			
	School Board of Broward County Biological Assets	Broward (FL	County,	PROFESSIONAL 20	0.000	CONSTRUCTION (If applicable)			
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND (\$75,000) The project consisted quantification of biological as County. TCG provided biological site inspection and environment	l of a pilot prossets associated assessment and	d with exi d data ana	the revie sting sch lysis for	ew, asse nool sit	tes within Broward roject, along with			
	(1) TITLE AND LOCATION (City and State)					COMPLETED			
	SBBC Phase I ESAs	Broward (County,	PROFESSIONAL	L SERVICES	CONSTRUCTION (If applicable)			
		FL	-	20	08				
_	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND	SPECIFIC ROLE		X Check if	project per	formed with current firm			
c.	(\$25,000) TCG provided all serv various schools throughout Brow		Environm						
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED			
				PROFESSIONAL	L SERVICES	CONSTRUCTION (If applicable)			
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND) SPECIFIC ROLE		Check if	f project per	formed with current firm			
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED			
				PROFESSIONAL	L SERVICES	CONSTRUCTION (If applicable)			
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND	SPECIFIC ROLE		Check if	f project per	formed with current firm			

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E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)							
12.	NAME	13. ROLE IN TH		Key pen		EARS EXPERIENCE	
Joseph N. Ziegler, P.E., B.C., P.S.S.C. President					a. TOTAL	b. WITH CURRENT FIRM	
15	FIRM NAME AND LOCATION (City and Sta	to) FNC	INEEDED ENVIDONN	MENITAL	25 . SOLUTIONS , INC.,La	21	
			T				
	EDUCATION (DEGREE AND SPECIALIZATI University of Florida, Gainesville Bachelor of Science in Civil Engineering Master of Engineering, 1991		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) State of Florida Licensed Professional Engineer - No. 49375 State of Florida Certified Building Contractor- No. CBCO58400 State of Florida Certified Pollutant Storage Specialty Contractor - PCC056821				
18.	OTHER PROFESSIONAL QUALIFICATIONS	(Publications, Or	ganizations, Training, .	Awards,	etc.)		
		19.	RELEVANT PROJE	CTS			
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Beckman Coulter, Hialeah Miami-Dade County, Florida		PROFESSIONAL SERVICES CONSTRUCTION (if applicable) NA 2010				
a.	(3) BRIEF DESCRIPTION (Brief scope, size Mr. Ziegler served as building contract diesel surface spill at an industrial loc horizontal and vertical recovery wells backfilling the excavation.	tor/pollutant st cation in Hialeal	orage contractor as	s EESI p rk inclu	ded the excavation o	services for a 500-gallon If test pits, installation of	
	(1) TITLE AND LOCATION (City and State)			(2) YEAR (COMPLETED	
	Boca Raton Shell Boca Raton, Florida				SSIONAL SERVICES	CONSTRUCTION (if applicable) 2009	
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE							
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Enterprise Rent A Car Melbourne, Florida		PROFE NA	SSIONAL SERVICES	CONSTRUCTION (if applicable) 2010		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE							
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	National Car Rental Panama City, Florida		PROFE NA	SSIONAL SERVICES	CONSTRUCTION (if applicable) 2009		
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE						
	(1) TITLE AND LOCATION (City and State)				(2) YEAR COMPLETED		
	Medical Manufacturing Facility, Hialeah, FL			PROFE NA	SSIONAL SERVICES	CONSTRUCTION (if applicable) 2010	
e.	(3) BRIEF DESCRIPTION (Brief scope, size Mr. Ziegler served as building contract of an 8,000-gallon AST.				Check if project perform emoval of a 12,000-ga		
						STANDARD FORM 330 (6/2004)	

	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)						
	NAME	13. ROLE IN T	HIS CONTRACT	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		EARS EXPERIENCE	
Ke	evin S Rockett, PG		pervisor/ Project		a. TOTAL	b. WITH CURRENT FIRM	
		Geologist	WEEDED EN (1801)	4551751	23	21	
15.	FIRM NAME AND LOCATION (City and Sta	te) ENG	INEERED ENVIRONN	VIENTAL	SOLUTIONS, INC.,La	antana, FI	
	EDUCATION (DEGREE AND SPECIALIZATI					TATE AND DISCIPLINE)	
	rida Atlantic University, Boca Raton, F. chelor of Science in Geology, 1996	lorida	State of Florida Lice	ensea Pro	ofessional Geologist - No	0. 2329	
Da	chelor of Science in Geology, 1990						
18.	OTHER PROFESSIONAL QUALIFICATIONS	(Publications, O	rganizations, Training, ,	Awards,	etc.)		
		19.	RELEVANT PROJE	CTS			
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Beckman Coulter, Hialeah Miami-Dade County, Florida				ESSIONAL SERVICES	CONSTRUCTION (if applicable)	
	(3) BRIEF DESCRIPTION (Brief scope, size	cost etc.) AND	SDECIEIC BOI E	NA 🖂	Check if project perform	2010	
a.	Mr. Rockett served as Senior Site Supe						
	industrial location in Hialeah. The sc						
	recovery wells, excavation of contam (1) TITLE AND LOCATION (City and State)	inated soil, the	recovery of produc	t with s	•	,	
	Boca Raton Shell			(2) YEAR COMPLETED PROFESSIONAL SERVICES CONSTRUCTION (if applicable)			
	Boca Raton, Florida				NA 2009		
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE			☐ Check if project performed with current firm.			
υ.				on of the service station, removal of the complete fueling USTS and dispensers, excavation, transportation and			
	disposal of contaminated soil, installa						
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Enterprise Rent A Car Melbourne, Florida				SSIONAL SERVICES	CONSTRUCTION (if applicable)	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE			NA 🖂	Check if project perform	2010	
C.	Mr. Rockett served as Senior Site Supe						
	gallon UST and the installation of a 3,	000-gallon AST					
	(1) TITLE AND LOCATION (City and State)			(2) YEAR COMPLETED			
	National Car Rental			PROFE	SSIONAL SERVICES	CONSTRUCTION (if applicable)	
	Panama City, Florida			NA		2009	
d.	(3) BRIEF DESCRIPTION (Brief scope, size Mr. Rockett served as Senior Site Supe				Check if project perform on USTS.	ned with current firm.	
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	(1) TITLE AND LOCATION (City and City)		Т		/2\ \/E \ D	COMPLETED	
	(1) TITLE AND LOCATION (City and State) Medical Manufacturing Facility,			PR∩FF	ESSIONAL SERVICES	COMPLETED CONSTRUCTION (if applicable)	
	Hialeah, FL			NA	OSIGNAL SERVICES	2010	
e.	(3) BRIEF DESCRIPTION (Brief scope, size				Check if project perform		
υ. 	Mr. Rockett served as Senior Site Supe	ervisor for the r	emoval of a 12,000-	-gallon	UST and the installat	ion of an 8,000-gallon AST .	
	·					STANDARD FORM 330 (6/2004)	



Asbestos Consulting • Radon Measurements • Lead Assessments • Indoor Air Quality Testing • Mold Investigations

Alexander Front

Education and Certification

- Deerborne High School, Coral Gables, Florida, Graduated: 1981
- Pittsburgh Testing Laboratory, Asbestos Air Sample Analysis
- Pittsburgh Testing Laboratory, Asbestos Bulk Sample Analysis
- Arch Training Services, Inc., Sampling and Evaluating Airborne Asbestos Dust NIOSH 582 Equivalency
- Georgia Institute of Technology, Supervision of Asbestos Abatement Projects
- Louisiana State University, Asbestos in Building and Assessment
- Mayhew Environmental Training Associates
 - AHERA Asbestos Abatement Supervisor
 - AHERA Inspector Refresher Training
 - Management Planner
- State of Florida Radon Measurement Specialist
- Registered Industrial Hygiene Technologist
- Florida Asbestos abatement contractor

Additional certifications available upon request

Specialized Training

- Asbestos Project Management and Site Supervision
- Asbestos Abatement for Inspectors and Management Planners
- Asbestos Air Monitoring
- Asbestos L.E.A. Awareness
- Sampling and Microscopic Evaluation of Airborne Asbestos Dust (NIOSH 582)
- Deleader Supervisor (Mass. Deleader)
- State certified Asbestos & Lead Instructor
- E.P.A. Lead Risk Assessor
- E.P.A. Lead Supervisor
- Certified Indoor Environmentalist

Professional ExperiencePhase I & II Environmental Audits

- Asbestos Material Surveys and Air Monitoring
- Asbestos Removal Supervision
- Academic Instruction of Industrial Personnel in:

EPA-AHERA

- Asbestos Worker
- Asbestos Contractor/Supervisor
- Asbestos Inspector/Management Planner
- Refresher Course for all Asbestos

JEFF BAYLOR PROJECT MANAGER / CLIENT SERVICES MANAGER

EDUCATION

B.S., Biology (Pennsylvania State University, 1996)

REGISTRATIONS

American Chemical Society

EXPERIENCE

Mr. Baylor has been a project manager for the laboratory since 2001 specializing in landfills, NPDES, drinking water, solid waste, and other State programs. His many years of service with the laboratory have given him a background that allows him to help clients with their site- specific work plans, applicable methodologies, turnaround time requirements, and project data quality objectives. In the capacity as Project Manager, Mr. Baylor provides his Clients as the one point of contact for all their production and technical needs. He serves as a liaison between the Client and the laboratory operations and currently serves a diverse group of Clients, including many cities, counties, utilities, and consultants.

Prior to assuming the position of Project Manager, Mr. Baylor was the Supervisor of the laboratory's Biology Laboratory. He oversaw all areas of the department including the Microbiology and Toxicity sections. For the Microbiology section, he was in charge of the following: media preparation; quality control; detection and enumeration of densities of Fecal and total Coliforms, *Fecal Streptococcus*, *Enterococcus*, and heterotrophic bacteria. In 2002, he led the effort for ELAB to become EPA certified for testing for *Aeromonas* bacteria in drinking water under the Unregulated Contaminant Monitoring Rule (UCMR) program. For the toxicity section, he was responsible for organism breeding, quality control, freshwater and saltwater bioassays using EPA certified methods for both Acute and Chronic tests, and statistical evaluation of toxicity tests performed for client's NPDES permits.

Prior to this, Mr. Baylor supervised the Inorganic Department for several years after working as an analyst in the Metals and General Chemistry departments for six years. While in the General Chemistry department, he utilized gravimetric, potentiometric, titrimetric, and colormetric approved methodologies to test samples of varied matrices including drinking water, ground water, surface water, waste water, solids, and sludges. He used a wide variety of instrumentation including manual and automated colorimetric analyzers, Ion Chromatograph, IR Chromatograph, and digestion/distillation apparatus. In the Metals department, he was responsible for all aspects of testing including digestion, analytical, and quality control. He is proficient with the instrumentation used for the quantification of metallic elements such as flame and graphite furnace AA and cold vapor analysis of mercury.

During his tenure, Mr. Baylor help set up the Toxicity Characteristic Leaching Procedure methods now used by the laboratory for testing materials for clients under the RCRA program. He also supervised and conducted the setup and incubation of samples for Simulated Distribution Systems (SDS) and Biodegradable Organic Carbon (BDOC) analysis, which is related to the Information Collection Rule program.

John C. Maffett

841 Somerset Avenue Davie, FL 33325

QUALIFICATIONS

Experience in a variety of drilling projects including: shallow monitor wells, deep monitor wells, double-cased wells, recovery wells, vapor extraction wells, split spoons, rock coring, auger borings, NX casing installations and field management. Knowledge in the handling of hydrocarbons, solvents and many other contaminants in Level A, B, and C Operations.

PROFESSIONAL HISTORY

15 years experience in the Environmental Drilling Industry. Currently serving as President and Co-Owner of Enviro-Drill, Inc. since 2004. Previously employed by Precision Drilling, served as Drilling Manager. Also worked for GFA International and Earth Tech Drilling.

EDUCATION

- High School Graduate, South Dade High School
- OSHA 40-hour Health and Safety Training
- OSHA 8-hour Health and Safety Refresher Training
- Class A CDL

PROFESSIONAL AFFILIATION

- National Ground Water Association
- Florida Ground Water Association

PROFESSIONAL REGISTRATION

• Water Well Contractor #11228

Mark G. James

800 AltaVista Terrace Davie, FL 33325

QUALIFICATIONS

Experience in a variety of drilling projects including: shallow monitor wells, deep monitor wells, double-cased wells, recovery wells, vapor extraction wells, split spoons, rock coring, auger borings and NX casing installations. Knowledge in the handling of hydrocarbons, solvents and many other contaminants in Level A, B, and C Operations.

PROFESSIONAL HISTORY

Over 25 years of experience in the Environmental Drilling Industry. Currently serving as Vice President and Co-Owner of Enviro-Drill, Inc. since 2004. Previously employed by GFA International and served as South Florida Drilling Manager. Responsibilities included management of all drilling activities. Also employed by US Drilling, Inc. and served as Operations Manager, overseeing all drilling activities.

EDUCATION

- High School Graduate Miramar High School
- Certified Fire-Fighter, Broward County
- OSHA 40-Hour Health and Safety and 8-Hour Supervisor Training
- 1000 hour Masonry Construction Sheridan Vocational
- Safety Training and Driver Training Airside Operations Miami International Airport

PROFESSIONAL AFFILIATION

- National Groundwater Association Member
- Florida Groundwater Association Member

<u>PROFESSIONAL REGISTRATION</u>

- Licensed Water Well Contractor S.F.W.M.D. #11031
- Collier County Monitor Well Contractor #31246



Michael R. Goldstein, Esq. **The Goldstein Environmental Law Firm, P.A.**One Southeast Third Avenue, Suite 2120, Miami, FL 33131

mgoldstein@goldsteinenvlaw.com

Curriculum Vitae

Michael R. Goldstein, Managing Shareholder of The Goldstein Environmental Law Firm and a Martindale-Hubbell AV rated attorney, practices exclusively in the areas of environmental law and environmental redevelopment for a broad range of clients, including retail, residential, and industrial developers, public and private companies, lenders, and local governments. A major aspect of Mr. Goldstein's environmental legal practice involves working closely and extensively with local governments, real estate development principals, and engineering, planning, and design professionals to help coordinate federal, state and local regulatory approvals for complex retail, industrial, residential, mixed use, and marina related projects throughout the State of Florida. His practice has a heavy emphasis on the remediation, financing, and beneficial reuse of contaminated sites and involves a broad array of Brownfields related transactional, administrative, regulatory, legal, legislative, and policy work for clients in both the private and public sectors.

Mr. Goldstein has developed a national reputation as one of the leading and most innovative Brownfields practitioners in Florida, working on important and precedent establishing projects as well as heading up or participating in numerous local, regional, state, and federal environmental restoration initiatives. On a statewide level, he was the founding Chairman of the Florida Brownfields Association and served as its Chairman and/or President for the first five years of the organization's existence. His tenure as Chairman and President was distinguished by his commitment to elevating environmental justice and public health as critical areas of emphasis for business, community, regulatory agency, and local government stakeholders. In 1996, the Miami-Dade County Commission appointed him Chairman of the Miami-Dade County Brownfields Task Force, a post that he held until the committee's business was completed in 2004. In January 2006, he was appointed to serve on the Advisory Board of the Bureau of National Affair's highly respected Environmental Due Diligence Guide, which serves as a national reporting, editorial, and opinion forum for environmental transactions and related Brownfields and policy matters. In 2008, he founded and funded the Goldstein Brownfields Foundation, which is dedicated to empowering economically and health disadvantaged individuals and communities with scholarships, programming, and resources to restore polluted land, revitalize neighborhoods, and protect public health. The Goldstein Brownfields Foundation also focuses on increasing the ethnic and gender diversity of lawyers working in the environmental arena through academic scholarships, educational and career programming, and professional mentoring. In 2009, he was appointed to the Executive Committee of the National Brownfields Coalition, an affiliation of private and public sector stakeholders working in the U.S. Congress to advocate for improvements in environmental redevelopment policy and legislation.

On May 16, 2013, Mr. Goldstein was awarded the prestigious Brownfields Leadership Award at the U.S. EPA National Brownfields Conference by the National Association of Local Government Environmental Professionals for his "achievement in and commitment to public private partnerships." On October 28, 2013, he was awarded the prestigious Chrysalis Award by the membership of the Florida Brownfields Association at its Annual Brownfields Conference for his "outstanding efforts towards the cleanup and redevelopment of Brownfield properties in the state of Florida," including "educating the public and elected officials about the Brownfield Program, providing volunteer assistance to Florida communities, advancing legislation that promotes the Brownfield Program through increased incentives and opportunities, extreme volunteer participation in the activities of the Florida Brownfields Association, promoting the state and federal Brownfield Programs, and Brownfield site cleanup." He is called on frequently to provide training and support for local government based environmental redevelopment efforts and has formally developed and presented brownfield related workshops to elected officials, planning staff, businesses and community stakeholders in the

following Florida municipalities: Hollywood, Fort Lauderdale, Miami, North Miami, North Miami Beach, Pompano Beach, Sarasota, and St. Petersburg.

Notable Experience Related to Transactions, Cleanups & Environmental Redevelopment

Extensive experience in the procurement, contracting, and management of environmental engineering and consulting professionals to develop and implement environmental due diligence, remediation, compliance, and design and construction strategies, including negotiation of consultant contracts, review and revision of draft plans and reports prior to submittal to environmental regulatory agencies, and interfacing with consultants to negotiate clean-up agreements and schedules with environmental regulatory agencies.

Extensive experience in working with environmental consultants to design, negotiate, obtain state and local regulatory approval of institutional and engineering controls to allow residual soil and groundwater contamination to be safely managed in place.

Extensive experience in developing, implementing, and managing long-term environmental restoration, economic redevelopment, and project construction strategies on behalf of developers, end-users, and local governments to address clean-up, regulatory, liability, design and engineering, financing, environmental insurance, community outreach, and stakeholder involvement concerns on or in connection with Brownfield and Superfund sites in Florida.

Experience in procuring environmental insurance coverage and negotiating endorsements, exclusions, and related policy language for buyers, sellers, lenders, and end-users.

Strong working relationships with Brownfields program managers and administrators at U.S. Environmental Protection Agency, Florida Department of Environmental Protection, numerous local pollution control agencies across the State of Florida (including Broward County Environmental Protection and Growth Management Department, Hillsborough County Environmental Protection Commission, and Miami-Dade County Department of Regulatory and Economic Resources), U.S. Army Corps of Engineers, U.S. Department of Housing and Urban Development, U.S. Department of Commerce, and several of Florida's Regional Planning Councils.

Strong relationships and extensive experience working with federal, state, regional, and local regulatory and economic development officials, including U.S. Department of Housing and Urban Development, U.S. Economic Development Administration, Enterprise Florida, the Florida Department of Economic Opportunity, the South Florida Regional Planning Council, Miami-Dade County's Beacon Council, and the Miami-Dade County Office of Community and Economic Development.

NOTABLE BROWNFIELDS RELATED WORK

Brownfield Projects. Specific Brownfield related matters engaged to work on in Florida through March 2015 include projects located in the following jurisdictions: Apopka, Auburndale, Boynton Beach, Brevard County, Broward County, Citrus County, Cocoa Beach, Coral Springs, Dania Beach, Davie, Deerfield Beach, DeFuniak Springs, Delray Beach, Duval County, El Portal, Escambia County, Fort Lauderdale, Fort Walton Beach, Hallandale Beach, Hillsborough County, Jacksonville, LaBelle, Largo, Lauderhill, Miami, Miami Gardens, Miami-Dade County, Miramar, North Miami, North Miami Beach, Opa-locka, Orlando, Palm Beach County, Pasco County, Pensacola, Polk County, Pompano Beach, Punta Gorda, Sarasota, Sarasota County, Seminole, South Miami, St. Petersburg, Sunrise, Sweetwater, Tallahassee, Tampa, Tarpon Springs, Venice, and West Palm Beach.

Brownfield Incentives. Over the past 18 years worked with clients, environmental consultants, local government officials, Certified Public Accountants, and/or state regulators to prepare and/or submit over 38 Voluntary Cleanup Tax Credit Application packages, 24 Brownfield Redevelopment Bonus Applications, 18 Construction Materials Sales Tax Refund Applications, and 5 Brownfield Targeted Site Assessment Applications. Have also supported numerous local government Brownfield grant applications to the U.S. EPA, including a successful \$500,000 U.S. EPA Brownfield Jobs Training Grant for the City of Miami and a successful \$450,000 U.S. EPA Brownfield Remediation Grant for Palm Beach County. Clients receiving brownfield incentives include Carlisle Development Group, Cornerstone Group, Darden Restaurants, Gerdau Ameristeel, IKEA, McArthur Dairy, Pinnacle Housing Group, Sam's Club, Wal-Mart, Waste Management, and ZOM.

Negotiation of Brownfield Site Rehabilitation Agreements. Successfully negotiated 30 Brownfield Site Rehabilitation Agreements under the Florida Brownfields Program, including 7 with the Florida Department of Environmental Protection, 16 with the Miami-Dade County Department of Regulatory and Economic Resources, 5 with

the Broward County Environmental Protection and Growth Management Department, and 2 with the Hillsborough County Environmental Protection Commission.

Landfill Related Redevelopment and Reuse Experience. Worked or working on approximately 29 landfill redevelopment and reuse projects involving commercial, conservation and recreation, industrial, renewable energy, residential, and retail reuse scenarios, including landfill sites located in Apopka, Aventura, Ft. Walton Beach, Delray Beach, Doral, Gainesville, Hallandale Beach, Hialeah, Hollywood, Jacksonville, Miami, Miami Gardens, North Miami, North Miami Beach, Opa-locka, Orlando, Palmetto, Pompano Beach, Sarasota, Sweetwater, Tampa, and West Palm Beach.

Brownfields Counsel to City of North Miami. Engaged by the City of North Miami to assist in the Brownfields designation of former wastewater treatment plant for redevelopment and reuse for affordable housing, health care, and expanded conservation and recreation purposes. Also engaged to brief the City Council on all brownfields related economic incentive communities and to hold outreach workshops for business and neighborhood stakeholders.

Brownfields and Environmental Counsel to City of North Miami Beach. Engaged by the City of North Miami Beach to assist in the environmental investigation, cleanup and master planning of former Miami-Dade County owned landfill for expanded conservation and recreation purposes. Also engaged to advise the City as to Brownfields related funding opportunities in 2009 federal stimulus legislation.

Brownfields Counsel to City of Miami Gardens. Engaged by the City of Miami Gardens to assist in the identification and designation of multiple corridors, neighborhoods, and sub-markets as Brownfield Areas. Spearheaded successful brownfields designation of City-owned property for marketing to private sector. Also engaged to brief the City Council on all brownfields related economic incentive communities and to hold outreach workshops for business and neighborhood stakeholders.

Brownfields Counsel to City of Miami. Engaged by the City of Miami to draft and help implement the City's Strategic Brownfields Plan, including procedures for initiating Brownfields designation, recommendations for developing additional incentives (such as zoning incentives) to stimulate Brownfields redevelopment, strategies for promoting Brownfields redevelopment opportunities to developers, end-users, and neighborhood groups, and protocols for community outreach and environmental justice.

Environmental Counsel to City of Miami for Bicentennial Park to Museum Park Project, Orange Bowl Stadium to Florida Marlins Stadium Project, Former Virginia Key Landfill Conservation Reuse Project. Engaged by the City of Miami in 2009 to assist in the environmental investigation and cleanup of contamination at Bicentennial Park to facilitate its redevelopment as a bayside campus for the Miami Art Museum and the Miami Museum of Science; in 2008 to assist the City in the environmental investigation and cleanup of contamination at the former Orange Bowl Stadium site to facilitate its redevelopment as a new stadium for Major League Baseball's Florida Marlins team; and in 2003 and 2004 on a pro bono basis in connection with beneficial reuse of 100 acre former landfill located on Virginia Key in the City of Miami.

LEADERSHIP POSITIONS

Founding Chairman and President, Florida Brownfields Association

In May 2002, Mr. Goldstein was one of the founding Board members of the Florida Brownfields Association and unanimously elected by his peers and colleagues in the private and public sector to serve as its first Chairman and President. The Florida Brownfields Association is a statewide coalition of public sector and private sector stakeholders working on an array of legislative, policy, legal, public health, and environmental justice initiatives to improve the pace and scope Brownfields restoration and economic revitalization in Florida. Mr. Goldstein was unanimously reelected to a second two-year term in July of 2004 that concluded in 2006.

Board of Directors and Co-Chair of Legislative & Policy Committee, Florida Brownfields Association

In October 2013, Mr. Goldstein was re-elected to the Board of Directors of the Florida Brownfields Association and served in that position through October 2014. In 2013, Mr. Goldstein served as Co-Chair of the Legislative & Policy Committee of the Florida Brownfields Association. He remains actively involved in preparing amendments to Florida's Brownfields Redevelopment Act to expand the scope and impact of economic and liability protection incentives available to developers, end-users, lenders, and local governments.

Chairman, Miami-Dade County Brownfields Oversight Committee and Miami-Dade County Brownfields Task Force

In 1995, Mr. Goldstein petitioned the Miami-Dade County Commission to empanel and empower an advisory board that would develop recommendations to encourage investment by the private sector in brownfield properties through the establishment of grants, low interest revolving loans, and the amendment of the County's environmental protection code to provide liability clarification and protection. As a result of his efforts, the Board of County Commissioners created the Miami-Dade County Brownfields Task Force in 1996, which Mr. Goldstein was appointed to as Chairman. In 1999, the Task Force was reauthorized as an Oversight Committee and charged with implementing the recommendations developed by the Task Force. He was again appointed to serve as Chairman and continued in that role working closely with senior DERM management as well as Miami-Dade County elected officials and staff on a host of related policy, programmatic, funding, and educational initiatives until 2005, when the Committee was sunseted.

President and Chairman, Goldstein Brownfield Foundation

In 2008, Mr. Goldstein established the Goldstein Brownfield Foundation, a 501(3)(c) and Florida not-for-profit, to raise money for and provide scholarships for minority college and law students who want to pursue careers in environmental law, environmental redevelopment law, and environmental public health; to raise money for, fund, and stage and/or support Brownfields-related programming for local government staff and officials, community based stakeholders, and students, teachers, and professors; and to raise money for, fund, initiate, and coordinate the restoration, redevelopment and reuse of Brownfield sites in environmental justice communities in Florida that lack a private sector advocate. The Foundation issued its first Brownfields grant to the Environmental Law Institute in support of its January 25, 2008 Workshop entitled, "Community Justice, Health, and Wealth: Restoring Neighborhoods through Brownfields Redevelopment," in Jacksonville, Florida. In the Fall of 2008, the Foundation issued its first scholarship, a \$10,000 award to a law student from Haiti, who wrote in his grant application that it is his "hope that as a Haitian environmental attorney in the United States, I will not only be able to serve my clients effectively, but also help sustainably develop distressed Haitian communities in the United States and in Haiti." In April 2009, the Foundation awarded a \$5,000 grant to support and recognize the leadership of the Northeast Midwest Institute in promoting federal legislative change and educational outreach to further environmental restoration, economic development, and public health improvement and protection at the community level.

President and Chairman, Goldstein Brownfields Group

In 2008, Mr. Goldstein founded the Goldstein Brownfields Group, a Miami-based development and consulting firm that focuses exclusively on the acquisition, cleanup, restoration, and sustainable reuse of environmentally impaired properties. The Goldstein Brownfields Group works with public and private companies, lenders, individual buyers and sellers, local governments, regional partnerships, regulatory agencies, consulting and engineering professionals, public health advocates, environmental justice stakeholders, and neighborhood activists to arrive at consensus-driven remediation solutions and redevelopment strategies designed to eliminate threats to human health and the environment, reduce pollution, strengthen neighborhoods, reuse existing infrastructure, promote green construction, expand renewable energy production and infrastructure, create jobs, generate meaningful financial equity and economic opportunity for neighborhood residents, and encourage further investment of private capital in distressed communities.

SELECTED LECTURES AND PRESENTATIONS

- "Too Toxic? The Transactional and Legal Challenges of Non-Statutory Environmental Liability at Brownfield Sites," U.S. EPA National Brownfields Conference, November 2015
- "Brownfields Funding and Regulatory Solutions for Public Sector Planners and Private Sector Principals," Annual Florida Environmental Network Summer School Conference & Exhibition, July 2015
- "Redevelopment and Reuse Design, Funding, and Compliance Strategies for Local Government Owned Landfill Sites in Miami-Dade County Pursuant to the Miami-Dade County Comprehensive Landfill Closure Plan," The Goldstein Environmental Law Firm Special Topics in Brownfields Reuse Seminar Series, May 2015
- "Legal and Regulatory Strategies to Overcoming Environmental Liability Risk at Urban Infill Redevelopment Sites," Plenary Address, U.S. Environmental Protection Agency Region IV Brownfields Grantee Workshop, October 2014
- "Structuring Environmental Justice and Sustainability: A Model Partnership for Universities, the Community, and the Private Sector," Environmental Justice and Sustainability Forum, Florida A&M University, October 2014

- "Utilizing Brownfields Strategically to Attract Private Capital & Accelerate Economic Development, Job Creation, and Environmental Restoration," City of Miami Gardens Community and Business Stakeholder Workshop, October 2013
- "The Making of a New Brownfield Redevelopment Market: Regulators, Local Governments & the Public Sector
 Discovering and Perfecting Landfill Reuse to Unlock Intrinsic Value, Create New Neighborhoods and Usable
 Places, and Amplify Sustainability," U.S. EPA National Brownfields Conference, May 2013
- "A Critical Guide to Maintaining Environmental Liability Protection during Development and Construction Activities at Brownfield Sites," U.S. EPA National Brownfields Conference, May 2013
- "Brownfields Policy and Practice for Planners," Miami-Dade County Planner's Association, April 2013
- "Connecting Sites to Neighborhoods: Accelerating Brownfields Reuse Through Planning & Design," 25th Annual Florida Environmental Network Summer School Conference & Exhibition, July 2011
- "Structuring Exposure to Environmental Risk to Incentivize Private Capital Investment and Catalyze Redevelpment at 'Place-Making' Brownfield Sites," Joint Florida Brownfields Association and U.S. Environmental Protection Agency Improving Access to Healthcare through Brownfields Redevelopment Workshop, June 2011
- "Green Collar Employement Opportunities in Fast Expanding New Environmental Economy," Goldstein Brownfields Foundation Lecture Series, City of Miami Brownfield Job Training Grant Program, May 2011
- "A Deeper Shade of Green for Local Governments: Adding Blue to Brownfield Sites to Expand Renewable Energy Infrastructure," South Florida Regional Planning Council, September 2010
- "Environmental Justice and Brownfields Redevelopment," 1st Annual Environmental Law and Justice Conference, Florida A&M University Law School, November 2010"Brownfield of Dreams: Lawyer/Developer Investigates Possible Uses of Former Landfill," South Florida Business Journal, September 7, 2009
- "Environmental Justice and Brownfields Redevelopment," Interview on Radio Green Earth, July 2009
- "Fundamentals of Brownfields Redevelopment for Local Governments, Community Groups & Developers," East Coast Florida Regional Planning Council Inaugural Brownfields Workshop, August 2005
- "Fundamentals in Brownfields Redevelopment, Reuse, and Community Building: A Primer for Local Governments," Teleconference Workshop for Georgia Black Mayors co-hosted by U.S. Minority Business Development Association and U.S. Environmental Protection Agency, April 2005
- "Understanding the Dynamics and Psychology of Public/Private Redevelopment Partnerships: A Brownfields Primer for Municipal Redevelopment Officials through Case Study and Role Play," U.S. Environmental Protection Agency Annual Brownfields Conference, September 2004
- "Brownfields Redevelopment Strategies for Local Governments and CRAs," Annual Florida Redevelopment Association Conference, September 2004
- "Greenfields Redevelopment: Remedial Reuse of Brownfields as Public Parks, Ballfields, Conservation Areas and Open Space," Fourth Annual Florida Brownfields Conference, November 2001
- "A Guide to Brownfields Redevelopment in Miami-Dade County," Miami-Dade County Department of Environmental Management Pollution Prevention Seminar, May 2000
- "From Environmental Liability to Brownfields Asset: Redevelopment of Municipal Solid Waste Landfills,"
 National Association of Parks and Recreation, February 1999

SELECTED MEDIA ARTICLES

- "Former West Palm Beach Landfill Would Be Cleaned, Converted to Shops," Palm Beach Post, March 9, 2015
- "North Miami Seeks State Aid to Clean Up Park Site," Miami Herald, September 29, 2014
- North Miami Considers Whether to Invest in Brownfields," Miami Herald, January 23, 2014
- "Designation Moves Seminole Mall Plans Forward," Tampa Bay Times, November 15, 2013
- "State Incentives Fuel Growing Brownfield Reclamation Trend," Miami Today, October 24, 2013
- "BJs Wholesale Club Seeks Brownfield Incentives for New Miami Store," South Florida Business Journal, February 27, 2013
- "IKEA Sweetwater to Start Build in 2 Months, Open in Mid-2014," South Florida Business Journal, February 20, 2013
- "Health Centers Find Opportunities in Brownfields," New York Times, December 11, 2012
- "St. Petersburg Approves \$240,000 Brownfields Tax Break for Sam's Club," Tampa Bay Times, June 8, 2012
- "Formerly Contaminated Brownfield Sites Now Development Targets," Miami Today, April 28, 2011
- "Wal-Mart Seeks Incentives for Miami Store," South Florida Business Journal, April 15, 201
- "Attorney Begins Goldstein Brownfields Foundation," Miami Today, April 3, 2008
- "Batting Cleanup," Commercial Property News, November 16, 2007

- "A Decade of Brownfields Redevelopment in Florida: Reflecting on the Past, Celebrating the Present, and Planning for the Future," Key Note Presentation, 9th Annual Florida Brownfields Conference, October 2006
- "Fundamentals of Brownfields Redevelopment for Local Governments, Community Groups & Developers," East Coast Florida Regional Planning Council Inaugural Brownfields Workshop, August 2005
- "Cleanup Hitter: Group Seeks Legislation to Make Polluted Properties in Florida Easier, More Lucrative to Develop," Daily Business Review, November 13, 2003
- "When Little Else Available, Developers Turn to Contaminated Lands," Miami Today, July 3, 2003
- "Environmental Leaders Clean up Contaminated Sites . . . Develop Parks and Clean Up Beaches and Waterways,
 "Miami Today, Special Best of Miami Supplement, June 5, 2003
- "Go Brown," Staff Editorial, The South Florida Business Journal, March 28, 2003
- "Cheerleading for Brownfields," Daily Business Review, November 18, 2002
- "Miami Seeks Federal Money to Turn Landfill into Park," Daily Business Review, May 21, 2002
- "Is Brownfield Designation in Munisport's Future" Daily Business Review, April 22, 2001
- "The Marlins' Play on Brownfields," Daily Business Review, March 29, 2001
- "Meeting Aims to Marry Owners of Tainted Lands with Urban Developers," Miami Today, August 17, 2000
- "Brownfields Report to Call for Development Partners," Miami Today, March 4, 1999
- "Brownfields Task Force Poised to Present Incentives," Miami Today, October 29, 1998
- "Brownfields Task Force Tossing a Wider Net," Daily Business Review, September 24, 1997
- "State Incentives May Fuel Dade's Brownfields Efforts," Miami Today, May 15, 1997
- "Dade Task Force Would Make 'Brownfields' Green," Miami Today, May 30, 1996



Project Manager Experience



Vincent Yarina, PG, CEM Project Manager

Vincent Yarina will serve as overall project manager for Langan on this project and will be charged with allocating the proper resources to serve the city and successfully complete our task orders. Mr. Yarina will also provide technical expertise on matters related to environmental assessment and remediation, permitting, asbestos, lead and indoor air quality and sustainability.

Vincent Yarina has over 23 years of environmental engineering and geosciences experience. Mr. Yarina manages Langan's downtown Fort Lauderdale office and also leads Langan's environmental consulting practice in Florida. Mr. Yarina has served as Project Manager for various professional services contracts with municipalities including: City of Hollywood, City of Homestead, Town of Lauderhill and South Florida Water Management District. In addition to municipalities, Mr. Yarina provides environmental engineering services to a diverse national client base that includes Fortune 500 companies, land developers, financial institutions, attorneys, and institutional investors.

Mr. Yarina has worked with FDEP, through their Pre-approval Petroleum Cleanup and Dry-cleaning Solvent Cleanup Programs on projects ranging from tank closures to Site Assessments to Remedial Action. Additionally, Mr. Yarina served as Project Manager for Langan's contract with South Florida Water Management District (SFWMD) in its land acquisition program for the Comprehensive Everglades Restoration Plan (CERP). 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, and performing and analyzing aquifer pump test data using MODFLOW and other computer modeling software. In addition, Mr. Yarina has managed dozens of asbestos, lead and mold/indoor air quality projects throughout Broward County and South Florida.

Mr. Yarina is an expert in environmental due diligence and has presented on the subject of Phase I ESAs, All Appropriate Inquiry, and environmental due diligence to the Florida Chamber of Commerce's Semi-Annual Environmental Permitting Conferences and Florida Brownfield Association's Annual Conference, the Environmental Bankers Association and national real estate conferences.

Mr. Yarina has a vested interest in the City's affairs and serves on the Board of Governors for the Fort Lauderdale Chamber of Commerce's Downtown Council. Mr. Yarina was also a graduate of Leadership Fort Lauderdale Class VIII and served as Chair and co-chair of Leadership's Community Development/Environment Day from 2002 to 2006. He is acutely aware of the impacts that sea level rise has on the city and is committed to assisting the city in solving its flooding problems by committing Langan's resiliency and engineering resources for this effort.





Mr. Yarina will be supported by Chip Day, who will serve as assistant project manager. Mr. Day has successfully served the city on previous matters related to natural resources. Mr. Day is a Certified Project Manager and Dive Safety Officer (DSO) with 15 years of experience working on various project types and ecosystems throughout South Florida. He is very familiar with the unique regulatory hurdles associated with Broward County, and how to get over them! The most notable hurdles are associated with potential impacts to the regulated natural resources within the County, such as seagrass, wetlands, mangroves, coral and other protected unique habitats.

Within Broward County, Mr. Day has worked on a wide variety of complex environmental and regional planning projects; including National Environmental Policy Act (NEPA) documentation for the Florida Department of Transportation (FDOT) and SFWMD, public and private land development, energy and transportation studies, bridge and roadway expansion permitting, wildlife and protected habitat assessments, marina expansion, work within the Atlantic Intracoastal Waterway, and wetland and habitat mitigation design and construction oversight. He has obtained environmental resource permits through federal, state and local regulatory agencies for many of complex projects and is very familiar with the Joint Environmental Resource Permit Application process through the U.S. Army Corps of Engineers and SWFMD and FDEP. He also has years of experience navigating the Broward County Environmental Protection and Growth Management Department (BCEPGMD). Mr. Day successfully negotiated an agreement with the BCEPGMD on a very serious regulatory violation to a satisfactory outcome on behalf of the City of Fort Lauderdale for the ongoing Marina Expansion Project.

Mr. Day is invested in the environmental stewardship of South Florida, having received two master's degrees from Florida Atlantic University, working on multiple research grants and non-profit projects. He also served on the boards of the Treasure Coast Chapter of Environmental Professionals (TCCAEP) and the South Florida Chapter of Environmental Professionals (SFAEP). He is a Certified Gopher Tortoise Permit holder, experienced manatee observer and a scientific diver familiar with the marine environment within the City of Fort Lauderdale's limits.



Approach to Scope of Work

Project Understanding

The City of Fort Lauderdale is Broward County's largest municipality. A city as diverse as and the size of Fort Lauderdale has a large infrastructure and a multitude of public works and services that require environmental engineering services. As such, we believe the city desires the best value for the highest quality of environmental engineering services. The typical city-requested services are listed in Section III of the RFQ and generally include:

- Regulatory permitting
- Attending public meetings
- Environmental compliance
- Grant writing and applications
- Asbestos, lead-paint, indoor air quality and mold services
- Phase I and Phase II Environmental Site Assessments
- Soil, sediment, groundwater assessments and remediation plans
- Remediation system design
- Storage tank services
- Brownfield services
- Threatened and endangered species
- Wetland delineations
- Sustainability and LEED services
- Water quality evaluations
- NEPA related services (i.e., social jus-tice, historical and archeological re-views)

We understand the city could request any of the above services. Langan Engineering and Environmental Services, Inc. provides these engineering and environmental consulting services for private developers, public agencies, property owners, and institutional clients around the world. Founded in 1970, Langan employs more than 900 professionals in its Elmwood Park, New Jersey headquarters and among 17 regional offices, including our local office in Fort Lauderdale. Langan is listed among the Top Design Firms and Top Green Design Firms in Engineering News Record. We specialize in:

- Site assessment, design, and remediation
- Brownfield redevelopment
- Transactional due diligence
- Natural resources and ecological restoration
- Regulatory compliance and permitting
- Air quality and industrial hygiene

Langan's heritage in geotechnical engineering has instilled an understanding throughout the firm for strong foundations – for structures and business relationships. At the base of every relationship is trust. Through more than four decades of growth, we have developed an entrepreneurial culture that embodies Technical Excellence, Practical Experience, and Client Responsiveness. We combine these attributes in everything we do. That's how we exceed expectations. That's how we meet schedules and reduce costs. That's why clients stay with Langan.

When it comes to environmental solutions, clients want to do the right thing, but they need to know the right way. Langan will be your technical and regulatory advocate. We will work with you to develop sound, cost-effective environmental solutions in the context of complicated regulatory policies.

Langan is the prime consultant for this contract. Our contract manager is **Vincent D. Yarina, PG, CEM**. When the city requests a proposal for a particular service, Mr. Yarina will discuss the assignment with the Langan task manager:

- Natural Resources, wetlands, NEPA Chip Day
- Phase I/II Environmental Site Assessments/Site Assessments/Soil and Groundwater Studies – Daniel Spector, PG, LEP
- **Environmental Remediation** Raymond Lees, PE, Fangmei Zhang, PE
- **Grant Services** Greg Firely
- Asbestos Surveys and Remediation John Magnavita, PE, Licensed Asbestos Consultant
- Air Quality Testing, Lead Paint, Mold, Indoor Air Quality Brian Feury, CIH and Vijay Patel
- Sustainability and LEED services Chris Glenn, PE, Chris Hager, PE, Michael Szura, RLA, LEED AP

The task manager and the contract manager will prepare the proposal, including the budget and schedule, and discuss the proposal with the city. The proposal will include assumptions and limitations so that the city understands the scope of work, which will minimize the need for change orders. Langan's task managers will provide the subcontractors with specific scopes of work and solicit cost proposals and schedule.

When we receive the city's purchase order, Mr. Yarina will meet with the task manager to discuss the scope of work, the budget, and the deadline. The task manager will meet with the staff and coordinate work with the subcontractors.

Langan manages budgets, costs, and schedules through our Deltek Vision web-based program that allows the task manager to track project charges on a real-time basis. The task manager will meet regularly with the project team. Mr. Yarina will communicate regularly with the city's project manager to discuss status, findings, and unanticipated conditions. The task manager will transmit draft reports and progress memos to the city's project manager for discussion. We want to ensure that the city understands the findings and recommendations, and the implications of those recommendations, on the city's operations and budgets before reports are finalized.

Langan will transmit an electronic copy and hard copies of the final report after incorporating the city's comments. Mr. Yarina will issue the invoices in accordance with the terms of our Professional Services Agreement.

Langan has assembled a team of subcontractors to assist Langan in completing the requested scope of services. The subcontractors include:

- The Chappell Group, Pompano Beach, Florida professional permitting services and technical studies related to wetlands, threatened & endangered species, water quality evaluations and technical support related to NEPA services
- **Envirodrill**, *Davie*, *Florida* monitoring well installation and abandonment and soil borings
- Pace Analytical Services, Pompano Beach, Florida laboratory analytical testing services
- Engineered Environmental Solutions, Lake Worth, Florida licensed pollutant storage specialty tank contractor services and remediation cleanup services
- **ARS Environmental**, *Plantation*, *Florida* licensed radon testing and evaluations and mitigation
- The Goldstein Environmental Law Firm, Miami, Florida environmental justice evaluations, reviewing ordinances, Brownfield grant assistance, public relations support, commission meetings

Langan has worked with these contractors and this team has served many clients, including municipalities, throughout South Florida. The Langan team has experience, technical expertise, and excellent working relationships. Our team will be seamless from the city's point of view. Mr. Yarina will be the city's point of contact. The city can be confident that our response will be comprehensive and thorough – one point of contact to our full range of environmental services.

The following sections discuss in more detail the Langan team's methodologies for the environmental services required under this contract.

PROJECT MANAGEMENT AND QUALITY ASSURANCE/QUALITY CONTROL

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 exceed 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.

Quality Assurance/Quality Control (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.

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's 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 be out of calibration due to damage. Langan personnel will select instruments that fit the required range, tolerance, type, and accuracy as specified in pertinent documents (such as operating procedures) to verify conformance to the specified criteria.

INFORMATION AND TECHNOLOGY MANAGEMENT

Langan uses a Management Information System (MIS) for planning, scheduling, tracking, and reporting, including MS Project, Gantt Charts, Excel spreadsheets, and web-based portals with calendar functions. We also use Deltek Vision software for budgeting, invoicing, and project cost tracking for multiple-phase projects or for projects performed for clients who require the use of such a system. These programs are updated and evaluated periodically in order to identify areas that may be improved. We also review commercially available software and developing programs within Langan and implement upgrades into the existing programs. Personnel required to use the MIS and Vision software will be trained in the formats and applications as modifications are made.

Langan's Information and Technology Department is responsible for hardware, software, and communication technology used on our computing platforms, including Wide Area Networks, personal computers, Local Area Networks, and servers.

Langan's computer software includes, but is not limited to, design, data handling, data analysis, modeling of environmental processes and conditions, operations, or process control of environmental technology systems (including automated data acquisition and laboratory instrumentation), and databases containing environmental data.

Langan develops SOPs to ensure uniform quality of products and processes. SOPs will describe their purposes and specific steps and techniques, and will be written clearly and concisely in a manner readily understood by a person knowledgeable of the technical or administrative

concept of the procedure or process. Any staff member can identify the need for a SOP and, if knowledgeable of the particulars of a procedure or process, may also write such SOP. For environmental projects, Langan adheres to the guidelines provided in the Florida Department of Environmental Protection Standard Operating Procedures (rev. 2014).

HEALTH AND SAFETY

Langan is proud that our OSHA Recordable Incident Rate has been less than 1 for at least the last three years. The primary responsibility of project management is the health and safety of the Langan team. A healthy and safe work environment is not only the right of each team member, it is also a critical component of our QA/QC program – only healthy and safe team members can produce quality work. Langan's Corporate Health and Safety Manager will supervise this aspect of our work. He will help managers develop site-specific health and safety plans as integral components of each project scope of work.

CURRENT WORKLOAD

Langan's Fort Lauderdale office will be responsible for providing services under this contract. Between our Fort Lauderdale and Miami Lakes offices, the contract manager and the task managers have a pool of more than 40 professionals (geologists, scientists, and engineers) who can be assembled into teams for specific task assignments. Mr. Yarina also has access to professionals in all Langan's other offices, who can supplement the Florida workforce.

Langan's environmental practice involves several dozens of projects a year, from small Phase I Environmental Site Assessments to long-term assessment, remediation, and monitoring projects. We know how to balance our staff and our workload and we don't "overbook." We are honest and realistic with our clients when discussing timelines, schedules, and deadlines, but we will always find a way to meet our clients' needs.

RESOURCES

Langan uses the latest GIS, CAD and Data Management solutions. Our technical staff is experienced in ArcGIS and manages vast amounts of data including large utility databases for infrastructure cataloging and project planning at large oil refineries and major universities. Our staff uses ESRI's ArcGIS suite of applications, including ArcInfo, ArcEditor, and ArcMap. This expertise starts outside of the office, where Langan's field staff collects and reduces data in real-time using handheld ArcPAD data collectors, GPS units, and TabletPCs. Langan uses Earthsoft's EQuIS Chemistry and Geology products in conjunction with ArcGIS. EQuIS, Rockworks, GMS, and EVS are fully integrated with ArcGIS.

We provide our clients with easy access to their project data by developing Extranet and Sharepoint data portals for seamless data exchanges. Langan has developed custom web-based applications using ESRI's ArcIMS and ArcGIS Server technologies to publish data, maps, and metadata that clients can access effortlessly. Langan's GIS/CAD and Data Management group is comprised of professional engineers and software programmers who provide the best technical solutions for each project.

Modeling of groundwater and surface water is the science of using computers as tools to predict and illustrate the flow of water and/or contaminants over time. Langan recognizes that modeling is a valuable tool for understanding the hydrologic system, ground water resource management, and remediation design. Langan has the capabilities to provide cities and agencies with groundwater flow and transport models to assess the interaction of contaminant plumes and potential remediation approaches. Our modeling projects rely upon various groundwater modeling platforms and codes to provide a series of snapshots over time which are then interpreted and animated using CTech's EVS software. This offers a clearly presented model that synthesizes a number of highly technical and complex tasks from which recommendations can be made.

CLIMATE CHANGE

Climate change has forced cities in southeast Florida, including the City of Fort Lauderdale, to consider how to improve their infrastructure to meet the threat of sea-level rise combined with a naturally shallow groundwater. This combination gives rise to difficult problems, such as the management of stormwater runoff, the protection of property, and the delivery of water and sanitary sewer services:

- Because of the amount of impervious surface, coastal areas of South Florida are subject to flooding during heavy storms. Some particularly low-lying areas remain flooded for days after a storm. As sea level rises, the ability of municipalities to drain their stormwater runoff to the ocean will become more difficult. We see this during high tidal cycles in Las Olas Isles area.
- As sea level rises, municipalities could require new projects to have finished floor elevations that are higher than elevations required in the past. An additional challenge is to protect older buildings whose finished floor elevations make those structures increasingly susceptible to flooding.
- Water and sanitary sewer utility infrastructure was designed before sea-level rise became a concern. As sea level rises, the depth of the infrastructure, the grade of the piping and connections, and the ability of pump stations to manage the flow, will become increasingly problematical.

Langan's hydrogeologists are working on projects in the City of Hallandale Beach in which the city is redesigning its stormwater management system to address the growing problem of flooding. Langan's civil engineers are working with developers and property owners on Miami Beach to evaluate the impact of higher finished floor elevations on existing buildings. Langan's landscape designers are working with developers to incorporate roof-top landscaping and gardening into architectural design, to reduce the amount of runoff.



References

Performance Verification

For over three decades, our South Florida staff of more than 40 environmental, geotechnical, and civil engineering and consulting professionals has helped clients meet their technical and regulatory project needs. We wish to serve and provide the same high level of consulting that we share with the following clients to the City of Fort Lauderdale.

LANDFILL GROUNDWATER MONITORING

Monroe County Public Works

Bill Grant, Supervisor, Solid Waste Management

1100 Simonton Street, Room 2-231, Key West, Florida 33040 T: 305.664.2263 F: 305.292.4555 E: grant-bill@monroecounty-fl.gov

Date of Contract: April 2012

Description: Landfill Compliance Monitoring

Construction Cost: N/A

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

Construction Cost: N/A

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: Environmental Assessment and Remediation

Construction Cost: N/A

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

Construction Cost: N/A

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

Construction Cost: N/A



POMPANO BEACH MUNICIPAL GOLF COURSE

City Pompano Beach

Alessandra Delfico, City Engineer

1201 Northeast 5th Avenue, Pompano Beach, Florida 33060

T: 954.786.4060 F: 954.786.4028 E: alessandra.delfico@copbfl.com

Date of Contract: August 2010

Description: Final Closure Assistance, Source Removal Plan and

Groundwater Delineation Construction Cost: N/A

HIAD REDEVELOPMENT FEASIBILITY STUDY

City of Hollywood

Terrence Comiskey, AIA

2600 Hollywood Boulevard, Hollywood, FL 33021

T: 954.921.3900 F: 954.921.3416 E: tcomiskey@hollywoodfl.org

Date of Contract: May 2015

Description: Feasibility study for redevelopment of an ash landfill

Construction Cost: N/A



Minority (MBE) Participation

Langan has included The Chappell Group and Envirodrill, MBE-certified firms to provide various services as noted in the previous sections of this submittal.



LOCAL BUSINESS PREFERENCE CERTIFICATION STATEMENT

The Business identified below certifies that it qualifies for the local BUSINESS preference classification as indicated herein, and further certifies and agrees that it will re-affirm it's local preference classification annually no later than thirty (30) calendar days prior to the anniversary of the date of a contract awarded pursuant to this ITB. Violation of the foregoing provision may result in contract termination.

(1)		is a Class A Business as defined in City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. A copy of the City of Fort Lauderdale current year Business Tax Receipt and a complete list of full-time employees and their addresses shall be provided within 10 calendar days of a formal request by the City.
	Business Name	
(2)	Langan Engineering and Environmental Services, Inc. Business Name	is a Class B Business as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. A copy of the Business Tax Receipt <u>or</u> a complete list of full-time employees and their addresses shall be provided within 10 calendar days of a formal request by the City.
(3)	Business Name	is a Class C Business as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. A copy of the Broward County Business Tax Receipt shall be provided within 10 calendar days of a formal request by the City.
(4)		requests a Conditional Class A classification as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. Written certification of intent shall be provided within 10 calendar days of a formal request by the City.
	Business Name	-
(5)	Business Name	requests a Conditional Class B classification as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. Written certification of intent shall be provided within 10 calendar days of a formal request by the City.
	Dusiness Name	
(6)		is considered a Class D Business as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. and does not qualify for Local Preference consideration.
()	Business Name	-
BIDD	ER'S COMPANY: Langan Engineering a	and Environmental Services, Inc.
	HORIZED COMPANY PERSON: Vince	nt Yarina //wint D. Janua 06/20/2015
		NAME / SIGNATURE DATE





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 8/19/2014

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	CONTACT Jerry Noyola					
Greyling Insurance Brokerage	PHONE (A/C, No, Ext): (770)552-4225 FAX (A/C, No): (866)550-4082					
450 Northridge Parkway	E-MAIL ADDRESS: jerry.noyola@greyling.com					
Suite 102	INSURER(S) AFFORDING COVERAGE	NAIC #				
Atlanta GA 30350	INSURER A Zurich American Insurance	16535				
INSURED	INSURER B: American Guarantee & Liability	26247				
Langan Engineering &	INSURER C: Alterra Excess & Surplus Ins.	33189				
Environmental Services, Inc.	INSURER D:					
619 River Drive Center 1	INSURER E:					
Elmwood Park NJ 07407	INSURER F:					

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.

1		ADDLIS	JBR	POLICY EFF	POLICY EXP		
INSR LTR	TYPE OF INSURANCE	INSR W	/VD POLICY NUMBER	(MM/DD/YYYY)	(MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY					EACH OCCURRENCE \$ 1,000,0	
	X COMMERCIAL GENERAL LIABILITY					PREMISES (Ea occurrence) \$ 300,0	000
A	CLAIMS-MADE X OCCUR		GL09242433-02	4/1/2014	4/1/2015	MED EXP (Any one person) \$ 5,0	000
						PERSONAL & ADV INJURY \$ 1,000,0	000
						GENERAL AGGREGATE \$ 2,000,0	000
	GEN'L AGGREGATE LIMIT APPLIES PER:					PRODUCTS - COMP/OP AGG \$ 2,000,0	000
	POLICY X PRO- JECT X LOC					\$	
	AUTOMOBILE LIABILITY					COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,0	000
l _A	X ANY AUTO					BODILY INJURY (Per person) \$	
^	ALL OWNED SCHEDULED AUTOS		BAP9242432-02	4/1/2014	4/1/2015	BODILY INJURY (Per accident) \$	
	X HIRED AUTOS X NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident) \$	
						\$	
	X UMBRELLA LIAB X OCCUR					EACH OCCURRENCE \$ 12,000,0	000
В	EXCESS LIAB CLAIMS-MADE					AGGREGATE \$ 12,000,0	000
	DED X RETENTION\$ 0		AUC-9242434-02	4/1/2014	4/1/2015	\$	
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY					X WC STATU- TORY LIMITS ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE					E.L. EACH ACCIDENT \$ 1,000,0	000
	(Mandatory in NH)		WC9242431-02	242431-02 4/1/2014	1/2014 4/1/2015	E.L. DISEASE - EA EMPLOYEE \$ 1,000,0	000
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT \$ 1,000,0	000
C	Professional Liability		MAX7PL0001189	4/1/2014	4/1/2015	Per Claim \$1,000,0	000
	E&O-Incl. Pollution Liab.					Aggregate \$1,000,0	000

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

CERTIFICATE HOLDER	CANCELLATION
Sample Certificate	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 Gregg B———————————————————————————————————

INS025 (201005) 01



Subconsultants

Langan proposes to use the following subconsultants to effectively meet the requirements of the City of Fort Lauderdale's contract. We have included detailed information on the team members in Section 4, Qualifications of the Project Team.

The Chappell Group - Natural Resources & Permitting

The Chappell Group, Inc. (TCG) is a certified MBE/CDBE/WBE firm that covers the specialized fields of wetlands delineation, marina and wetland permitting, marina design, wetland mitigation, and monitoring; threatened and endangered species surveys and habitat management plans; environmental impact assessments; Phase I environmental site assessments; benthic surveys; and all forms of environmental permitting and compliance for Federal, State, and local agencies. In this regard, TCG is unique because engineering, environmental, regulatory, scientific, and operational field expertise are available for multi-disciplinary projects.

TCG clients include the public and private sector throughout Florida, the Caribbean, and the Southeastern United States, TCG is committed to providing technical design expertise with a forward thinking approach, coupled with sound project management in order to achieve the goals and vision of the Client while maintaining a sustainable environment.

Engineered Environmental –Storage Tank Testing and Evaluations

EESI was founded in 1994 by Joseph Ziegler, PE and Kevin Rockett, PG to provide full-scale, turn-key remediation services. The firm specializes in engineering, construction, and equipment services associated with onsite soil and groundwater remediation.

EESI's highly trained staff of project managers, administrators, professionals, remedial equipment specialists, pipe fitters, heavy equipment operators, and environmental field technicians has successfully completed over 2,000 projects throughout Florida.

EESI has two licensed Pollutant Storage Specialty Contractors (PSSC). The firm has successfully removed and closed numerous underground and above ground storage tanks from 100 to 20,000 gallons in size. Services include Permitting, UST and AST removals, UST abandonment-in-place, Tank inerting, Tank purging with our venturi and 185 CFM compressor, Tank monitoring with our LEL/O2 explosimeters, Tank cleaning and liquids disposal, Off-site tank disposal, Source removals – excavation & free product recovery, Backfilling and Paving & site restoration.

Envirodrill – Environmental Drilling

Enviro-Drill, Inc., located in Davie, Florida, began operations in 2004. Services include environmental and geotechnical drilling. The firm's executives have 45 years of combined experience. Envirodrill is a certified Small Business Enterprise (SBE) and County Business

Enterprise (CBE) through Broward County and a Small Business Enterprise (SBE) through the South Florida Water Management District. The firm is also state licensed and carries a \$5 million liability insurance policy.

Enviro-Drill, Inc. is safety oriented and all employees are 40-hour OSHA trained, LPS safety trained and API safety trained. Enviro-Drill, Inc.'s equipment includes Mobile B57 Drill Rig mounted on 2005 International 4300 4x2, Geoprobe DT6620 – Tracked with auger capabilities, Geoprobe 5400 mounted on 1999 Ford F-350, DitchWitch FX30 Vacuum Excavator, seven (7) support trucks, three (3) three service trailers, and two (2) Honda ATV's.

ARS Environmental – Radon Testing, Evaluation and Mitigation

ARS Environmental's personnel have established working relationships with many federal, state, and local agencies. The firm's staff is recognized for their strong capabilities in project management. ARS' experience working with federal, state, and local agencies and the rapport they have developed can facilitate progress in investigation projects. ARS Environmental can identify key agency decision makers and use protocols known to be accepted by each agency.

ARS Environmental's qualifications include:

- NIOSH Certified Air Sampling Microscopist Certified AHERA Inspector Certified Respiratory Protection
- Supervisor AHERA Management Planner, Florida Licensed Asbestos Consultant, EPA Sponsored Asbestos
- & Lead Abatement, Training Instructor State of Florida, Radon Measurement Specialist, Certified Indoor
- Environmentalist, Registered Industrial Hygiene Technologist, Certified Thermographic Specialist

Pace Analytical Services - Sampling and Analytical Services

Pace Analytical is a privately held, full service sampling and analytical services firm operating a network of 23 environmental laboratories and 23 service centers nationwide, plus two Life Sciences laboratories. All the full-service environmental laboratories are NELAC accredited. Laboratories utilize U.S. EPA, ASTM, Standard Methods, NIOSH, and other accepted test procedures and methods, in accordance with federal and state regulations.

The company consists of three divisions: Environmental, Life Sciences and Lab Ops. Analytical testing and related services include analytical chemistry, on-site field sampling, product and material testing, microbiology services, medical device and drug-device combination product testing, professional laboratory staffing, and lab equipment sales and services. Pace Analytical maintains a comprehensive list of certifications and methodologies throughout our laboratories.

In addition to offering full service environmental analytical services, Pace provides the following specialty environmental testing services: Dioxin / Furan, Biota / Sediment, Environmental Forensics, Microbiological, In Situ Monitoring Solutions, Asbestos, Drinking Water Analysis / UCMR-3,

Field Sampling and Analysis Aquatic, Toxicity / Bioassay, Radiochemistry, Air Toxics, Low Level Mercury Analysis, Vapor Intrusion, PCB Congeners, Stack Sampling & Analysis, On-Site Gas Phase FTIR

The Goldstein Environmental Law Firm, P.A.- Environmental/Social Justice Evaluations

The cornerstone of the Firm's practice is the environmental legal counsel rendered to clients in connection with real property transactions, corporate mergers and acquisition, contamination incidents, the day-to-day operations of a private or public sector business, and the evaluation, prosecution, or defense or a wide range of possible contamination related claims.

The firm is frequently involved on the front end of an acquisition to recommend, contract with, and direct and manage qualified environmental consultants to assist with due diligence investigations. As the environmental investigation proceeds through a typical Phase I/Phase II process, the firm will help the client understand the legal and regulatory significance associated with the findings that come out of a soil/groundwater/vapor investigation, including whether contamination conditions require reporting to government agencies and disclosure to adjacent third parties. Additionally, the firm is routinely called on to explain how contamination conditions as they are revealed during a due diligence investigation, may adversely impact on the design, budget, and schedule of site development and construction activities.

The Firm is experienced in pursuing environmental permits, whether they involve a wetland or natural resource matter, an industrial operation, or the handling, storage, dispensing, and disposal of hazardous materials. The firm's environmental legal practice also involves ensuring that, on a day-to-day basis, clients comply with the obligations that are imposed on them as a result of any federal, state, or local permitting requirement. The Firm's deep understanding of how environmental claims are brought and typically litigated also inform the counsel that is provided to clients in a transactional context and shapes the legal and business recommendations that the firm makes.

Subconsultant Licenses

The Chappell Group















State of Florida Department of State

I certify from the records of this office that THE CHAPPELL GROUP, INC. is a corporation organized under the laws of the State of Florida, filed on April 14, 2005.

The document number of this corporation is P05000055901.

I further certify that said corporation has paid all fees due this office through December 31, 2015, that its most recent annual report/uniform business report was filed on January 26, 2015, and its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Twenty-sixth day of January,



Ken Definer Secretary of State

Authentication ID: CC2956246454

To authenticate this certificate, visit the following site, enter the

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



Engineered Environmental

Expiration: 2/28/2015 Audit No: 228201511521



State of Florida Board of Professional Engineers Attests that Joseph Nicholas Ziegler, P.E. B licensed as a Professional Engineer under Chapter 471, Florida Statutes P.E. lic. No.

State of Florida

Board of Professional Engineers

Accests that

Engineered Environmental Solutions, Inc.

FBPE

is authorized under the provisions of Section 471.023, Florida Scoutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Scoutes.

Expiration: 228/2015

Audit Nov. 228/2015

Audit Nov. 228/2015

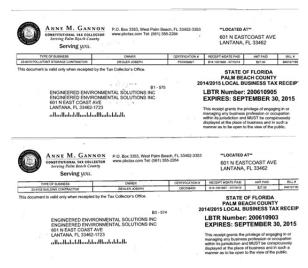
Certificate of Authorization

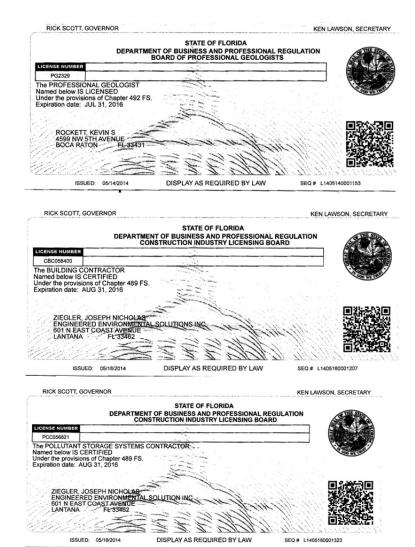
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LOCAL BUSINESS TAX RECEIPT TOWN OF LANTANA, FLORIDA RECEIPT NUMBER: 06-200301878 EFFECTIVE DATE: EXPIRATION DATE ENGINEERED ENVIRONMENTAL SOLUTIONS INC LANTANA, FL 33462 BUSINESS LOCATION: LANTANA. FLORIDA 33462 LANTANA, FL 33462 NAME OF BUSINESS ENGINEERED ENVIRONMENTAL SOLUTIONS BUSINESS CLASSIFICATION: 014 - OFFICE BUSINESS TYPE OWNERSHIP TYPE: INCORPORATED SPECIAL CONDITIONS THIS RECEIPT EXPIRES AS SPECIFIED ABOVE TO AVOID PENALTIES PLEASE RENEW ON OR BEFORE SEPTEMBER 30, 2015 BUSINESS TO BE CONDUCTED IN CONFORMITY WITH AND SUBJECT TO THE PROVISIONS OF THE ORDINANCES OF THE TOWN OF LANTANA AND THE LAWS OF THE STATE OF FLORIDA. THIS RECEIPT MUST BE POSTED IN A CONSPICUOUS PLACE

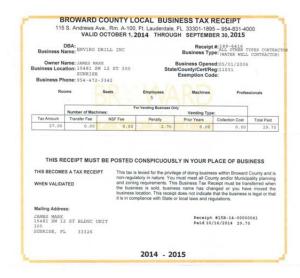
STATE OF FLORIDA WATER WELL CONTRACTOR LICENSE Issued to JOSEPH ZIEGLER





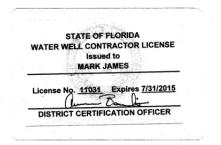


Envirodrill



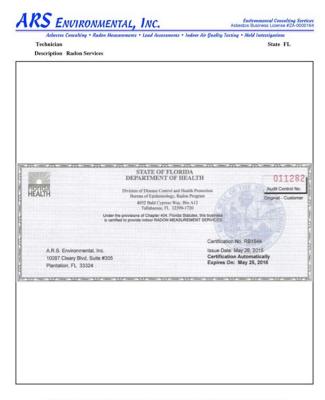








ARS Environmental

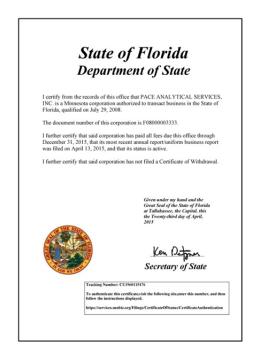




10097 Cleary Boulevard, #305, Plantation, FL 33324 * Phone 954-227-2402 * Fax 866-816-5110

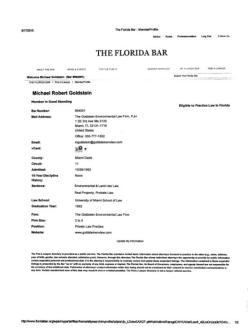
Pace Analytical





The Goldstein Environmental Law Firm







NON-COLLUSION STATEMENT

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

- 3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).
- 3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

<u>NAME</u>	<u>RELATIONSHIPS</u>

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.



CONTRACT PAYMENT METHOD BY P-CARD

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City has transitioned from traditional paper checks to payment by credit card via MasterCard or Visa. This allows you as a vendor of the City of Fort Lauderdale to receive your payment fast and safely. No more waiting for checks to be printed and mailed.

In accordance with Article 7, item 7.4.3 of the consultant agreement attached herein, payments for all services will be made utilizing the City's P-Card program (MasterCard or Visa). Accordingly, firms must presently have the ability to accept credit card payment or take whatever steps necessary to implement acceptance of a credit card before the commencement of the agreement.

Please indicate with which credit card you	prefer to be paid:
X Master Card	
X Visa Card	
Company Name: Langan Engineering and Env	ironmental Services, Inc.
Vincent Yarina	(Invent D. Yarına
Name (printed)	Signature
06/20/15	Associate/Vice President
Date:	Title



Our Commitment to Sustainability Began With Ideas.

Today, it's About Action.

2014 Corporate Sustainability Plan



Langan is committed to providing a healthy and safe work environment. Our goal is to stay accident free every day. To promote our goal to employees, Langan management leads a firm-wide effort that goes beyond compliance with applicable federal and state occupational health and safety laws. We have implemented policies, procedures, operations, and technologies that increase awareness and acceptance of our goal.

The Langan Sustainability Program: The Journey from Vision to Plan

Langan understands that its employees, clients, and the communities in which we all live, work, and play will thrive in a future built on the principles of sustainability.

A Message from Our President/CEO

The very nature of Langan's technical services and the majority of projects we support involve best practices that lead to a sustainable future.

For example, we remediate brownfield sites, design sustainable stormwater solutions, and utilize recycled materials in foundation engineering. We also help identify and protect threatened and endangered species, encourage the use of mass transit and walkability through advanced transportation planning, and create landscapes that weave organic principles seamlessly into all manner of development projects. Clearly, Langan has always been and will continue to be a sustainable company.

Yet we know we need to do more.

This plan crystallizes our commitment to sustainability through our internal business practices, which includes more than 25 offices worldwide. With this plan, we are recognizing our many ongoing sustainability initiatives, spurring new action and committing to embrace sustainability as a core value.

Specifically, we will train our staff to incorporate sustainability principles into all aspects of our internal operations, including purchasing, office siting and design, office operations, travel, and firm management. Also, we will continue to encourage our employees to lead sustainable organizations and volunteer efforts. With each Langan employee involved, our environmental stewardship will become more deeply ingrained into our corporate culture.

We look forward to making good on the promises we announce in this plan, and to inspiring our colleagues to help shape our shared sustainable future.

MADO

David T. Gockel, PE, PP, LEED APPresident/CEO



A Look at Our Progress



Langan formalizes its commitment to sustainability by establishing a Green Team

0004



Treadwell & Rollo's San Francisco, Oakland and San Jose offices certified as Bay Area Green Businesses

First two Langan employees become LEED accredited



Langan attends our first GreenBuild in Boston

2008

2004

2005

Treadwell & Rollo establishes a Green Team



2007

Langan's Philadelphia office becomes member of the Greater Philadelphia Green Business Program



2009

Langan becomes a provider of USGBC-accredited courses





Langan and Treadwell & Rollo become one firm

Langan holds an ITRC seminar on sustainable redevelopment

2010



Langan takes a leadership role in SuRF

Shareholders identify sustainability as a strategic initiatives and create a Sustainability Leadership Team

2012

100+ LEED Green Associates, LEED APs and Envision™ Sustainability Professionals on staff

Langan teams actively assist clients with sustainability services, including LEED certification, carbon footprinting, and sustainable project optimization

Langan unveils the Sustainability Plan and baselines to all employees

2014

2011

Langan becomes sole corporate founding member of Sustainable Remediation Forum (SuRF) and active on ITRC and ASTM teams to develop guidance for sustainable remediation



2013

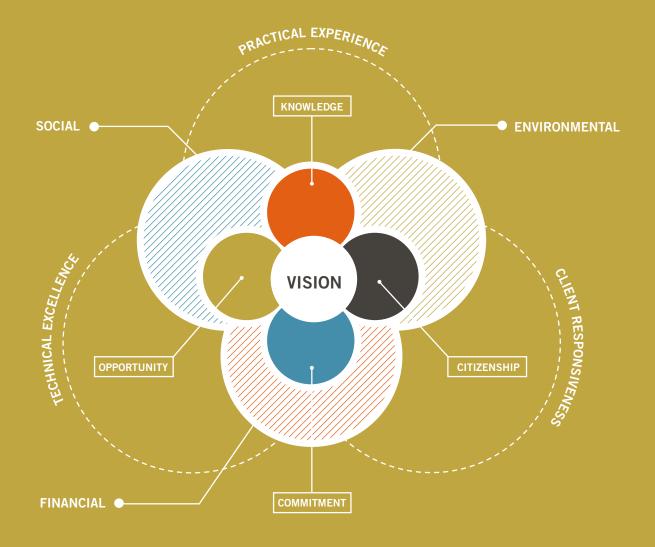
Executive Committee endorses the Langan Sustainability Vision and Policy Statements

Sustainability champions tasked with preparing the Sustainability Plan

Employees respond to web-based sustainability survey; 33% of respondents volunteer to assist

Sustainability champions lead cross-departmental, multi-office teams to develop objectives

Sustainability is the Nucleus of our Culture



Applying What We Stand for to Sustainability

Langan's Vision: To Be the Best in Our Field

Our vision has always been to be recognized by our clients, employees, and competitors as the best engineering and environmental consulting firm.

To achieve this, we relentlessly pursue quality in our work, hire only those who demonstrate the potential to grow, transfer our values and technical knowledge internally, and know our clients and their needs better than any other firm.

Langan's Core Values: To Live and Work with Passion, Pride and Integrity

Our mission is to contribute to the success of our clients by providing an unmatched combination of our people's **technical excellence**, **practical experience** and **client responsiveness**. To achieve that, we pursue excellence in everything we do by demonstrating the following core values:

Knowledge

Embrace learning to benefit ourselves and our clients.

Opportunity

Cultivate an environment of opportunity in which career growth, entrepreneurial spirit and teamwork flourish.

Commitment

Assist in our clients' success by providing exceptional service and personal relationships.

Citizenship

Contribute our time, skills and knowledge to foster positive change in the communities where we live and work.

Langan's Sustainability Vision: Committed to an Integrated Future

We believe that people and organizations will thrive in a future built on the principles of sustainability.

We are committed to building that sustainable future by partnering with clients to expand the breadth of our sustainability services, and to continually train and develop our staff in sustainable design and engineering practices.

Additionally, we will incorporate sustainability principles into all internal operations and

ensure that environmental stewardship continues to be engrained our corporate culture.

We understand that keeping our commitments requires more than a single step. We will, therefore, seek continual improvement, monitoring our sustainability practices every step of the way.

Langan's Sustainability Goals: Quantifying the Financial, Environmental, and Social Effects of Our Program

To support our sustainability vision, we are setting quantifiable goals that correspond to our core values and address the three pillars of sustainability: financial, environmental, and social.

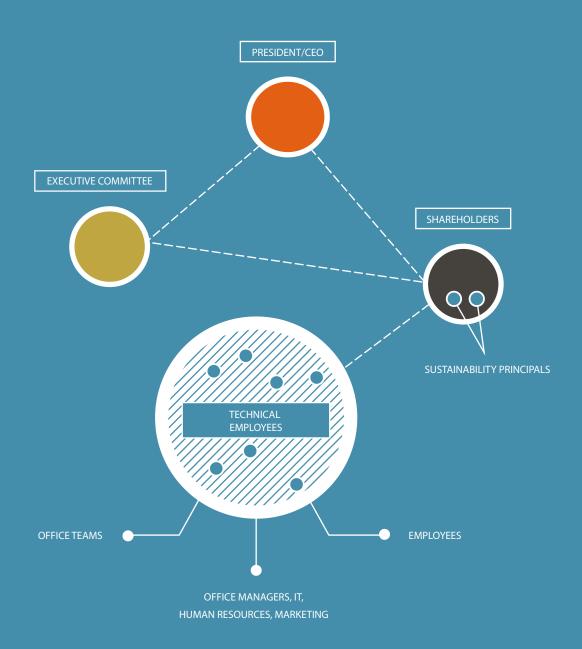
We will evaluate our performance annually and set ever higher benchmarks to ensure that we continue to have a positive and far-reaching effect on our world. Langan sees Sustainability as an opportunity for new business, increased cooperation between offices and career advancement.

I'm excited to be part of a growing company that considers sustainability to be part of their business model.

— Carolyn Paone, PE, LEED AP, Project Engineer

Langan will be as committed to sustainability as we have been with so many causes since the firm has been in existence.

- Gregg Woodruff, PP, AICP, LEED-AP BD+C, Senior Project Manager



What's Next for Langan's Sustainability Program: Upping the Ante on Our Commitment

We have already accomplished a lot and now we are taking Langan's Sustainability Program to the next level by making it an integral part of our corporate culture. Such integration will require specific commitments within the three pillars of sustainability.

Our Commitment to the Three Pillars of Sustainability

FINANCIAL: CONTINUED STRENGTH

Develop and further expand sustainable practices with our clients.

Maintain growth-focused operations.

Reward employees' efforts.

Remain financially strong.

Continue to foster a clientfocused culture.

Hire and grow exceptional employees.

ENVIRONMENTAL: JUDICIOUS STEWARDSHIP

Continue environmental stewardship.

Conserve energy, water, and other natural resources.

Implement pollution prevention and waste minimization.

Comply with applicable environmental regulations.

Work with government agencies to develop workable environmental guidelines.

SOCIAL: CONNECTION TO COMMUNITY

Contribute time, skills, and knowledge to foster positive change in the communities where we live and work.

Deepen connections to our communities.

Provide opportunities for employees to contribute globally, regionally, and locally.







Langan's Sustainability Strategies: Realizing the Three Pillars Through Our Core Values

A promise is meaningless without a plan. Here's how our core values have led to specific strategies, ensuring that we will achieve our commitments to each of the three pillars.

Core Value: Commitment

Applied to sustainability, **Commitment** means we are pursuing strategic growth in our core business areas and expanding the breadth of our sustainability services. We will make this concrete through the following objectives and goals:

Objective	Goal	Impact
Pursue strategic growth in our core business areas: green design, stormwater management, sea level rise adaptation, sustainable remediation, etc.	Establish baseline, technical leads, launch 2015, 20% Growth	
Enhance the website and create our marketing materials to promote and grow key services.	Ongoing	• •
Expand our sustainability services.	Ongoing	
Communicate our sustainability goals to vendors and subcontractors.	Ongoing as part of Company Policy	0
Establish a sustainability category for "Project of the Year."	2015	A
Develop and launch a carbon calculator template for projects.	2015	0
Identify a corporate sustainability director.	Long-term	

Core Value: Knowledge

Applied to sustainability, **Knowledge** means that we are constantly furthering our awareness and understanding of sustainability principles and practices. We will make this concrete through the following objectives and goals:

Objective	Goal	Impact
Reduce paper use through "green" office practices.	Establish baseline and Reduce 20% or more by end of 2015	
Extend paperless office practices through the use of web-based and electronic forms.	2014	00
Establish a green purchasing that provides direction on environmentally preferable materials, including office supplies, appliances, vehicles, and catered meals.	2015	
Establish firm-wide green office guidelines modeled after Bay Area Green Businesses.	2014	00
Re-energize a Green Team in each office to carry out green office standards and support our sustainability program.	Q3 2014	O (1)
Add a sustainability side bar to the intranet page to encourage collaboration and share knowledge.	Q4 2014	A
Enhance our sustainability web page.	Ongoing	A
Increase employee incentives for using alternative means to commute and travel.	Ongoing	00
Implement flexible work schedule.	Q3 2014	00

Core Value: Opportunity

Applied to sustainability, **Opportunity** means we are providing a progressive environment in which employees are the foundation of our effort and through which we will attract and retain the best and the brightest. We will make this concrete through the following objectives and goals:

Objective	Goal	Impact
Enhance sustainability-focused in-house training.	Quarterly training event	00
Maintain continuing education credentials and enhance our technical excellence in sustainability services.	Develop training credential information for Intranet and establish credential leads 2015	
Provide sustainability program information to employees through company policy materials and training programs.	Q3 2014	0
Provide continual training and staff development opportunities related to sustainable design and engineering practices.	Ongoing	
Implement a sustainable design review as applicable and appropriate.	2015	110
Identify a sustainability-focused 401(k) investment option for employees.	Long-term	11 (1)
Add sustainability topics as agenda items at corporate and staff meetings.	Rotating topic for Monday Managers Meetings Q1 2015	0
Identify ways in which sustainability can become a forum for employee team building.	Ongoing	O
Develop an office plant and green wall program.	Long-term	00

Core Value: Citizenship

Applied to sustainability, **Citizenship** means promoting volunteerism and charitable giving by all team members at all levels. We will make this concrete through the following objectives and goals:

Objective	Goal	Impact
Cultivate and support a spirit of volunteerism focused on supporting sustainability organizations.	Ongoing	0
Develop programs and support staff efforts to educate the general public about sustainability.	Ongoing	0 (1)
Develop a corporate sustainability grant program for employee requests.	2015	000
Develop funds for internal office sustainability incentive and challenge programs.	2015	0 (1)
Develop a corporate budget for sustainability-related organizations and employee efforts.	2015	

Measuring Our Progress and Success

Langan will establish baselines for each objective. Once established, we will:

- Measure progress annually.
- Revise strategies and goals each year.
- Prepare an Annual Sustainability Report to communicate our progress to the company, our clients and friends and post the reports on our web page.
- Employ a third-party peer review.
- Develop a Global Reporting Initiative (GRI) within the next three to five years.

Above all, we pledge to move the bar ever higher as our program develops and evolves.

Commitment is practicing what we preach — to get the work we want and to see the positive impact on the bottom line and in our communities.

 $-\operatorname{Spencer}$ Finch, PE, LEED AP, Project Engineer

Making Our Sustainability Program Accountable

A Message from Langan's Sustainability Principals

All Langan shareholders and principals have personal and professional interests in transforming the sustainability effort into an established program with clear goals.

By establishing our operational baseline and measuring our progress, we will be:

- Continuing to fulfill Langan's sustainability vision.
- Surpassing our competitors.
- Operating responsibly.
- Recruiting the best talent.
- Developing related businesses and services.

Above all, Langan's program will evolve as goals are met and as new objectives are established.

Many employees have assisted in the sustainability effort and they share our passion for improving our performance and expanding our business opportunities. We will continue to rely on their commitment as we all work to improve our world.

Dorinda Shipman, PG, CHG, Env SPPrincipal/Vice President



Michael Szura, PLA, ASLA, LEED AP Principal/Vice President



Meet Langan's Sustainability Program Champions

The insightful leadership and relentless passion of our Sustainability Program Champions have been the driving force for developing Langan's expertise in the field of sustainability. These champions continue to advance sustainability principles and practices within and outside the firm by:

- Promoting Langan's sustainability philosophy through educational efforts and leadership roles within affiliate organizations.
- Providing direct sustainability-related services and guidance on Langan projects.
- Developing relationships with key sustainability business partners.
- Directing external sustainability education and communications.
- Driving the sustainability direction for the firm through our local Green Teams.

Nate Burns
PLA, ASLA, LEED AP BD+C
Doylestown, PA



PE, LEED GA Oakland, CA

Christopher Glenn



Michael Nilson PE, LEED AP New York, NY



Spencer Finch PE, LEED AP Philadelphia, PA



Carolyn Paone PE, LEED AP Philadelphia, PA



Gregg WoodruffPP, AICP, LEED AP BD+C
Elmwood Park, NJ



Worldwide commitment to green principles and sustainability is unquestionably here to stay. I am proud to be part of a company that has elevated these important sustainability issues to the highest level.

Our ability to develop and adhere to sustainable principles in our daily work habits, in our design efforts, and in our lives outside of the office will shape the future for ourselves and for generations to come. Knowing how Langan employees address important issues, I am confident that we can make our Sustainability Plan a success.



— George P. Kelley, PE,

Managing Principal/Chairman of the Board

