

ORIGINAL



JULY 9, 2014

REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004

ROBERTO LEON, P.E.
PROJECT MANAGER

CSA Central, Inc.
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REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



TABLE OF CONTENTS

Tab 1.	Qualifications of the Firm	1
Tab 2.	Key Personnel's Experience & Qualifications	28
Tab 3.	Past Work Experience	42
Tab 4.	Approach to the Services	55
Tab 5.	Other Certifications	74
Tab 6.	Attached Forms	





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



July 9, 2014

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

**RE: REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES
RFQ NO. 14-004**

Dear Selection Committee Members:

CSA Central, Inc. (CSA Group) is pleased to submit its qualifications to provide professional Environmental Engineering Services.

As a full service, project delivery A/E/C/P&E firm, we have delivered professional services to public/government agencies for over 56 years. CSA Group is listed among the top 500 A/E firms in the country; we are a minority-owned firm that is backed by a multidisciplinary staff of more than 300 professionals. Most importantly however, we have been providing professional services to local municipalities in South Florida over the past 30 years at every level of involvement possible, and under all delivery methods. As A/E consultants with a direct understanding of the local community, our professionals offer the level of intimate knowledge necessary to make this project nothing short of a success....

CSA Group has extensive experience in assisting governmental agencies in managing and completing numerous environmentally sensitive projects. We have successfully managed similar contracts for agencies such as the City of Miami, City of North Miami, City of Miami Beach, Miami-Dade County, the Florida Department of Transportation and the South Florida Water Management District, to name a few. Our team has direct project experience in the City of Key West and Florida Keys.

We are certainly ready to handle this contract and have the necessary experience and manpower to get the job done. Our Team is familiar with all procedures, requirements and expectations of this contract. We are excited about the opportunity to present our qualifications and look forward to working together with the City of Key West.

Respectfully,
CSA CENTRAL, INC. (CSA GROUP)

Roberto Leon, P.E.
Senior Vice President

RL/dkr

Enclosures



QUALIFICATION OF THE FIRM





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



I. QUALIFICATION OF THE FIRM

CSA Central, Inc. (CSA Group)¹ brings together one of the most capable and multidisciplinary teams in United States, Puerto Rico, Latin America and the Caribbean. We are confident that our broad range of in-house expertise, ranging from project financial components, to Environmental Services, to Planning and Mapping (GIS / Survey), Architecture and

Engineering, Construction Management and finally Operation and Maintenance, will provide the **City of Key West** (the City) a long-term partner in project development.

PERSONNEL:

- Over 300 Employees
- 48 Disciplines
- 148 Engineers & Architects
- 17 LEED Professionals
- +10 Scientists
- +20 GIS/IT/CAD Technicians

CSA capacities range from analyzing the feasibility of a project to finish its construction.

CSA Group in Numbers:

- Top 50 Program Management Firms
- Top 100 Firms Environmental
- Top 500 Design Firms
- Top 500 Architectural Firms

The City of Key West (CITY) is seeking Environmental Engineering Services: **RFQ No 14-004**. The City is in need of consultants for Environmental Engineering Services for Environmental & Coastal Engineering. CSA feels confident that it can fully support **the City**, not only in the environmental engineering, but throughout the forthcoming next steps, such as, additional design, construction and operation (e.g. compliance).

CSA was founded in **1956**, established in Florida since 1995, and has grown to be the largest Hispanic engineering (multidisciplinary) firm in the United States. It is recognized as one of the principal engineering and consulting firms, consistently rendering high quality services for more than 55 years.

Our greatest asset is our highly qualified personnel, their experience, and how they contribute in transforming the needs of our clients into reality.

We offer a great variety of services including GIS, Environmental, Planning,

Engineering, Architecture, Surveying, Construction Management, Inspection, Operation and Maintenance, Programming/Federal Fund Management, and Safety, among others. Our team has the qualifications and experience to develop GIS databases, spatial analysis, geo-databases, maps preparation, perform environmental reconnaissance, compliance inspections, scientific diving, environmental documents and permits, technical engineering reports and studies to address engineering feasibility of alternatives, which evaluate the physical, natural, and human impacts of the alternatives, public involvement and interagency coordination, and mitigations.

Our goal to transform your project needs into reality. From conceptual design to project commissioning and even maintenance & operation... we're here throughout the life of your project. As a total service provider for public & private sector clients within the facilities, infrastructure, and transportation industries, we truly are a one-stop-shop firm – and with over 50 technical, scientific, and professional in-house disciplines working together to service your project needs, there is no challenge we cannot handle.

We are known for our capability to provide our clients with true full service project delivery solutions, based on state-of-the-art technology and a level of personal attention considered second to none in our industry, all under our six core services:

¹ **CSA** is a Hispanic-owned Ohio corporation established in Florida on September 29, 1995. CSA Group's parent company was established in 1956 and has since grown to become a full service Architectural/ Engineering/ Construction Management/ Planning & Environmental firm backed by a multidisciplinary staff of more than 300 professionals.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



1. Architecture & Engineering
2. Construction Management
3. Environmental Consulting
4. Program & Project Management
5. Operations & Maintenance
6. Project Financial Consulting

CSA Group has extensive experience in assisting governmental agencies in managing and completing numerous capital improvement program projects. We have successfully developed a comprehensive portfolio and have cultivated relationships with private and public sector clients over the past 30 years in South Florida. The value, innovation and repeat commissions are a direct result of our relationships with our clients. We believe that successful projects depend on the trust and respect supported by clear communication with our clients. Our list of municipal clients includes:

- South Florida Water Management District (SFWMD)
- City of Miami
- City of Miami Beach
- City of Miami Gardens
- City of North Miami Beach
- City of Fort Lauderdale
- Miami-Dade County Public Works Department
- Miami-Dade County Aviation Department
- Miami-Dade County Fire Rescue Department
- Miami-Dade County Water & Sewer
- Miami-Dade Public Schools
- Monroe County
- Florida Department of Transportation (FDOT)

Other clients from our team include:

- United States Environmental Protection Agency (EPA)
- Florida Department of Environmental Protection (FDEP)
- BP Amoco
- Conoco-Philips
- Marathon
- Shell
- Colonial Pipeline
- Buckeye Pipeline Company
- Hunt Oil
- Koch Refinery
- Marathon Refinery
- El Paso Energy
- Con Edison
- Dallas/Fort Worth (DFW) International Airport
- State of Wyoming
- AIG
- Kinder Morgan
- UTC
- Walgreens

With proven experience and the local presence that this initiative demands, we feel confident in our ability to deliver nothing short of a successful project to the City of Key West and our community. Our staff has the experience and necessary certifications required for all types of vertical and horizontal construction work. We are experts in the understanding and application of all technical requirements needed to assure quality of construction as well as the correct administration of all construction contracts.

CSA Group will be responsible, along with other duties, for managing and coordinating project design and sub-consultants, undertaking project development and plans production duties and addressing project complexity issues. On any of the City's proposed projects, it is very important to clearly determine the requirements of the project and the services to be provided by the CSA Group Team and to define the overall scope of services for a given project.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



City's Need & Projects Understanding

The City of Key West (CITY) is seeking Environmental Engineering Services: RFQ No 14-004. The City is in need of consultants for Environmental Engineering Services for Environmental & Coastal Engineering. For this type of projects or contracts, CSA has developed proven processes and techniques for the successful delivery of projects. Some key elements of our proven path to success include:

- * Complete understanding of our customer, the end user, and their mission.
- * Strong, consistent, and dedicated leadership.
- * Leveraging of our expertise in municipal, local, state and federal regulations.
- * Managing design deliverables to accommodate early project phasing.
- * Strong Data & Document Management.
- * Clear and concise communication to avoid surprises and improve efficiency.
- * Use of over the shoulder reviews and task groups, involving clients or stakeholders.
- * Selection of subcontractors whose core values and commitment match ours.
- * Quality control processes sustained throughout all phases of the project.
- * Strong project closeout procedures.
- * High level of commitment to our projects.
- * Lessons learned exercise at the end of each project.

Team Familiarization: Key West is an island at the end of the chain of the Florida Keys. It is connected to the mainland by US Highway 1 which uses a series of bridges to link the islands of the chain. This is a popular vacation destination which gives visitors the feeling of the Caribbean without having to leave the country.

- * 42 bridges connect Key West to the mainland of Florida.
- * The third largest coral reef in the world is off the coast of Key West. The reef is 160 miles long.
- * All of the sand on the beaches of Key West were shipped in on barges from the Caribbean.
- * The whole island is a bird sanctuary since there are many endangered species there.
- * Cultural resources occur in Key West (e.g. Three Civil War forts are located on Key West).
- * The highest elevation in Key West is 18 feet above sea level.

Qualifications & Experience

CSA most successful, mainstay market over the last two decades has been the Water Resources Market. The company's water resources project portfolio spans twenty plus years and nearly \$10B in planned, designed and/or managed projects. Of the 300 plus professionals employed by CSA, a major portion (40%+) focuses their effort in the many service offerings under this core market. These professionals provide a full spectrum of services.

ENR

(2013 Top Rankings)

- ✓ 50 Top Program Managers – 38th
- ✓ 100 Top CM for Fee – 64th
- ✓ 500 Top Design Firms – 416th



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



CSA as the Prime Respondent has experience in all project types and services. Once the experience of our Team Members are combined, an exceptionally capable and experience team will provide the City a significant value added proposition. Following is a major project type grouping that will guide the Team experience presentation:

In Section III: Past Work Experience, a general overview of recent (within the last five (5) years) relative experience is presented for CSA and our Team that highlights our strong capabilities and presents how each project provides a value added proposition. For all CSA projects, CSA was the Engineer of Record for those that involve design services and the prime Construction Manager for those projects with CM services.

In Section II, specific project experience is presented in a summary table that provides a snapshot of CSA and its Team history with the District, providing a compendium of significant projects successfully completed during the last five years. In addition, other qualifying projects of similar or greater complexity are presented in a summarized manner, comparing the projects to those key project features in City projects. In the same order, these qualifying projects are then presented in detail through individual profiles that cover methodology and approach, quality assurance/quality control methods and results as well as management processes used in each project.

To recap, the CSA team brings strong project qualifications and a well balanced mix of firms to fully address the myriad of requirements and challenges in the City project. The projects profiles presented in this section show: Substantial experience on the relevant project features highlighted in the RFP scope:

- ✓ Well-balanced mix of experience in engineering, inspection and construction management services
- ✓ Proven management capabilities for complex programs and projects
- ✓ Successful and consistent project completion track record

The combined experience of all our team members robustly addresses the stated needs of the District, providing a well-honed, time tested group of professionals that understands the City needs, priorities and programs.

General Project Experience Overview

As presented in Section III, CSA's proposed team combines a wealth of similar experience as well as an ability to tap into a wealth of highly capable resources at a national level (Biovation and CB&I). Below is an overview of the previous project experience of the team divided among projects directly related to the services requested by the City or greater complexity.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



- ***Contaminated Site Investigation and Remediation Services***

- Conducted soil and groundwater testing in 36 locations along Sistrunk Boulevard from Interstate I-95 to Andrews Avenue in anticipation for the long-awaited construction. The report suggested language for addressing the contamination encountered during construction in the bidding documents.
- Completed source removal and proper disposal of arsenic impacted soils as part of the construction of a wetland to satisfy permit requirements for the Eller Drive stimulus project. This work was completed on behalf of FDOT at West Lake Park. A total of 15,276 tons of soil were excavated from ground level to below the mean high water level in predetermined construction areas. The site perimeter was bordered by a silt fence to provide erosion and sediment control, and to prevent off-site stormwater runoff and spreading of the impacted soil.
- Completing a Site Assessment Report of the Copans Road mass transit facility for Broward County Transit Department. This assessment is addressing petroleum impacts from within their bus maintenance and fueling facilities.
- Developed a remediation plan for the City of North Miami Beach on their largest cleanup project, which is an abandoned solid waste dump. This former landfill was operated by the Miami-Dade County.
- Crooks Farm, Ft. Pierce, FL (FDEP Facility ID #9807808)
- Others

- ***Industrial Hygiene Services***

- Industrial hygiene sampling at the locations identified in the JHA/PPE assessments.
- Comprehensive indoor air quality study in an office building where there were several employee complaints with regard to air quality.
- Inspecting the building for evidence of indoor air concerns, such as mold growth, use of chemicals, and cleanliness.
- Inspecting the heating, ventilation, and air-conditioning (HVAC) system, with the use of a borescope, for evidence of mold growth and cleanliness.
- Performing ventilation measurements of the HVAC system to determine if the recommendations of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) were being met.
- Monitoring for carbon dioxide, humidity, and temperature to determine if the recommendations of ASHRAE and the OSHA proposed indoor air quality regulation were being met.
- Performed a tuberculosis hazard assessment and developed an exposure control plan for the prevention of tuberculosis. This led to development of a program to minimize employees' potential exposure to tuberculosis.
- Developed a formaldehyde procedure, in compliance with OSHA regulation 29 CFR 1910.1048, to be followed by laboratory employees in the Medical Examiner's Office.
- Developed a Palm Beach County-specific respiratory protection training course and presented the training to Palm Beach County employees numerous times.
- Atmospheric monitoring for volatile organic compounds, using U.S. Environmental Protection Agency.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



analytical method TO-17 to determine if industry guidelines were being met

- Presented an eight-hour industrial hygiene sampling training course to safety professionals. This meant that Palm Beach County safety professionals could perform industrial hygiene sampling internally, providing costs savings by eliminating the need for consultants to perform the sampling.
- Others

- **Underground Storage Tank Site Services**

- Joe's Texaco, Pembroke Pines, FL (FDEP Facility ID # 8838491)
- Lehigh Golf Course, Lee County, FL (FDEP Facility ID # 8629489)
- Others

- **Real Estate Development Support Services**

- Provided Phase I/II ESAs and asbestos surveys on numerous tracts slated for redevelopment by the Pompano Beach CRA.
- Lee County School District Bus Depot, Ft. Myers, FL (FDEP Facility ID #9806949)
- Others

- **Coastal Design & Full Scale Engineering**

- Provided Level II services for the N.W. 7th Avenue-9th Avenue Connector project for the Fort Lauderdale CRA. This project required a very integrated and iterative design and planning approach because it is located in an industrial area of Fort Lauderdale. Many of the properties to be disturbed were suspected of being contaminated from historical industrial land use. The scope of services was designed to assist the City with identifying suitable locations to site drainage ponds, reducing environmental liabilities associated with property acquisition and minimizing impacts of potential environmental conditions on the construction. The team worked closely with the design engineers to incorporate provisions for contamination into the design of the drainage system and other subsurface features.
- Port of Miami Tunnel Project: The project consisted of three components: Twin tunnels under Government Cut; Connections to PortMiami's roadway system; and MacArthur Causeway Bridge widening, realignment of eastbound State Road A1A/MacArthur Causeway lanes and reconstruction of Parrot Jungle Trail frontage road.
- Coastal Restoration Project for Smathers Beach in **Key West**, Florida
- North Roosevelt Boulevard, **Key West**, Florida
- San Juan Water Front
- Others

Our team members have worked on **Brownfields** throughout the State of Florida, including previous remediation work in the City of Fort Pierce's first Brownfield property, where *bioremediation* is used to cleanup chlorinated solvents at this former dry cleaner.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Computer Applications & Equipment Capability

CSA has a wide range of applications and computer infrastructure to satisfy the demands of this type of Project. This includes updated Arc Editor Version 10.0, AutoCAD 2013, Civil 3D 2013, SharePoint / ShareFile, MS Office Professional package, and Adobe Standard Writer.

Design / Drafting

- 2013 AutoCAD Network
- MicroStation V8i w/GEOPAKCivil
- Engineering Suite
- 2013 Design Review

BIM

- 2013 Revit Architecture
- 2013 Revit Structure
- 2013 Revit MEP
- 2013 Civil3D

Scheduling & Construction

- Microsoft Project
- Primavera
- Access
- SharePoint

Environmental Modeling

- CALRoads View (CALINE4, CAL3QHC, and CAL3QHCR)
- Mobile 6
- EPA MOVES Model (2010b)
- TNM 2.5

Water Resources Modeling

- InfoWater & H2O Map
- SWMM, ICPR, Multiple HEC & Others

GIS & Mapping

- ArcVIEW
- ArcGIS
- ArcEditor
- ArcInfo
- Spatial Analyst
- 3D Anlyst
- Global Mapper
- Surveying Instrumentation

In addition, CSA has various specialized applications, which are used by our professionals in approximately 48 technical and scientific disciplines. Our web is completely integrated to other Company operations, design and analysis applications.

Other equipment associated for remediation, underground storage tanks and industrial hygiene services include:

- Advanced Bio-Cycle® mobile bioremediation treatment trailers
- Low-Profile Air Strippers
- Dual Phase/Multiphase Extraction
- Soil Vapor Extraction
- Integrated Mobile Water Treatment Systems (Primary and Redundancy Units)
- DAPL Truck (Manufactured according to design instructions)
- Air Sparge/Biosparge/Ozone Sparging
- Bioremediation Treatment Trailer (Bioremediation with proprietary surfactant)
- Oil/Water Separators
- Oxidizers
- Pilot Units

Furthermore, CSA Team has access to the necessary equipment to perform the field studies identified in the RFQ.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Executing City's Project Goals

The CSA team has established an organization and execution strategy to meet the goals of the City for Reliability, Performance, Cost, Schedule, and Risk Management. The CSA team will implement a management approach that will facilitate goal attainment. Our many years of experience assisting multiple clients with environmental planning, federal and state permitting and compliance, have turned CSA in an efficient and cost effective service provider to our clients. A description of our specific project approach for this new potential engagement is included in **Section 4 (Tab 4)**.

Statement of Policy & Approach to Quality

CSA recognizes **the City's** emphasis and expectations with respect to quality, and is committed to providing professional services that meet the requirements of our clients and involve all personnel, in continually improving work processes. This commitment is embodied in our Corporate Quality Policy, implemented through our Project Management and Quality Guidelines, and enforced through our standard operating procedures, work instructions, and audit procedures (as required by our Quality Management System). Quality Management Plans are developed by integrating proven, established procedures already in place within the CSA Quality Management System. The result is a rigorous quality assurance/quality control (QA/QC) program that leads to quality deliverables and a streamlined submission review process.



RESPONSIBLE OFFICE

CSA Group's Miami office will be the responsible office for this contract and the contact person for the success of this contract:

Roberto Leon, P.E., Principal
6100 Blue Lagoon Drive, Suite 300
Miami, Florida 33126
Telephone: (305) 461-5484
E-mail: rleon@csagroup.com
E-mail: drrosa@csagroup.com

Website: www.csagroup.com
Fax: (305) 461-5494

CSA also maintains offices in throughout the U.S., Latin America and the Caribbean that include:

- Colorado
- District of Columbia
- **Florida**
- Illinois
- New York
- New Jersey
- Pennsylvania
- Puerto Rico
- Argentina
- Brazil
- Panama
- Peru

The CSA Group Team also maintains all the required licenses to provide the requested services. CSA Central, Inc. (CSA) and our sub-consultants are legally authorized to perform professional services within the State of Florida.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

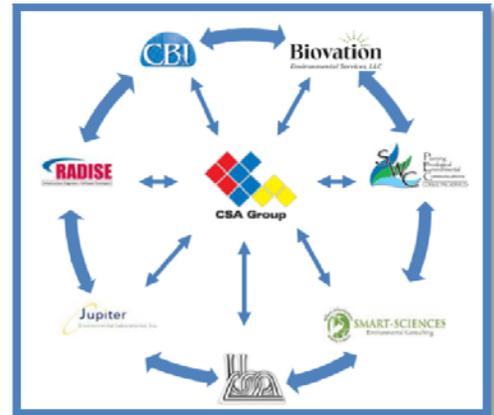
RFQ #14-004



PROPOSED PROJECT TEAM

The CSA includes broad capabilities, robust in house resources and team member firms that share our long history in these type of projects. In addition, it provides a depth of local and national staff that offers a great diversity of services at the disposition of the City. Finally, it also presents a focus on environmental services that are a critical component for the City of Key West. Selected team members are proven service providers, some are certified as small business, and all enjoy considerable and successful experience in all the Project key components listed in the RFQ.

Additionally, we have complemented our team with highly qualified sub-consultants (including local small businesses) with technical background in these fields, and experience in previous projects within the **City of Key West**. They are fully familiarized with the RFQ and other municipal, state and federal requirements that could apply to the City projects. Together, we have formed a truly outstanding team dedicated to time-tested practices backed by hands-on, "in the field" experience.



CSA Team Roles and Responsibilities										
FIRM	ROLE	Contaminated Site Investigation & Remediation Services	Industrial Hygiene Services	Underground Storage Tank Site Services	Real Estate Development Support Services	Full Scale Engineering				Specifications, bid, with technical review, attain qualified contractors for work, construction administration, owner project representation services vices
						Coastal	Design	Surveying	Env. Ass. / Permitting	
CSA ²	Prime	◊	◊	◊	◊	◊	◊	◊	◊	◊
Biovation ³	Consultant	◊	◊	◊	◊					◊
Radise ⁴ (Geotech)	Consultant						◊			◊
CB&I ⁵ (Beach Renourishment)	Consultant	◊	◊	◊	◊	◊	◊	◊	◊	◊
BHA ⁶ (Bridges)	Consultant						◊			◊
SWC ⁷ (Env. & Permitting)	Consultant	◊			◊				◊	◊
Smart-Sciences ⁸ (Env. Surveys)	Consultant								◊	
EnviroSpec	Consultant	◊		◊	◊					◊
Jupiter Lab ⁹	Consultant	◊	◊	◊						

² www.csagroup.com

³ <http://biovationenv.com>

⁴ <http://radise.net/geotech.aspx>

⁵ Former Coastal Planning and Engineering, Inc. (<http://www.cbi.com/markets/infrastructure/maritime/>)

⁶ www.bhaeng.us

⁷ <http://www.swcinc.net>

⁸ <http://smart-sciences.com/>

⁹ <http://www.iupiterlabs.com/>





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Licenses & Certifications

CSA Central, Inc.

State of Florida Department of State

I certify from the records of this office that CSA CENTRAL, INC. is an Ohio corporation authorized to transact business in the State of Florida, qualified on February 23, 2006.

The document number of this corporation is F06000001176.

I further certify that said corporation has paid all fees due this office through December 31, 2014, that its most recent annual report/uniform business report was filed on February 3, 2014, and its status is active.

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

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Twenty-third day of April, 2014



Ken Putnam
Secretary of State

Authentication ID: CU8731845387

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

<https://efile.sunbiz.org/certauthtver.html>

State of Florida

Board of Professional Engineers

Attests that
CSA Central, Inc.

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

Expiration: 2/28/2015
Audit No: 228201501109

Certificate of Authorization

CA Lic. No:
28096



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

License No.: LB7938
Expiration Date: February 28, 2015

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

CSA CENTRAL INC
6100 BLUE LAGOON DR STE 300
MIAMI, FL 33126-4695

Adam H. Putnam

ADAM H. PUTNAM
COMMISSIONER OF AGRICULTURE

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



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Sandra Walters Consultants, Inc. (SWC)

State of Florida Department of State

I certify from the records of this office that SANDRA WALTERS CONSULTANTS, INC. is a corporation organized under the laws of the State of Florida, filed on January 4, 2000.

The document number of this corporation is P0000000847.

I further certify that said corporation has paid all fees due this office through December 31, 2014, that its most recent annual report/uniform business report was filed on February 18, 2014, and its status is active.

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

*Given under my hand and the
Great Seal of the State of Florida
at Tallahassee, the Capital, this
the Nineteenth day of March, 2014*



Ken Dietzman
Secretary of State

Authentication ID: CU0464112532

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REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



ENVIROSPEC

State of Florida Department of State

I certify from the records of this office that ENVIROSPEC, INC. is a corporation organized under the laws of the State of Florida, filed on May 30, 1995.

The document number of this corporation is P95000043673.

I further certify that said corporation has paid all fees due this office through December 31, 2014, that its most recent annual report/uniform business report was filed on March 24, 2014, and its status is active.

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

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Twenty-fourth day of March, 2014



Ken Detman
Secretary of State

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AC# 6149964

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS
SEQ# L12060102034

DATE	BATCH NUMBER	LICENSE NBR
06/01/2012	110409740	GB251

The GEOLOGY BUSINESS
Named below IS CERTIFIED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2014

ENVIROSPEC, INC
2755 S FEDERAL HWY UNIT 3
BOYNTON BEACH FL 33435

RICK SCOTT
GOVERNOR

KEN LAWSON
SECRETARY

DISPLAY AS REQUIRED BY LAW

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

LICENSE NUMBER
GB251

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

ENVIROSPEC, INC
2755 S FEDERAL HWY UNIT 3
BOYNTON BEACH FL 33435

ISSUED: 05/27/2014

DISPLAY AS REQUIRED BY LAW

SEQ # L1405270000966

State of Florida

Minority, Women & Florida Veteran Business Certification

Envirospec, Inc

Is certified under the provisions of
287 and 295.187, Florida Statutes for a period from:

06/10/2013 to 06/10/2015



DEPARTMENT OF MANAGEMENT
SERVICES

Craig J. Nichols
Craig J. Nichols, Secretary
Florida Department of Management Services



Office of Supplier Diversity • 4050 Esplanade Way, Suite 380 • Tallahassee, FL 32399 • (850) 487-0915 • www.osd.dms.state.fl.us



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



BIOVATION

State of Florida Department of State

I certify from the records of this office that BIOVATION ENVIRONMENTAL SERVICES, LLC is a Minnesota limited liability company authorized to transact business in the State of Florida, qualified on June 14, 2010.

The document number of this limited liability company is M10000002660.

I further certify that said limited liability company has paid all fees due this office through December 31, 2014, that its most recent annual report was filed on February 26, 2014, and its status is active.

I further certify that said limited liability company 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 Twenty-first day of June, 2014



Ken Lawson
Secretary of State

Authentication ID: CU7140405852

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AC# 6125844 STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS SEQ# L12051101069

DATE	BATCH NUMBER	LICENSE NBR
05/11/2012	117056911	GB474

The GEOLOGY BUSINESS
Named below IS CERTIFIED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2014

BIOVATION ENVIRONMENTAL SERVICES, LLC
4440 PGA BLVD
PALM BEACH GARDENS FL 33410

RICK SCOTT GOVERNOR KEN LAWSON SECRETARY

DISPLAY AS REQUIRED BY LAW



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



CB&I ENVIRONMENTAL & INFRASTRUCTURE, INC.

State of Florida
 Board of Professional Engineers
 Attests that
CB&I Environmental & Infrastructure Inc.


 FBPE
 FLORIDA BOARD OF PROFESSIONAL ENGINEERS

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

Expiration: 2/28/2015		CA Lic. No:
Audit No: 228201505703.1	Certificate of Authorization	9317



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



JUPITER ENVIRONMENTAL LABORATORIES, INC.

State of Florida

Minority, Women & Florida Veteran Business Certification

Jupiter Environmental Laboratories, Inc.

Is certified under the provisions of 287 and 295.187, Florida Statutes for a period from:

11/08/2013 to 11/08/2015



Craig J. Nichols
Craig J. Nichols, Secretary
Florida Department of Management Services



Office of Supplier Diversity • 4050 Esplanade Way, Suite 380 • Tallahassee, FL 32399 • (850) 487-0915 • www.osd.dms.state.fl.us



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



SMART Sciences, Inc.

State of Florida Department of State

I certify from the records of this office that SMART-SCIENCES, INC. is a corporation organized under the laws of the State of Florida, filed on March 18, 2013, effective March 18, 2013.

The document number of this corporation is P13000024816.

I further certify that said corporation has paid all fees due this office through December 31, 2014, that its most recent annual report/uniform business report was filed on January 14, 2014, and its status is active.

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

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



Ken Dietzner
Secretary of State

Authentication ID: CC1042442103

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State of Florida
Minority, Women & Service-Disabled Veteran
Business Certification

Smart-Sciences, Inc.

Is certified under the provisions of 287 and 295.187, Florida Statutes for a period from:

06/03/2013 to 06/03/2015

John P Miles

John P Miles, Secretary

Florida Department of Management Services
Office of Supplier Diversity

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REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



RADISE INTERNATIONAL

State of Florida Department of State

I certify from the records of this office that RADISE INTERNATIONAL, L.C., is a limited liability company organized under the laws of the State of Florida, filed on September 30, 1997.

The document number of this company is L9700001085.

I further certify that said company has paid all fees due this office through December 31, 2014, that its most recent annual report was filed on January 13, 2014, and its status is active.

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



Ken Detjmer
Secretary of State

Authentication ID: CC2442351702

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

State of Florida

Board of Professional Engineers

Attests that

Radise International, LLC



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

Expiration: 2/28/2015
Audit No: 228201500312

Certificate of Authorization

CA Lic. No: 8901



State of Florida
Minority, Women & Service-Disabled Veteran
Business Certification

RADISE International

Is certified under the provisions of 287 and 295.187, Florida Statutes for a period from:

09/09/2013 to 09/09/2015

John P Miles

John P Miles, Secretary

Florida Department of Management Services
Office of Supplier Diversity

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REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



BRIEF OVERVIEW OF EACH FIRM



CSA will serve as the Prime Respondent for this RFQ. Founded in 1956, CSA Group has since grown to become the largest Hispanic professional service firm of its kind in the United States, providing multidisciplinary capabilities including construction management, program management, project management, management consulting, architecture, engineering, environmental, sustainability and O&M services. CSA enjoys ample experience with public and private sector clients throughout several regions in the United States, the Caribbean, Central and South America. CSA shares a proud history with municipalities and cities, including infrastructure agencies such as the South Florida Water Management and Florida Department of Transportation (FDOT), performing Engineering, Consulting and Construction Management services, since 1995. CSA personnel performed critical roles in infrastructure and restoration projects during this period, to include the improvements of Overseas Highway (US-1), Everglades Agricultural Area Compartment (EAA) B&C STAs design and construction, Wyndham Rio Mar, North Roosevelt Boulevard (Key West), PUMA Bulk Liquid Pier, Regulatory Compliance & Regulatory Coordination Services for Muniz Air National Guard Base, US Army Corp of Engineers Tamiami Trail Project, Jewfish Creek Bridge (U.S. 1) Widening (Key Largo), CORCO Oil Spill Boats Shelter Expansion, Wyndham St. Thomas Grand Beach Resort, DERM - Miscellaneous Environmental Services Contract, and FDOT Districtwide Environmental Support for Construction & Maintenance Divisions, among others.

CSA has extensive experience in environmental, design, construction management and program/project management of water infrastructure projects. CSA is consistently ranked among the Top 500 Design Firm, Top 200 Environmental Firm, Top 50 Program Management and Top 100 Construction Management Firms by Engineering News Record (ENR). We currently have offices in Florida (Miami, Doral, Orlando), New York, New Jersey, Washington, D.C., Maryland, Illinois, Pennsylvania, Puerto Rico, Panama, Argentina, Peru and Haiti.

PROJECT MANAGEMENT

Project Management at CSA Group is the business of...Project Delivery. Once a customer's project is committed to the firm, it must be completed on time, within budget, and at levels of quality that meet our clients' needs within the realm of accepted professional standards of care. CSA Group's approach to this challenge is met through a strong Project Management system led by capable and experienced Project Managers.

CSA Group's Project Managers organize and coordinate the full spectrum of activities on a project from conceptual design through construction. Each Project Manger has the overall success of the project as his personal goal and guides the project to assure each discipline or supporting element fully addresses the needs of the other project team members. He or she is the direct link to the client, monitoring progress and costs, identifying potential problems and developing corrective action plans to avoid those problems before such issues significantly affect successful project delivery. Project Managers are qualified professionals involved in five major processes: proposal, contracting, planning, execution and monitoring. Our project management team is successful by providing leadership, coordination, diligent project planning and effective oversight of the delivery process.

CSA Group has extensive experience in complex infrastructure projects including construction management and inspection related projects. We emphasize effective project management on all our projects and understand that successful management is not produced by a single practice, but depends on the application of many concurrent policies and procedures. We use quality processes to produce high-quality deliverables on time and within budget. The



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



application of this process is based on clear lines of communication, proven project control systems, and established (QA/QC) procedures. All projects awarded to CSA Group are executed through an organizational structure that provides for defined management accountability and multi-disciplinary technical input.

PROGRAM MANAGEMENT

CSA Group's Program Management service merges our full architectural, engineering, project and construction management experience and technical resources to define, plan, implement and integrate every aspect of a client's collection of projects.

CSA Group's full delivery service benefits our clients' by having a single point of management responsibility for planning, design management, permitting compliance, construction management and ongoing operations services for any number of concurrent project.

CSA Group's Program Management processes include planning, land acquisition, engineering and design management, permit and compliance strategy, construction management, budget control, schedule control, quality assurance, and communications programs. A well-defined Scope of Work serves as the framework for alignment. Our use of technology tools and careful planning processes allows CSA Group to deliver program results consistently. Once aligned, the program approach delivers superior performance and peak efficiency while achieving the desired results.

ENVIRONMENTAL

CSA Group's Environmental Unit provides comprehensive environmental and permitting services to public and private sector clients. Service areas include environmental planning; natural resource assessment and management plans; environmental impact analysis; pollution... prevention, site characterization and remediation; pre-construction and construction permitting; and environmental compliance.

The Environmental Unit is formed by an exceptional group of professionals which includes environmental scientists, engineers, and technicians, specializing in all areas of environmental science and engineering, environmental compliance, and project permitting and licensing. Our experts have been recognized to accurately estimate and assess the effects of man on the environment and evaluate project impacts on human, animal, and plant life. Factors assessed include effect on natural resources, erosion and sedimentation, water quantity/water quality, coastal and freshwater wetland communities; wildlife habitat and migration; air, water and soil pollution; groundwater and surface water movements and flow. CSA Group's other specialized environmental services, include American Society for Testing and Materials (ASTM) environmental site audits, building materials evaluations, Resource Conservation and Recovery Act (RCRA) and THE Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, commonly known as the Superfund) investigations, surface and subsurface contamination studies, noise studies, wetland mitigation project design, landscape analyses, watershed management plans, and reforestation plans.

Environmental project experience encompasses major coastal and marine infrastructure works, including those for water/wastewater projects, transportation, power generation and transmission systems; port and airport facilities; industrial facilities; residential, commercial, and resort development; urban development; telecommunications; and specialized consulting to natural resource management organizations.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



DESIGN (ARCHITECTURE & ENGINEERING)

CSA Group, a full-service engineering firm, offers a comprehensive array of engineering disciplines and services in-house for our clients. In each discipline we offer planning, design, and construction related support.

CIVIL ENGINEERING

CSA Group's experience includes civil engineering services for institutional, commercial, educational and housing project involving master planning, design of roads, drainage, utilities, water and wastewater, and coastal.

STRUCTURAL ENGINEERING

Experience includes wood, steel, concrete, aluminum, composites. CSA Group has provided structural engineering design and construction administration services for new construction, additions, renovations and upgrades, and repairs. We also have provided structural analysis, design, failure analysis, certifications, foundations, retaining walls, buildings, towers, bridges, slope stabilization, and specialty structures.

MECHANICAL / HVAC

CSA Group's experience with mechanical systems includes the design of fire protection, heating power plants including fuel storage and dispensing systems, high and low pressure steam, high/medium/low temperature water, gas fired units, ventilating and air-conditioning, plumbing, life safety, automatic temperature controls, chillers, central and packaged air-conditioners and refrigeration power plants,

ELECTRICAL

CSA Group's experience with electrical systems includes the design and the preparation of contract documents for electrical power (including normal, emergency, co-generation plants), lighting design (interior and exterior) for conventional and Landmark buildings, central controls, life safety systems, fire alarms, telephone systems, paging systems, security systems (closed circuit TV, infra red sensors, key lock-out, intrusion alarms), computer rooms, and Uninterrupted Power Source (UPS) systems.

PLUMBING

CSA Group's experience with plumbing systems include the design of fire preventive systems, sprinklers (wet, pre-action, deluge, suppression system, and fire standpipes (dry and wet system) as well as water, gas, storm, sanitary, site drainage.

FIRE PROTECTION/FIRE LIFE SAFETY SYSTEMS

CSA Group designs state-of-the-art fire alarm, fire protection system, emergency lighting and emergency power distribution systems. We have designated Fire Protection systems for Commercial and Industrial facilities including fuel storage and dispensing sites. We work with local authorities having jurisdiction to assure all aspects of fire/life safety systems are in compliance with local requirements.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



ENERGY CONSERVATION/ AUDITS / MANAGEMENT

We have extensive experience designing energy conserving mechanical and electrical systems, developing energy audits and studies, conceiving, directing and implementing energy conservation measures. We help client's take advantage of incentive programs for these systems and work hard to help find cost saving, environmentally friendly solutions.

SUSTAINABLE & LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN (LEED®)

CSA Group has a commitment and dedication to 'Green' Building Design; several of our key employees are LEED® AP certified. We have experience working with clients to achieve minimum to maximum LEED® points needed for the various levels of LEED® certification (Silver, Gold, etc.) for both new and existing buildings.

CSA Group's multidisciplinary team has been instrumental in the environmentally friendly land planning for a major tourism development in the eastern part of Puerto Rico. In this project, CSA Group was able to merge its unparalleled environmental capabilities through the development of a multitude of environmental studies cross-referenced with GIS that eventually served as the basis for the land planning of the site. CSA Group has been recognized as setting the standard for the preparation of environmental documents.

CSA Group is experienced with the various recognized standards of determining a building's sustainability "level" including LEED's Green Building Rating System. CSA Group designs use LEED (Leadership in Energy and Environmental Design) guidance and principles. Examples of these include Urban Redevelopment to Optimize Site Selection, Site Erosion & Sedimentation Control, Reduction in Site Disturbances and Development Footprint, Protection and Restoration of Open Space; use of water efficient landscaping, water use reduction, optimization of energy performance, building reuse, use of renewable and locally available materials, ventilation effectiveness, as well as innovation in design.

ARCHITECTURE

A much quoted architectural maxim states, "Good buildings don't just happen. They are planned to look good and perform well, and come when good architects and good clients join in thoughtful, cooperative effort." CSA Group views its architectural services in much the same way. By helping the client define the building project, CSA Group architects can provide meaningful guidance for their design needs. We can conduct site studies and analysis, help obtain planning and zoning approvals, and perform a variety of other pre-design tasks that impact the client's project overall considerations.

CSA Group's architecture team seeks to understand client needs and transform them into an integrated work plan and design package through the collection of ideas from the multidisciplinary environment at CSA. In doing so the team strives to integrate innovative solutions that commensurate to project site conditions, budget and time requirements. Building images evolve from project functions and client perception and projections. The results are pragmatic buildings that speak the language of their surroundings as well as project the image suited to the client's interest and needs.

Architectural services include Master Planning, Interior Design, Architecture, and Landscape Architecture assisting our clients with many targeted services including New Building Design, Additions, Renovations, Building Survey & Evaluation, Programming and Facilities Planning, Space Planning, LEED Consulting/ sustainable design, commissioning, Change-in-use Applications, Furniture & Finishes Selection, Millwork and Custom Furniture Design.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



CONSTRUCTION MANAGEMENT SERVICES

Each Field Engineer is fully versed in construction techniques, industry standards, and applicable local and national building codes. Construction Supervision/ Inspection services are provided; making sure that construction is performed in strict compliance with the contract documents (drawings and specifications) and within the allocated construction period. Our engineers are experienced and skilled in building construction methods, procedures and administration.

CONDITION REPORTS

CSA Group field engineers are knowledgeable in preparing condition reports for existing and retrofitted projects. Each field engineer is sufficiently experienced with electrical and mechanical systems with the approach toward preparing condition reports, to evaluate and recommend system conditions, upgrades, and replacements.

Our systems allow the incorporation of innovative solutions through the application of the latest technology. Specifically, CSA has the latest applications of Autodesk Revit and Civil3D software, ArcGIS and its associated extensions, MicroStation and multiple hydrologic/hydraulic modeling software. CSA staff is constantly trained in the new software advancements. The result is a full utilization of the potential of any given software for swift, accurate production and design cycles that allow designers to quickly research and present options to our clients.

GIS / SURVEYING

GIS technology has become an essential tool for any planning or decision making that involves geographic data, design and permitting process. CSA's GIS capabilities allow us to quickly provide our clients with important information by rendering multidimensional solutions that combine various levels of data in a systematic approach. Our GIS department includes a multidisciplinary group of engineers, geologists, geographers, surveyors, urban planners, environmental scientists, cartographers and technicians that ensure the quality of the information and its' correct semantic interpretation. Our capabilities extend to any GIS application that requires data collection and conversion, database creation, mapping, data modeling and analysis, and custom interface design and development. We have the software, manpower, equipment and knowledge to handle any GIS need.

Public and private sectors use GIS for studies that help improve decision making processes and quality of life. GIS is used to expedite, standardize and monitor processes in diverse scenarios, such as the development of new projects and the behavioral review of a particular geographical area. At CSA we can offer you all the GIS services under one company. Some of the areas of GIS support include:

- Database Design
- Utility Mapping
- GIS / CAD / CAE
- Remote Sensing
- Protected Areas Management
- Spatial Analysis
- Exclusion Analysis
- Geo-referencing
- Cadastral Mapping
- GIS Design & Implementation
- Urban Planning
- Datum Transformation
- Seagrass Surveys
- Modeling
- Route Selection
- Document & Photo Scanning
- Topographic Mapping
- Photo-Interpretation
- Data Migration
- Training
- Benthic Mapping
- Location Feasibilities
- Watershed Management



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



In addition, Biovation is backed by Product Level Control Inc. (PLC) which offers more than 20 years of experience in the remediation industry. A complete design/build facility, PLC teams with our clients to offer site-specific environmental solutions for all their remediation, bioremediation, dewatering, carbon service, and automation needs. #



CB&I is assisting the City of Key West with the Coastal Restoration Project for Smathers Beach. CB&I's coastal engineering team has designed, permitted, implemented and monitored more beach restoration and shore protection projects than any other firm in the United States. For more than 25 years, we have engineered diverse solutions for preserving coastal environments and infrastructure, and designed numerous successful local, national and international projects. Using advanced technology and numerical models, our engineers provide a broad range of coastal services. Professional engineering services include:

- Beach nourishment
- Coastal structures
- Dune restoration
- Coastal management
- Inlet/Navigation studies
- Emergency response
- Permitting
- Aquadopp-ADCP
- Expert testimony
- Scientific program development and research

CB&I continue to be on the forefront of numerical modeling for consulting and research. Their modeling projects are developed by a team of experienced physical oceanographers and coastal engineers who are strongly grounded in coastal process theory and applications. In doing so, they review their model results in the context of overall project objectives, and incorporate them into designs and analysis as a tool to improve performance and longevity of projects. Their comprehensive set of numerical modeling services support analysis, design, permitting and funding of coastal projects such as beach nourishment, inlet management, ports and marinas, coastal structures and other marine projects. Offer modeling expertise includes:

- Tides and currents
- Wave processes
- Sediment transport
- Beach morphology
- Coastal structures
- Inlet processes
- Water quality and turbidity
- Storm damage assessments
- Economic evaluations
- Surfing analyses
- Ship maneuvering simulations
- Oil spill plumes and dispersion

Furthermore, CB&I's staff include certified industrial hygienists, safety professionals, health physicists, environmental trainers and indoor air quality professionals that can offer a full spectrum of industrial hygiene and safety services to commercial and government customers, helping them:

- Protect employees
- Reduce potential liabilities
- Minimize the risk of occupational disease and injury
- Maintain compliance with regulatory requirements
- Maximize productivity

Industrial hygiene and safety capabilities include:

- OSHA-equivalent compliance audits



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



- Industrial hygiene evaluations/monitoring chemical, noise, ventilation and health hazard evaluations
- Industrial hygiene and safety program assessment and development (third party)
- Engineering controls (ventilation system design, noise controls, machine guarding)
- Indoor air quality, including mold issues
- OSHA Voluntary Protection Program assistance, including gap analysis, application, health and safety procedure writing and pre-OSHA audit
- Job hazard analyses/personal protective equipment (PPE) assessments, including use of an internally developed software program
- OSHA-required training (hazard communication, chemical specific such as lead and arsenic, confined spaces, PPE, noise)
- Hazardous waste operations and emergency response (HAZWOPER) training, including 40-hour, refresher, supervisor, first responder, hazardous materials technicians, hazardous materials specialists and incident commander
- Comprehensive HS&E training needs, analysis and software design and development
- Health physics/radiation
- Comprehensive reports



Sandra Walters Consultants, Inc., is a resident of City of Key West and provides services since **1997** in all areas of **ecological** and **environmental** consulting; and **land use** and public facilities **planning and permitting**; including habitat assessments, wetland permitting and mitigation design, environmental impact statements, compliance monitoring, development agreements, and submerged land leases.

SWC has extensive experience working with regulatory agencies to develop project designs that minimize impacts and meet permitting requirements, and to bring clients into compliance with regulatory standards. The firm has conducted data collection and analysis, and written environmental and planning sections of **NEPA documents for FDOT, the FAA, the South Florida Water Management District, and U.S. Army Corps of Engineers**, and also provides environmental compliance monitoring services during construction. In addition, SWC is certified as a **disadvantaged business enterprise (DBE)** with the State of Florida, South Florida Water Management District (SBE), Florida Department of Transportation, Broward, Dade (also SBE) and Lee counties, and is a **woman-owned small business (WOSB)** with the federal government. The company is also very experienced at coordinating **communications**, including **public information and involvement** programs and is fully acquainted with all NEPA requirements. SWC can provide plan development; community outreach and consensus building using various tools such as workshops, seminars and public meetings; and preparation and placement of advertisements. The firm has full multimedia capabilities for production of public presentations, websites, newsletters, news releases, and all support documents.



RADISE is a premier, Florida based, **minority-small business** Geotechnical Engineering, Construction Materials Testing, Inspection (CEI), Information Technology, GIS Consulting firm and has been in business for over 17 years. Have grown significantly over the past few years with a current staff of 46 engineers, field inspectors, support staff, which includes 6 PE's, 2 PhD's, 8 EI's and 6 graduate Civil Engineers. Highly trained staff of professionals has extensive SFWMD Water Resource experience, and over 200 years of combined Civil Engineering, Geotechnical, CEI, IT and Materials Engineering experience. RADISE has successfully worked with both the Public and Private Sectors throughout Florida, holding Continuing Service Contracts with numerous Cities,





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Counties, School Districts and clients like the South Florida Water Management District, Florida Department of Transportation, and the United States Army Corps of Engineers.

RADISE performs its drilling in-house (2 drill rigs) and has 2 FDOT Certified Laboratories (Broward & Palm Beach Counties) managed by a team of registered professional engineers and certified lab technicians performing both standard and specialized testing. RADISE is also an FDOT Construction Testing Qualification Program (CTQP) Training Provider. Inspectors are highly trained and certified through the CTQP Program, the American Concrete Institute (ACI), and many other entities to provide our clients with the highest level of expertise. RADISE has years of experience setting up and maintaining field laboratories on construction sites, as part of our construction materials testing (CMT) services.

RADISE has worked on a wide variety of projects for the SFWMD since 1997. The company has worked on more than 150+ plus projects as a prime as well as sub-consultant roles. The disciplines on these projects range from the typical Civil Engineering, Geotechnical Engineering, Construction Management, Modeling, QA/QC, Staff Augmentation and Material Testing services to non-typical such as: GIS, Data Analysis, System Development, and Business Analysis.

RADISE also has the privilege of servicing the SFWMD on major restoration projects from conceptual design stage to end of construction in multi-disciplines Geotechnical Engineering, Construction Management and QA/QC. EAA FEB, Hillsboro Canal Bank Stabilization, C-111 Frog Pond Reservoir, Cell 4, STA-5/3 and STA-6/2 are few example projects where RADISE was involved in the entire project life cycle.

RADISE's niche has been successfully performing on highly complex projects such as the FLL Runway Expansion Project (7 million cubic yards of fill / 65 Foot MSE Wall), 7 USACE Task Order Cutoff Walls (QC/Laboratory Specialty Testing) on the Herbert Hoover Dike (HHD), Multiple HHD Culvert Replacement Projects (C-11, C-16, C-3, C-4A, C-5, C-5A, C-10, C-12), and numerous Containment and Seepage Management Projects (C-44 East Coast Protection Levee, Rollin Meadows & Catfish Creek, Picayune Strand Restoration Projects, Picayune Strand Pump Stations at Miller, Merritt and Faka Union canals, Nubbin Slough, Lake Kissimmee Boat Ramp, among others). Radise have been successfully working on water restoration projects since 1996. The list of projects is extensive from levee restorations, pump station, reservoir construction projects, canal stabilizations, culvert replacements and storm water treatment areas.

In addition to the engineering and testing side of the business, RADISE provides Geographic Information Systems (GIS), Information Technology (IT), and Research services as well as staff augmentation services. Some of the SFWMD IT projects include: O&M Cost Estimating Model, Nutrient Load 11G Migration, DB Hydro Database Analysis, Structure Inspection Program (SIP) Archival Tool, WCS Tracker (ArcHydro enhancement), National Inventory of Dams, Canal Capacity Conveyance Program GIS Steward for Biscayne Bay Wetlands project, FEMA Map Modernization and CERP Baseline Database, among others.

RADISE has a record of 100% completion rate on all projects, has had no litigation issues and a spotless safety record since inception. Radise has 5 offices located throughout Florida, including Riviera Beach (Corporate Office), Fort Lauderdale, Tampa, Miami and now in Orlando.



BHA In the past decade, Beiswenger, Hoch and Associates (BHA) has designed over 200 bridges, ranging in size and complexity from single grade separations to major Intracoastal Waterway crossing and multilevel urban interchanges.

BHA's structural design experience includes virtually all bridges construction technologies, including



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



conventional methods in prestressed and post tensioned concrete and steel plate girder, and contemporary methods in massive steel box girder and segmental concrete box grinder design. Bridge projects include:

- Port of Miami
- I-95 David Blvd. Interchange (Ramp Y)
- US-27 Moore Haven Bridge
- Florida’s Turnpike / I-75 Interchange (Ramp I)
- SR-869 Panther Drive Interchange
- Evan Crary Sr. Bridge (dual bridge crossing over St. Lucie River)

These include award winning design.



Smart-Sciences, Incorporated is a **Minority, Woman and Service-Disable Veteran** that provide expertise in environmental permitting, ecological consulting and environmental science to private, industrial and public sector clients. Our mission is to provide innovative solutions that promote smart growth and human development in an environmentally sustainable manner.

We approach each project as collaborators, bringing our comprehensive knowledge and our understanding of both the natural and regulatory environment. We have a proven record of accomplishing complex land development projects and large scale restoration projects in a timely and cost effective manner.

We believe communication, accessibility and responsiveness along with resourceful professionals and cutting edge technical expertise allows us to provide superior service to our clients. Smart-Sciences works to identify and understand your goals and provides innovative, practical solutions that meet your business needs.

Services provided include:

- Project Due Diligence
- Ecological and Phase I ESA
- Local, State and Federal Environmental Permitting
- Wetland Delineation and Wildlife Studies
- Mitigation Assessment, Design and Monitoring
- Threatened and Endangered Species Studies
- NEPA/PD&E Studies and Design Projects
- Seagrass and Benthic Resource Surveys
- Tree Surveying and Permitting
- Habitat Assessments and Conservation Plans
- GIS Mapping
- Consumptive Use Permitting
- Environmental Planning/Development of Regional Impact Assistance
- Turbidity Monitoring
- Contamination Site Assessment

Smart-Sciences is woman-owned and currently certified as a Disadvantaged Business Enterprise, Woman Owned Business Enterprise and Small Business Enterprise (DBE/WBE/SBE) with the Florida Department of Transportation, the Florida Department of Management Services and the South Florida Water Management District, Miami-Dade County (also SBE and CBE) and is a Woman Owned Small Business (WOSB) with the federal government.



Jupiter Environmental Laboratories, Inc. (JEL) is an independent, NELAP, DoD-ELAP and ISO/IEC 17025 certified commercial analytical laboratory located in Jupiter, Florida. Founded in 1995, JEL specializes in providing comprehensive laboratory services, rapid turnaround, high quality data and personal service in the analysis of waters, soils, and process wastes to environmental consultants, industry, and government. Organized on the model of a research





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



laboratory, JEL is committed to staying in the forefront of innovations in analytical chemistry. Jupiter Environmental Laboratories' custom-built facility is specifically designed as an environmental lab from the ground up. JEL employs the most advanced instrumentation available including the latest generation of ICP/MS, LC/MS/MS, Dual Micro ECD and CVAFS for large volume analysis and rapid, accurate results. Utilizing the most recent instrument innovations assures clients greater data integrity with prompt, reliable service. All instrumentation is automated and continually upgraded to allow JEL to remain an industry leader, providing our clients with timely and efficient project completion.

At Jupiter Environmental Laboratories, we feel our most valuable asset is our dedicated personnel. Our senior technical staff is experienced in many areas of analytical chemistry. Their prior training in research and development provides a strong analytical background to ensure accuracy on standard methods and the ability to develop innovative new methods when required. Several of our project managers are former chemists who understand the technical aspects of client projects; they are experienced with local, state and federal regulatory requirements.

When required, JEL provides comprehensive field sampling services for projects, including: temporary well installation, soil and sediment sampling, marina dredge material, and drum sampling. We can provide boat sampling in canals, large lakes and ocean environments. Field personnel are FDEP trained and equipped with upgraded field instruments including OVA meters and a variety of other multi-function meters. JEL's Quality Assurance Program is approved by the State of Florida. We are certified as a small woman owned (W/SBE) business by: the State of Florida, Palm Beach County, the South Florida Water Management District (SFWMD) and other area agencies and fall within the Federal Small Business size category.

The CSA Team comes together to provide an integrated, project delivery approach that covers all phases of any task or project assigned under this contract. Our Environmental Engineering team provides the required technical and scientific disciplines plus others we believe add value to **the City**, fielding personnel with extensive experience in the multiple project features of this RFQ. The Construction Management team brings depth of resources, robust experience and successful track record major clients with projects and program similar in nature to those of the RFQ.

KEY PERSONNEL EXPERIENCE





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



II. KEY PERSONNEL’S EXPERIENCE

The professional staff proposed by CSA Group Team is shown in the attached organizational chart. Our local office is enhanced by our ability to pull in resources within the local office or anyone available in other U.S. offices¹⁰ where the expertise exists of where the extra hand is available. This allows CSA to keep the project’s staff to the level required to complete the project on time. Our organizational structure offers a unique advantage to the City of Key West for the optimum performance of this contract. CSA’s structure designates a principal of the firm to whom the Project Manager must report project issues for the effectively and timely resolution. This chain of command allows an effective and fast communication to respond to any situation that may affect a project. Project team members’ resumes are included at the end of this section.

The CSA Project Team is familiar with the environmental engineering and regulatory requirements. CSA employs an efficient and thorough approach for this type of project that which involves review of existing databases, environmental site assessments, identification of environmental features, mapping, field identifications and reconnaissance activities, alternative analysis, documentation, agency coordination and the involvement of Project Stakeholders, among others.

Service and experience include full-scale engineering, design, surveying, permit preparation, preparing contract specifications, preparing bid and proposal documents and assisting clients with technical review and ranking of the same to attain qualified contractors for work, environmental assessments, construction administration and owner project representation services relating to operation, new construction, permit modification, construction improvements, rehabilitation of infrastructure facilities overall. In addition, environmental planning; natural resources assessments and management plans; environmental impacts analysis; contamination assessments; site selection, pollution prevention; construction permitting; and environmental compliance, among others.

Our experts have been recognized to accurate estimate and assess the effects of man on the environment and evaluate project impacts on human, animal, and plant life. Factors assessed include effect on natural resources, erosion and sedimentation, water quantity/water quality, coastal and freshwater wetland communities; wildlife habitat and migration; air, water and soil pollution; groundwater and surface water movements and flow.

Technical duties include studies (land, aquatic, and marine) for siting new facilities or structures, defining solutions to system and facility operational problems; preparing Environmental Impact Statements / Environmental Assessments, Environmental Resource Permits (ERPs), Multi-Sector General Permit, Air Emission Permits and other Federal and Local permits; USEPA/FDEP Compliance plans; preparing and monitoring mitigation plans; and providing contamination

CSA’s Human Resources	Local Capability	Local Availability
Project Managers	7	3
Safety Officers	1	1
Professional Engineers	10	5
Environmental Engineer	1	1
Registered Architects	2	1
Planners	1	1
Lead Professionals	3	1
Scientists	2	2
Geologists	1	1
Archeologists	1	1
CAD Technicians	5	2
GIS Analysts	1	1
Surveyors	2	1
Field Inspectors	25	3

¹⁰ <http://www.csagroup.com/contact.php?oid=31#contents-top>



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



assessments of contaminated sites, among others.

CSA specialties include, building construction permits, ASTM environmental site audits, building materials evaluation, RCRA and CERCLA (commonly known as Superfund) investigations, surface and subsurface contamination studies, noise studies, wetland mitigation project design, landscaping, and reforestation plans, among others. We have assisted clients during public outreach, meetings and hearings, and have prepared the required support studies necessary to obtain approvals from the local and federal regulatory agencies; similar to what is required by this project.

We are adept at handling the wide range of issues that may arise during an environmental document preparation and know how to perform all phases of activities that may be required. Some other projects and/or contracts where CSA has had a similar involvement are included in the attached Company Qualifications Document.

Our full service offerings that include in-house engineers (i.e. environmental, civil, structural, mechanical and electrical), biologists, ecologists, registered geologists, marine scientists, wetland specialists, archeologists, planners and LEED professionals, water resources specialists, GIS analysts, surveyors and permitting specialists, allow us to provide a broad array of integrated services.

CSA Team

The Table below shows the leading key staff for each potential related discipline.

Management	Name	Years of Experience
Principal	Roberto Leon, PE	17
Safety Manager	Raymond Valentin	28
QA /QC Manager	Felix Fuentes, P.E.	18
PM & Design Manager (Contract Manager)	Evelio Chavez, P.E.	29
Environmental Discipline Manager	David R. Rosa	17

Sub Consultants - Specialties	Name
Contaminated Site Investigation and Remediation Services	SWC, Inc.
	Biovation
	Jupiter Lab
	EnviroSpec]
Industrial Hygiene Services	Biovation
	CB&I
	Jupiter Lab
Underground Storage Tank Site Service	Biovation
	EnviroSpec
Real Estate Development Support Services	SWC, Inc.
	Smart –Sciences
	Biovation
	EnviroSpec
Coastal Engineering	CB&I
Bridge	BHA
Laboratory	Jupiter Lab

As can be observed, CSA has a wide range of services and experiences, all in-house. Our principal and Senior Vice President, Roberto Leon, is an Environmental Engineer fully engaged with these type of projects; with his vision and experience, we will exceed **City of Key West** objectives. CSA design and environmental resources will be fully committed to the **City** projects.

We have complemented our team with highly qualified sub-consultants with technical background in this field, and experience in previous airport projects. They are familiarized with local and federal standards and regulations. Together, we have formed a truly outstanding team dedicated to time-tested practices backed by hands-on “**in the field**” experience.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Organizational Chart

Following is the proposed organizational chart. Below is a summary of the main attributes of our proposed organization.

- Our proposed Project Manager has been involved in projects within Florida Keys (including Key West) for more than five (5) years. His intimate knowledge of the City needs will prove to be a key factor of the success of our team.
- Our proposed Principal in Charge has an overall responsibility for project execution and will serve as a second Point of Contact (POC) with the City.
- A QA/QC Manager and Safety Officer have been identified to provide senior level support to the Project Team.
- Quality Control Manager will report directly to the Project Manager to assure independence of criteria while at the same time conveying the degree of importance to all Team members. This role has the authority to oversee all quality functions throughout the projects.
- Full Scale Engineering, strategically placed in the organizational chart, to emphasize its importance in all phases of the projects.
- Safety Manager strategically placed in the organizational chart above the Environmental and Full Scale Engineering group.
- This role will support the Environmental, Design and Construction groups. Safety is a high priority for CSA and thus will be a focus of our execution plans. This role has the authority to stop any type of work at any time due to safety issues.
- Assignments will depend on the type of projects being executed and workload.
- A well rounded, capable pool of resources for all disciplines required to participate in the projects.
- For the Design Team, the following can be highlighted:
 - All disciplines led by a CSA in-house staff member with a seamless integration of subcontractors in each specialty discipline.
 - Incorporation of a BIM/Civil 3D and a GIS team to assure that technological tools are efficiently implemented throughout the project.
- Environmental Laboratory already identified as part of the Team to facilitate project execution.

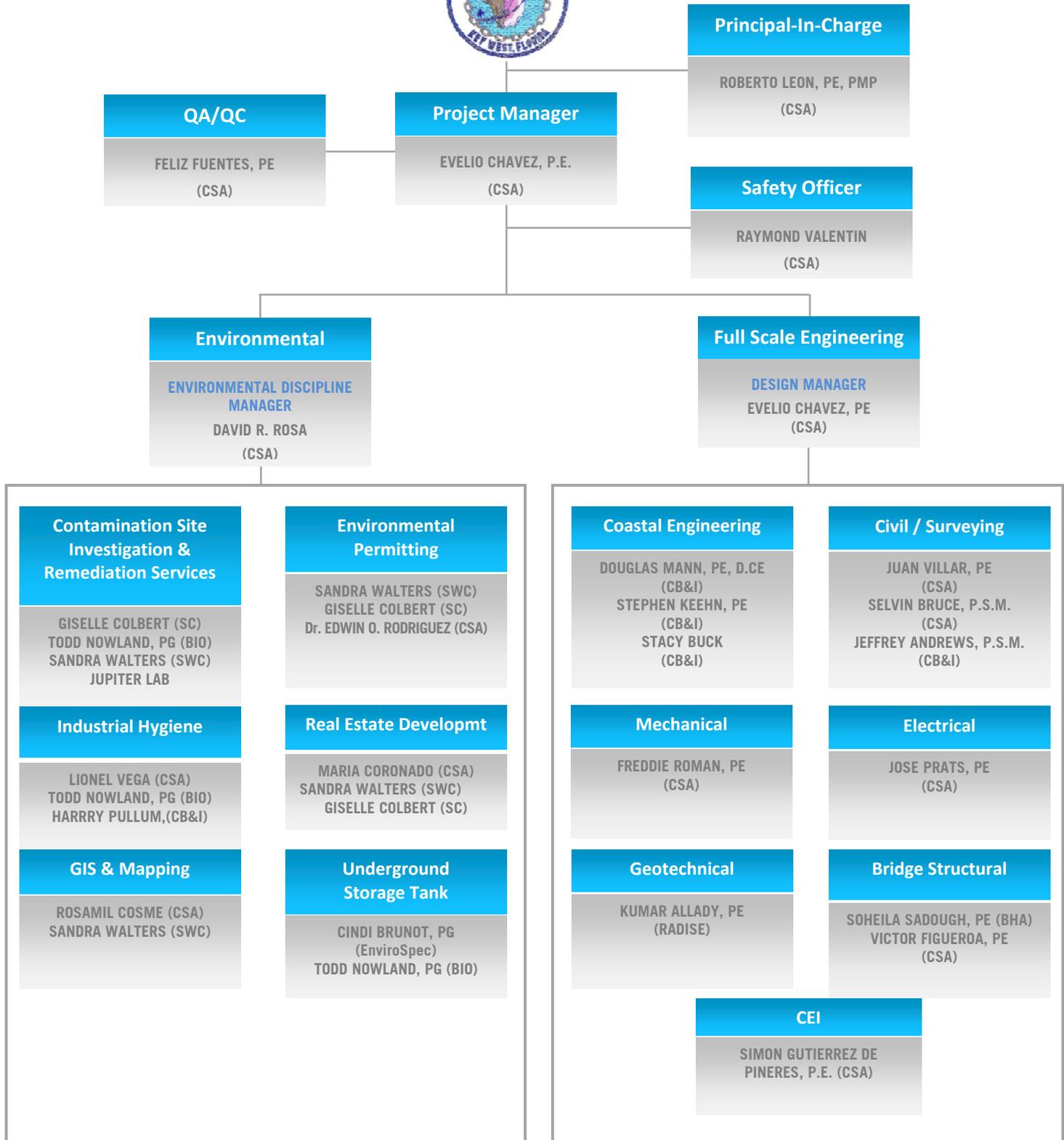


REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



ORGANIZATIONAL CHART





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Key Staff

The CSA Team comes together to provide an integrated, project delivery approach that covers all phases of any task or project assigned under this contract. Our Engineering team provides the required technical and scientific disciplines plus others we believe add value to the **City of Key West**, fielding personnel with extensive experience in the multiple project features of OMRRR projects. The Construction Management team brings depth of resources, robust experience and a successful track record with the SFWMD and several other major clients with projects and program similar in nature to the City. Below is a summary of the Top Key Individuals of our proposed team:

Project Manager/Resident Project Representative: Evelio Chavez, P.E. (CSA)

Mr. Chavez has 29 years highway design experience with both the public and private sector. His emphasis has been roadway design, plans production, and project management. Mr. Chavez has extensive experience and knowledge of the Florida Department of Transportation's (FDOT) procedures and standards. Moreover, Mr. Chavez was in charge of the North Roosevelt Boulevard Project in **City of Key West**. Furthermore he was also involved in the Jewfish Creek Bridge (U.S. 1) Widening Project in the City of Key Largo.

Principal-in-Charge: Roberto Leon, P.E. (CSA)

Mr. León is a Board Certified Environmental Engineer (BCEE) with a specialty in Water Supply and Wastewater from the American Academy of Environmental Engineers. He is also a LEED AP BD+C and a Project Management Professional (PMP). He has over 17 years of experience in major infrastructure projects, is licensed in four states and has a Bachelor of Science in Environmental Engineering from Cornell University and a Masters in Engineering from MIT. He will oversee the contract and ensure that management and staff is following established management protocols, procedures, and accomplishing the City's goals. Mr. León has spent over 16 years working in the environmental, engineering, architectural, program management and construction industry in the private and government sector. His experience includes projects in the water and wastewater, energy, environmental, transportation and buildings sectors in the United States Puerto Rico and Latin America. He currently serves as Senior Vice President of Operations.

Safety Officer: Raymond Valentin (CSA)

Mr. Valentin has over 28 years of experience in proactive & innovative safety management for pharma, chemical, electronics manufacturing & construction industries. Well versed in OSHA, OSHO, NFPA, FM, ANSI, ACGIH, GMP, Six Sigma, and OEP Standards and procedures, he offers safety professional seminars for universities, and public and professional groups. Mr. Valentin expertise also covers, ergonomics, industrial hygiene, process safety management, budget administration, personnel training and supervision, construction contractors safety, safety promotion & job safety analysis. He was invited by PROSHA as speaker in the PR Occupational Injuries and Illnesses Conference held on Dec. 11-13, 2011. In two years, he achieved around 15 safety recognitions in construction projects from PROSHA with the Puerto Rico Finance Infrastructure Authority and two with Puerto Rico Aqueducts and Sewers Authority (PRASA).

QA / QC Officer: Felix Fuentes (CSA)

Mr. Fuentes has over 18 years of experience in project engineering and construction management with astute knowledge in areas of geotechnical and transportation engineering. In-depth concentration on various FDOT projects from inspections and contract management. He is able to develop quality processes and procedures, capable of addressing and coordinating all project phases and expeditiously providing feedback to project key personnel. Experienced in delivering projects to meet project requirements and capable of managing teams, resolving conflicts, engaging teams and transferring knowledge.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Environmental Discipline Manager: David R. Rosa (CSA)

David R. Rosa has 17 years of experience in the environmental field including permitting, environmental impact studies, wetland delineations and wildlife studies. David serves as Environmental Discipline Manager / Sr. Environmental Scientist on large scale public and private sector projects. Furthermore, he has worked as a Director of Environmental Operations, Permit Coordinator and resident scientist for several infrastructure projects. He possesses vast experience in studies and evaluations of the environmental effects on the human and natural environment by transportation systems. His experience also involves assisting in the evaluation of alternate transportation corridors, and location/design alternatives within viable sites. Experience includes ERPs, FDEP permits, Dewatering Permits, ESA Section 7 consultations, preparation and assist in technical studies to address engineering feasibility of alternatives, environmental reports and documents which evaluate the physical, natural, and human impacts of the alternatives, public involvement and interagency coordination, and mitigations. He has managed and coordinated ESA Phase 2. Also he has conducted ESAs Phase 1, surveys for threatened and endangered species, recommending mitigation measures, monitoring selected populations, and developing conservation / protection measures during the planning phase of several projects. His experience also includes stormwater pollution prevention plan preparation, ESBARs, WERs, Contamination Site Screening Reports, habitat mapping, environmental compliance inspections, alternatives analysis, cumulative impact analysis, impact determination and NEPA, among others. Furthermore, his experience includes Avian & Bat Fatality Monitoring Plan preparation and implementation for wind projects. Also, frequently provides advice, guidance, and information as a member of an interdisciplinary team.

CONTAMINATED SITE INVESTIGATION AND REMEDIATION SERVICES

Maria Coronado-Baca, Contamination Specialist (CSA)

Ms. Coronado has 25 years of experience in the private and public sectors as a licensed Geologist and Environmental Consultant managing geologic, geotechnical, soil and environmental investigations. Her expertise spans the supervision of earth crust extractions, earth movement, quarry operations and construction projects in Puerto Rico and in Los Angeles and Sacramento, California. She is also experienced in conducting comprehensive Due Diligence Reports to determine regulatory constraints and identifying options for proposed development projects. She has served as a technical advisor to the Secretary, Deputy Secretary and the Auxiliary Secretary of Permits, Endorsements and Specialized Services of the Department of Natural and Environmental Resources (DNER). Ms. Coronado was also the Director of the Environmental Processes Division Office at the DNER. Her duties consisted of managing and supervising a multidisciplinary technical team to determine the potential environmental impacts to natural resources resulting from land development projects and the emission of the DNER's endorsement for such projects. She also acted as Interim Director for the Earth Crust Division and the Bureau of Endorsements at DNER.

David Levy, P.G (Biovation)

Mr. Levy has 25 years of experience in the design and implementation of mechanical and bioremediation systems. He has been involved in several contaminated site investigations and remediation sites.

INDUSTRIAL HYGIENE SERVICES

Harry A. Pullum, CIH, CSP, CIAQP (CB&I)

Mr. Pullum is a Distinguished Technical Associate with CB&I. He is a trained, Certified Industrial Hygienist (CIH), Certified Safety Professional (CSP), and Certified Indoor Air Quality Professional (CIAQP) with 43 years of experience in the recognition, evaluation, and control of harmful chemical, biological, and physical agents to which employees are exposed in the workplace. His experience includes evaluating health and safety hazards in all types of manufacturing and service industries and recommending control methods to reduce potential employee exposures. Mr. Pullum has



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



performed hundreds of comprehensive industrial hygiene and safety surveys, evaluations, and audits. With regards to his aerospace industry experience, he has been a senior industrial hygiene and safety auditor for Goodrich Corporation since 2005. In addition, he was the Program Manager and lead auditor on the Vought Aircraft Stuart, Florida ESH audit in 2007 and the Charleston, SC, Nashville, TN, and Milledgeville, GA EHS audits in 2008. Mr. Pullum provides senior safety and health program reviews, including safety management system reviews that follow the guidelines of the Occupational Safety and Health Administration (OSHA) Voluntary Protection Program (VPP), ANSI Z10, and ISO 18001. He also assists companies in obtaining OSHA VPP STAR status. Mr. Pullum has also been involved in performing indoor air quality (IAQ) investigations. These investigations have included employee interviews, sampling (mold, bacteria, chemicals, carbon dioxide, humidity, etc.), ventilation system evaluations, and comprehensive reports, with recommended controls.

Lionel Vega, Air Quality Specialist (CSA)

Mr. Vega is a former EPA employee in Washington D.C. with over 25 years of experience on environmental engineering, environmental management and planning, environmental compliance and permitting. His areas of expertise includes Construction and Air Quality Permitting, coordination with local and federal agencies, Air Quality Studies, Environmental Management and Compliance, Project Management of environmental impact statements, pollution control, environmental compliance and permitting projects, Site Environmental Assessments of industrial and commercial facilities; Hazardous waste, wastewater, air emission, and solid waste facilities.

UNDERGROUND STORAGE TANK SITE SERVICES

Cindi A. Brunot, PG (EnviroSpec)

Ms. Brunot is the founder of EnviroSpec, Inc. She has 25 years experience in the environmental industry. Ms. Brunot received her Professional Geologist License in 1995 and a Master's of Geology in 1997. She holds certifications as a Licensed Environmental Professional (LEP #22), as a Fla. Certified Environmental Assessor (FCEA #280), and as a Registered Environmental Property Assessor (REPA #6103). Ms. Brunot has extensive experience in tank closures, assessment and remediation of petroleum sites, Phase I/Phase II property assessments, well installations, training, project management, and all types of environmental sample acquisitions.

Bradley Nowland, P.E., (Biovation)

Mr. Nowland has 20 years cumulative experience in the fields of environmental compliance, site assessment, remedial systems design and project management for a wide variety of projects. Specific projects include industrial and commercial Environmental Site Assessments, site contamination assessment and cleanup system design, and extensive soil and groundwater sampling activities. Additional experience includes environmental permitting, the design and installation of groundwater wells and storm water management. Mr. Nowland has been actively involved in numerous environmental audits for the private sector, county and state agencies. Additional experience includes petroleum contamination assessments and remedial investigations for sites involved in local program/county and state cleanup activities. Responsibilities include technical report preparation, sampling and analysis plans, Corrective Action Plans (CAPs) and many aspects of environmental permitting. Mr. Nowland has designed and supervised the construction of numerous groundwater monitor wells, conducted and supervised numerous groundwater, soil/sediment, sludge and surface water sampling events. In addition, Mr. Nowland provides expertise on contamination evaluation and selection of appropriate laboratory analytical parameters depending on the contaminant of concern. He also develops and implements operations and maintenance (O&M) schedules for pollutant recovery and treatment systems. He has been responsible for all aspects of project work, including technical content of deliverable documents, budget maintenance and reporting, directing work efforts, and schedule compliance.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



John Krabbe, P.E (Biovation)

Mr. Krabbe has over 30 years of experience in the design and implementation of mechanical remedial systems and bioremediation systems. He has been involved in several contaminated site investigations and remediation sites.

REAL ESTATE DEVELOPMENT SUPPORT SERVICES

David R. Rosa, Senior Environmental Scientist (CSA)

Mr. Rosa has 17 years of experience in environmental services, permitting, environmental impact studies and wetland delineations. David serves as Environmental Discipline Manager / Sr. Environmental Scientist on large scale public and private sector projects. Furthermore, he has worked as a Director of Environmental Operations, Permit Coordinator and resident biologist for several transportation projects, including FDOT and USACE projects. He has managed, coordinated and conducted surveys for threatened and endangered, species, recommending mitigation measures, monitoring selected populations, and developing conservation / protection measures during the planning phase of several projects. His experience also includes stormwater pollution prevention plan preparation, habitat mapping, environmental compliance inspections, alternatives analysis and impact determination. Also, biological evaluations and assessments of natural resources, and providing advice, guidance, and information as a member of an interdisciplinary team.

Sandra (Sandy) Walters, Senior Environmental Scientist (SWC)

Ms. Walters has more than 25 years of professional experience in Florida. She is qualified as an Expert Witness in Florida administrative hearings and court proceedings; has conducted and supervised environmental studies, and developed avoidance and mitigation plans, in all South Florida submerged and upland habitats; has successfully permitted projects ranging from single family homes to developments of regional impact, working with all regulatory agencies; has extensive experience in design and implementation of public participation programs and review and development of comprehensive plans; and has represented clients successfully with many agencies and government boards. She is presently serving as immediate past chair of the South Florida Regional Planning Council, appointed by governors Bush and Crist; serves on EPA's Water Quality Steering Committee for the Florida Keys; and served from 2000 to 2004 as a Governor's appointee on Florida's Acquisition and Restoration Council, which supervises purchase and management of State conservation lands.

Edwin O. Rodriguez, PhD., Sr. Marine Scientist (CSA)

Dr. Rodríguez-Class has 16 years of experience as a wildlife biologist and environmental scientist, conducting wildlife research development and implementation, monitoring and other published field studies in a variety of marine and terrestrial habitats. Technical experience includes managing field sampling compliance projects, developing and implementing scientific research to help ecosystem-based management of terrestrial and marine resources. Dr. Rodríguez-Class has been part of a scientific team working in the preparation of Biological Evaluations, Mitigation Plans and Wetland Jurisdictional Determinations Studies to comply with sensitive marine and terrestrial species. in compliance with Section 7 of the Endangered Species Act (ESA), the US Fish and Wildlife Service and the National Marine Fisheries Service. Dr. Rodríguez-Class has been also involved in mediating issues between project proponents, stakeholders and regulatory agencies. He has conducted biological Critical Issues Analysis to determine location of an LNG pipeline crossing a natural reserve and protected areas for a site on the south coast of Puerto Rico. Additional experience includes conducting research and surveys for marine resources management, 310 hours of sea turtles monitoring and 2,600 hours of marine mammals monitoring in Puerto Rico, Costa Rica, Nicaragua, Mexico, and the United States; and Epibenthic Communities and Reef Fishes. Additionally, Dr. Rodríguez-Class is one of the leading scientist in the sharks and ecological marine soundscape research fields in Puerto Rico.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Robert Stewart, Senior Environmental Scientist (CSA)

Mr. Stewart has over 19 years of field and project management experience in the areas of Environmental Construction Compliance, Project Development and Environment (PD&E) Studies, ecological assessments, archaeological surveys, cultural resource identification and preservation, marine resource management, and endangered species monitoring.

COASTAL ENGINEERING

Douglas W. Mann, P.E., D.CE (CB&I)

Douglas Mann, P.E. has worked as a coastal engineer since 1987. Mr. Mann is experienced in all aspects of coastal engineering including dredge and fill projects for material disposal and beach nourishment, beach and inlet engineering, coastal structure design (including breakwater, groins, jetties, and Permeable Adjustable Groin (PAG) design and construction) as well as marine-related upland structures. Mr. Mann has been involved in the design of boat ramps, marina renovations, and other boating related projects. Mr. Mann is experienced in Joint Coastal permitting, Environmental Resource permitting, and FDEP Coastal Construction Control Line permitting.

Stephen Keehn, P.E., Program Advisor / Sr. Coastal Engineer (CB&I)

Stephen Keehn, P.E. is a Program Advisor and Senior Coastal Engineer and received his Masters in Coastal Engineering from U.C. Berkeley in 1982. He then served with the U.S. Army Corps of Engineers, Jacksonville District in planning, engineering, and construction assignments on beach and navigation projects. He continued this type of work with CB&I, where his major programs included Collier County, Captiva Island, Panama City Beaches in Florida and Fire Island, New York.

He has served as a Project Manager and Senior Coastal Engineer with CB&I since 1992, on numerous beach and inlet projects including four ASBPA Top Restored Beaches. He has worked on over a dozen inlet management plans in Florida, in addition to planning, design and permit of numerous inlet structures and dredging projects. He planned and coordinated a beneficial use of dredged sand project for Panama City Beach using sand from the Panama City Harbor dredging project. Knowledgeable in all aspects of coastal projects to include coastal engineering, geology, hydrographic and Lidar survey, Federal and State permitting and funding, marine habitats, lands and easements needed to implement a successful project. He was awarded the Per Brunn Distinguished Service Award by the Florida Shore and Beach Preservation Association in 1999.

Prior to 1992, Mr. Keehn served as a Coastal Engineer with the U.S. Army Corps of Engineers, Jacksonville District. During his tenure, he completed numerous feasibility and detailed design reports of coastal protective works. Performed coastal engineering analysis and design for three major beach restoration studies in Florida: the Feasibility Report for the Sarasota County Beach Restoration Project (Venice) (1984), the First Renourishment Design Report, Duval County (Jacksonville), FL (1984), the First Renourishment Design Report for the Dade County (Miami Beach), FL (1984) and revised the cost-benefit analysis for the Smathers Beach (Key West) Nourishment Project. Mr. Keehn designed coastal structures (Jetty Extension and Sand Tightening) at Bakers Haulover Inlet, FL (1984) and was the construction manager on the combined St. Johns River Maintenance Dredging & Jacksonville Beach Renourishment Project (1985) and the Mayport Naval Station Maintenance Dredging (1985).

Stacy Buck, Sr. Marine Biologist (CB&I)

Stacy Buck has over 14 years of experience in biological and environmental science, the last 10 of which have focused on coastal and marine biology in south Florida. Ms. Buck has conducted biological monitoring services for both public and private-sector clients and has extensive experience in the design and implementation of monitoring programs for marine resources. This experience includes marine habitat characterization of natural and artificial reef communities,





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



implementation of coral restoration/transplantation programs, and seagrass habitat assessment. Ms. Buck routinely prepares environmental documents in support of State and Federal permit applications including joint coastal (JCP) and environmental resource (ERP) permits. She also coordinates regularly with federal consulting agencies (NMFS and USFWS) to prepare Biological Assessments and Essential Fish Habitat Assessments in support of ESA Section 7 Consultation and the Magnuson-Stevens Fishery Conservation and Management Act. Ms. Buck is responsible for the complete coordination of biological monitoring projects from pre-permit application coordination through final report deliverables.

CIVIL/FULL SCALE ENGINEERING SERVICES

Juan Villar, P.E., Civil Engineering (CSA)

Mr. Villar has over 38 years of experience in Civil Engineering. Mr. Villar has considerable experience in storm water management studies, design and construction of water distribution systems, wastewater collection systems, and pump stations. Mr. Villar's technical and management capabilities include program and project management services for both, design and construction management disciplines; project controls expertise; value engineering, construction inspections, and commissioning of capital equipment for a broad range of projects, including water and wastewater facilities.

Hans Figueroa, P.E. Environmental/Civil Engineer (CSA)

Mr. Figueroa has over 20 years of experience as a Civil and Environmental Engineer in the design, specification, analysis and studies associated with water and wastewater treatment and conveyance infrastructure. Mr. Figueroa also has experience in feasibility studies for industrial, commercial and residential projects as well as in environmental assessment, storm water management and environmental permitting. He provides technical expert advice to clients in MS4 cases during consent decree negotiations with EPA, and in design, budgeting and implementation of mitigation and compliance measures.

STRUCTURAL ENGINEERING

Basem Dow, P.E., Structural Engineer (CSA)

Mr. Dow, P.E. has 24 years of experience in the design and management of construction projects varying in type, size and complexity.

Soheila Sadough, P.E., Structural Engineer (BHA)

Ms. Sadough has over 24 years of experience ranging the full spectrum of bridge types from curved structural steel to precast post-tensioned concrete members. Her significant design contributions have encompassed all project phases, from preliminary design and Bridge Development Reports to final design, peer review, value engineering, and post design services. In addition, Ms. Sadough has served in the role of Structures Project Manager and Engineer-of-Record for a multitude of high profile FDOT bridge projects requiring the full gamut of considerations ranging from railroads and airports to coastal projects and major Florida waterways. Ms. Sadough's comprehensive knowledge of FDOT design guidelines and policies will minimize District staff review efforts. This is particularly important when utilizing structural component phase submittals to expedite the Design-Build project schedule and reduce cost to the Department.

GEOTECHNICAL ENGINEERING

Kumar Allady, P.E., Geotechnical (Radise)

Mr. Allady has over 20 years of experience in Civil Engineering (Geotechnical Engineering, Construction Engineering Inspection and Construction Materials Testing) Services plus 3 years of software related experience. He has provided





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Geotechnical Engineering, CEI and CMT Services for roadway, bridge structures and interchange projects including braided ramps, roadway realignments, widening, paving, and lane extensions, retaining walls, overhead signs, lighting and mast-arms. He has also provided engineering services on multiple bridge hydraulics reports. During construction, Mr. Allady has been responsible for inspection and inspection coordination, documentation, responding to RFI's, estimates, contract administration and schedule reviews. Provided peer review and approval of excavation and dewatering plans, mix designs and repair methods. He has performed engineering services on numerous Florida Department of Transportation (FDOT) projects in Districts 1, 4, 6 and 7 and is very familiar with FDOT practices and procedures. He has a strong understanding of FHWA guidelines, AASHTO test methodologies, ASTM standards, FDOT specifications, FDOT construction practices and methodologies.

MECHANICAL ENGINEERING

Freddie Roman, P.E., Mechanical Engineer (CSA)

Mr. Román is a Mechanical Engineer with over 16 years of experience in the analysis, design, and construction of HVAC systems for industrial, residential, and commercial buildings. He has also been involved in contract negotiations, personnel supervision and the performance of energy audits. Mr. Román has managed the mechanical engineering design for multiple water and wastewater projects.

ELECTRICAL ENGINEERING

Gustavo Rieckehoff, E.E., Electrical Engineer (CSA)

Mr. Rieckehoff has over 16 years of experience in electrical consulting services, including technical leadership, design, technical specifications, and cost estimates of electrical power, lighting, and communication systems for several pharmaceutical, commercial, federal government, highways, and urban development projects.

Jose Prats, E.E., Electrical Engineer (CSA)

Mr. Prats has over 19 years of experience in electrical consulting services, including electrical power, lighting and communication design. He has worked as Project Manager for electrical system projects, and been Technical Leader of MEP Disciplines.

BATHIMETRY, SURVEYING & MAPPING

Selvin Bruce, P.S.M., Director of Surveying (CSA)

Mr. Bruce has over 34 years of experience in surveying and mapping. He has served as project manager on numerous projects ranging from hydrographic, construction, condominium, boundary, topographic, mean high water, subdivision, to design and transportation surveys. He is also a of Surveying responsible for the Vice-President and Director preparation of cost proposals, participation in survey related presentations, monitoring budgets, supervising overall field and office surveying operations, handling various surveying needs for clients, selecting and employing new of employees.

Darryl Hauser, P.S.M., Right of Way Mapper (CSA)

Mr. Hauser has over 20 years of experience and has worked in almost all areas of surveying and mapping in both the public and private sectors. He has worked in numerous locations such as the Tampa Bay Area, North Central Florida, Southern Maryland, and Washington, D.C.; prior to relocating to South Florida and working for over 12 years with the FDOT District Six in Miami.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Jeffrey L. Andrews, P.S.M., CH (CB&I)

Jeffrey Andrews has been performing marine sand searches and offshore geotechnical, geophysical and hydrographic surveys since the early 1980s. During his career, Jeff has conducted more than 50 marine sand searches and mapped more than 100 million cy of beach compatible sand on the continental shelf. Mr. Andrews has unique experience and knowledge about existing sand resources and about techniques of sand resource prospecting and mapping. Jeff was also the project manager of a project with the FDEP (Florida Department of Environmental Protection) in which all existing information about sand resources along the Florida coast was compiled into a GIS database interfaced with an Internet Mapping System. A summary of selected project experience is listed. Directed bathymetric and upland surveys in Florida, Georgia, North Carolina, Virginia, New Jersey, New York, Massachusetts, Alabama, Louisiana, Texas, Alaska, Puerto Rico, Brazil and the Bahamas. Prepared all hydrographic and topographic survey reports; including technical writing and supervision of data analysis. Over thirty years of conducting bathymetric and topographic surveys, and provided navigation/positioning for numerous offshore projects.

Rosamil Cosme, GIS Analyst / Planner (CSA)

Ms. Cosme has more than 11 years of experience in cartography and Geographic Information Systems (GIS), with expertise in the ESRI line of products (ArcMap, ArcCatalog, ArcToolbox, Crystal Reports, Spatial and 3-D Analyst). Her work has spanned data entering, data queries, vector and raster analysis, digitizing, georeferencing, database, shapefile, feature class creation, updating metadata and map creation for: environmental and urban planning, modeling, protected areas management, utility mapping, inventory and management, location feasibilities, suitability analysis, route and site selection, wetland assessment, creation and mitigation, water resources planning, county permitting, wildlife assessment environmental studies in flora and fauna areas, environmental impact assessment maps, and habitat delineation. Ms. Cosme has also worked doing GIS design and implementation, and training personnel on the basic tools of ArcGIS.

CONSTRUCTION ADMINISTRATION

Felix Fuentes, P.E., CEI (CSA)

Mr. Fuentes has over 18 years of experience in project engineering and construction management with astute knowledge in areas of geotechnical and transportation engineering. In-depth concentration on various FDOT projects from inspections and contract management. He is able to develop quality processes and procedures, capable of addressing and coordinating all project phases and expeditiously providing feedback to project key personnel. Experienced in delivering projects to meet project requirements and capable of managing teams, resolving conflicts, engaging teams and transferring knowledge.

Simon Gutierrez de Pineres, CEI (CSA)

Mr. Gutierrez has over 10 years of experience with a specific emphasis on contract administration and management of construction projects. He brings a dual perspective to the management of projects as a former employee of FDOT District Four responsible for overseeing the preparation of progress and final estimates; oversees preparation of supplemental agreements and work orders; work schedule reviews; plan reviews, claim analysis; permit compliance; resolving conflicts during construction; public involvement/public relations; provide contractor quality control oversight; partnering; correspondence and documentation.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



EXPERIENCE SUMMARY OF PROPOSED STAFF

Following is Table 1 that summarizes the experience of the proposed team staff according to the Project types that are typical of OMRRR projects. CSA staff is presented first, followed by our sub-consultants.

TABLE 1. EXPERIENCE SUMMARY FOR CSA TEAM MEMBERS

Count	First Name	Last Name	Professional Designation	Firm	Discipline	Contaminated Site Investigation and Remediation Services	Industrial Hygiene Services	Underground Storage Tank Site Service	Real Estate Development Support Services	Coastal Engineering	Full Scale Engineering
1	Evelio	Chavez	P.E.	CSA	Project / Design Manager	✓			✓		✓
2	Roberto	Leon	P.E.	CSA	Principal in Charge	✓	✓	✓	✓	✓	✓
3	Felix	Fuentes	P.E.	CSA	QA/QC	✓		✓	✓		✓
4	Raymond	Valentin	OSHA Instructor	CSA	Safety Officer	✓	✓	✓	✓	✓	✓
5	David	Rosa	PADI-DM, Stormwater Inspector, Recon Diver	CSA	Environmental	✓			✓	✓	✓
6	Maria	Coronado	PG	CSA	Environmental	✓	✓		✓		✓
7	David	Levy	PG	Biovation	Environmental	✓		✓	✓		✓
8	Lionel	Vega		CSA	Environmental	✓	✓	✓	✓		✓
9	Cindy	Brunot	PG	EnviroSpec	Remediation	✓	✓	✓	✓		✓
10	Todd	Nowland	PG, FL Contractor	Biovation	Remediation	✓	✓	✓	✓		✓
11	John	Krabbe	P.E.	Biovation	Remediation	✓		✓	✓		✓
12	Sandra	Walters		SWC	Environmental	✓			✓		
13	Edwin	Rodriguez	PhD	CSA	Environmental				✓	✓	✓
14	Robert	Stewart		CSA	Environmental	✓		✓	✓	✓	✓
15	Douglas	Mann	P.E., D.CE	CB&I	Coastal Engineering				✓	✓	✓
16	Stephen	Keehn	P.E.,	CB&I	Coastal Engineering				✓	✓	✓
17	Stacy	Buck	SDI Divemaster, BOEM Protected Species Observer	CB&I	Environmental				✓	✓	✓
18	Juan	Villar	P.E.	CSA	Civil/Stormwater	✓	✓	✓	✓	✓	✓
19	Hans	Figueroa	P.E.	CSA	Civil / Stormwater				✓		✓
20	Basem	Dow	P.E.	CSA	Structural (Bridge)						✓
21	Soheila	Sadough	P.E.	BHA	Structural (Bridge)						✓



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Count	First Name	Last Name	Professional Designation	Firm	Discipline	Contaminated Site Investigation and Remediation Services	Industrial Hygiene Services	Underground Storage Tank Site Service	Real Estate Development Support Services	Coastal Engineering	Full Scale Engineering
22	Kumar	Allady	P.E.	Radise	Geotechnical	✓		✓	✓		✓
23	Freddie	Roman	P.E.	CSA	Mechanical						✓
24	Gustavo	Rieckehoff	P.E.	CSA	Electrical						✓
25	Jose	Prats	P.E.	CSA	Electrical						✓
26	Selvin	Bruce	P.S.M.	CSA	Surveying				✓	✓	✓
27	Darryl	Hauser	P.S.M.	CSA	Surveying				✓	✓	✓
28	Jeffrey	Andrews	P.S.M.	CB&I	Bathymetry				✓	✓	✓
29	Rosamil	Cosme		CSA	GIS Analyst				✓		
30	Simon	Gutierrez	P.E.	CSA	CEI						✓
31	Harry	Pullum	CIH, CSP, CIAQP	CSA	Industrial Hygienist	✓	✓				



EVELIO CHAVEZ, P.E., Vice President

PROFESSIONAL LICENSES AND REGISTRATIONS

Professional Engineer
Florida No. 47558
1994

Advanced Work Zone Traffic
Control, Exp. 11/15/18

EDUCATION

B.S. Civil Engineering
Florida International University
1985

YEARS EXPERIENCE

29

TECHNICAL EXPERTISE

Mr. Chavez has 29 years highway design experience with both the public and private sector. His emphasis has been roadway design, plans production, and project management. Mr. Chavez has extensive experience and knowledge of the Florida Department of Transportation's (FDOT) procedures and standards.

RELEVANT EXPERIENCE

1. CSA Central, Inc., Florida

- 2012 - Present: Vice President - Responsibilities include directing and managing the design and production of roadway projects, technical and cost proposal preparation, marketing, project management, subcontractor management, quality control review of roadway design projects, and client interface.

2. Consul-Tech Enterprises, Inc.

- 2009 - 2011: Vice President - Responsibilities include directing and managing the design and production of roadway projects, technical and cost proposal preparation, marketing, project management, subcontractor management, quality control review of roadway design projects, and client interface.
- 2001 - 2008: President - Responsibilities include directing and managing the design and production of roadway projects, technical and cost proposal preparation, marketing, project management, subcontractor management, quality control review of roadway design projects, and client interface.
- 1996 - 2001: Director of Transportation - Responsibilities included design and production of roadway projects, technical and cost proposal preparation, project management, subcontractor management, quality control review of roadway design projects, client interface, and coordination of FDOT projects.

3. David Plummer & Associates, Inc.

- 1993 - 1996: Senior Associate/Chief Highway Engineer - Responsibilities included design of roadway projects, project management, proposal preparation, scheduling, staffing, training, budgeting, subcontractor management, and client interface.

4. Post, Buckley, Schuh & Jernigan, Inc.

- 1988 - 1993: Project Engineer - Responsibilities included supervision and preparation of all components associated with a final roadway set of plans, engineering reports, cost estimates, budgeting, and scheduling. Performed design work that involved conventional solutions but also design work involving complex design features requiring innovative solutions.

5. David Plummer & Associates, Inc.

- 1985 - 1988: Design Engineer - Responsibilities included plans preparation of urban and interstate roadway projects including pavement marking design, drainage, maintenance of traffic, computation books, and cost estimates.

PARTIAL LIST OF PROJECTS

INTERCHANGE DESIGN EXPERIENCE:

- S.R. 826 (Palmetto Expressway) Interchanges at Miller Drive, S.R. 874 and Bird Road, Miami-Dade County, FL - Project Engineer for approximately 2.2 miles of limited access mainline reconstruction, three interchange reconstructions, reconstruction of crossroads, and 11 bridge structures fully designed in metric units. One of the interchange designs consisted of a single point interchange; the first of its kind for the county. Client: FDOT District Six, Jason Chang, P.E., (305) 470-5331, 1996-2008.
- S.R. 826 (Palmetto Expressway) Interchange at N.W. 36 Street, Miami-Dade County, FL - Project included final design plans for approximately 1 mile of limited access mainline reconstruction, widening, and an interchange reconstruction. The interchange design consisted of two fly-over ramps and a total of four bridge structures. Client: FDOT District Six, (305) 470-5100.
- Palmetto Improvement Program (S.R. 826), Miami-Dade County, FL - As a design engineer for the Palmetto Improvement Program, work experience consisted of developing interchange design plans to an FDOT 30% level of completion. The 30% plans developed would then be utilized by various Section



Consultants selected by FDOT to complete the final plans. The interchanges designed included: S.W. 24th Street. (Coral Way), N.W. 74th Street, I-75, S.W. 56th Street, S.R. 874, and S.W. 40th Street.

- San Juan and Ponce Metropolitan Areas, Puerto Rico - Project consisted of the development of several major transportation corridor segments in the San Juan and Ponce metropolitan areas. The primary scope of work was to provide preliminary engineering plans consisting of roadway and interchange designs, including horizontal and vertical alignments, constructability, geotechnical issues, and staging. This was a fully metric project.

MAJOR ARTERIAL PROJECTS:

- SR 5/US 1/Overseas Highway from South of MacDonald Avenue to South of Coppitt Road, Monroe County, FL - Project Manager for the 3R Milling and resurfacing of approximately 5.213 miles located between Stock Island and Big Coppitt Key. This corridor is designated as an Urban Other Principal Arterial, with an Access Class 3 Classification between MP 0.000 and MP 5.077 and an Access Class 6 between MP 5.077 and MP 5.213. Design elements will include Engineering design, drainage, lighting, signalization, structures, traffic engineering, utility coordination, geotechnical, photogrammetry and public involvement. Client: FDOT District Six, Ali Toghiani, (305) 470-5343, 2012 - Present.
- S.R. 90/S.W. 8th Street from S.R. 821 (HEFT) to S.R. 826 (Palmetto Expressway), Miami-Dade County, FL - Project Manager for milling and resurfacing project that includes safety improvements, ADA upgrades, and additional safety upgrades at the intersections of S.W. 92nd Avenue, S.W. 102nd Avenue to S.W. 99th Place, and S.W. 109th Avenue. Scope of work includes upgrade provisions for Turbo Lanes at the intersection of S.W. 102nd Avenue. Design elements include roadway design, signing & pavement markings, drainage, maintenance of traffic, surveying and mapping, geotechnical, landscape architecture, bridge design, lighting, signalization and traffic engineering. Client: FDOT District Six, Ana Arvelo, P.E., (305) 470-5210, 2010-2014.
- S.R. 968/W. Flagler Street from NW/SW 14th Avenue to NW/SW 2nd Avenue, Miami-Dade County, FL - Project Manager overseeing roadway design, quality control, constructability reviews and surveying and mapping service elements for the reconstruction/resurfacing of SR 968/ West Flagler Street existing curb and gutter sections, including upgrading sidewalks and pedestrian cross-walks to ADA compliance, upgrading traffic signals, lighting and drainage system, intersection improvements and landscaping enhancement. Client: Gannett Fleming, Inc., Pablo Bielecki, P.E., (786) 846-9540, 2009-Present.
- North Roosevelt Boulevard (S.R. A1A), Monroe County, FL - Project Manager for the reconstruction of 2.5 miles of an urban roadway in Key West. Other improvements include drainage, signing and pavement marking, lighting, signalization and sea wall reconstruction. Client: FDOT District Six, Ali Toghiani, P.E. (305) 470-5343, 1999-2011.
- S.R. 5 (US-1) Yamato Road just south of Yamato Road to the C-15 Canal, Palm Beach County, FL - Project Manager for the 3R Milling and resurfacing project that includes the analysis of existing roadway conditions to extend the service life of the existing roadway, roadway slopes, geometry, clear zone, and strain poles and appropriate implemental and analyses. Services also include roadway design, drainage, signalization, maintenance of traffic, signing and pavement markings, utility coordination, surveying, landscaping, geotechnical, photogrammetry, and public involvement. Client: FDOT District Four, Leslie Wetherell, P.E., (954) 777-4438, 2006-2011.
- S.R. A1A (Ocean Drive) from south of Seacrest Parkway (MP 0.870) to Azalea Terrace (MP 2.011), Hallandale Beach, Broward County, FL - Project Manager for the RRR Milling and resurfacing of SR A1A from south of Seacrest Parkway (MP 0.870) to Azalea Terrace (MP 2.011). Services include roadway design, drainage, signalization, maintenance of traffic, signing and pavement markings, utility coordination, surveying, landscaping, geotechnical, photogrammetry, and public involvement. Client: FDOT District Four, Bing Wang, P.E., (954) 777-4406, 2006-2009.
- S.R. 820 Hollywood Boulevard, Broward County, FL - Project Manager for 3R major milling and resurfacing project from west of Presidential Circle to west of Hollywood Canal. Services included corridor upgrades to meet current 3R criteria. Design components include roadway design, drainage, signing and pavement markings, signalization, utility coordination, lighting, permit preparation, survey, geotechnical and landscaping. Client: FDOT District Four, Anson Sonnett, P.E., (954) 777-4474, 2003-2009.



EVELIO CHAVEZ, P.E., Vice President

- 41st Street Beautification Project, Miami-Dade County, FL - Project Manager for intersection reconstruction, median construction, bridge modifications for 41st Street from Alton Road to Collins Avenue. Services also included post design services at Biscayne Waterways and Indian Creek Bridge. Client: City of Miami Beach, Jose Garcia-Pedrosa, (305) 673-7010, 1996 - 2006.
- Wiles Road, Broward County, FL - Project Manager for the design of a new 4-lane divided roadway between S.R. 7 and Lyons Road in the City of Coconut Creek. Client: Broward County Engineering Division, William Fowler, P.E., (954) 577-4555, 1997-1999.
- U.S. 1 (S.R. 5), Miami-Dade County, FL - Project Manager for the reconstruction of U.S. 1 from a 2-lane to a 4-lane divided rural facility. Project limits extend for approximately 8 miles, from Card Sound Road to Mile Post 6.00. Client: FDOT District Six, (305) 470-5100, 1996 - 1998.
- S.R. 776, Charlotte County, FL - Project Manager for a 4-mile reconstruction of an urban and suburban 4-lane typical section.
- Florida Turnpike, Miami-Dade County, FL - Project Manager for the widening and ramp reconstruction of the Homestead Extension of Florida's Turnpike (HEFT) from Quail Roost Drive to S.R. 874, approximately 4 miles in length.
- Griffin Road East and West of S.R. 818, Broward County, FL - Project Manager of a 6-lane section of new construction from west of S.R. 817 to S.R. 7, approximately 4.3 miles in length.

OTHER RELATED EXPERIENCE:

- City of Miami Civil Engineering Services for Roadway Projects, Miami-Dade County, FL - Project Manager for Civil Engineering services to include complete planning, design, programming, pavement analysis, surveying, geotechnical, options evaluations, public meetings, detailed assessments and recommendations, cost estimation, opinions of probable construction costs, quality control reviews, field investigations, observations, post design services, construction administration and other related services as need to complete projects. Projects include roadway reconstruction or resurfacing, drainage improvements, swale restoration, curbs, gutters, sidewalks, lighting improvements, landscaping, signage and striping, verification of City's pavement analysis report within project area, surveying, geotechnical and utility locations. Client: City of Miami Capital Improvements, Alice Bravo, P.E., (305) 416-1207, 2008-Present.
 - Bayfront Park Baywalk Improvements, Miami-Dade County, FL - Project Manager for the demolition of portions of existing concrete walkways, excavation of new planters and preparation of the planters for large trees, large palms, and ground cover; all necessary topsoil and mulch; irrigation including reworking of existing systems; site furnishings including park benches and litter receptacles; and lighting systems including pole mounted fixtures and up lights. Services included complete site engineering to include paving, grading and drainage plans, ADA improvements, permitting and post design services. Client: City of Miami Capital Improvements, Hector Badia, (305) 416-1236.
 - Center Grove Street & Lighting Improvements, Miami-Dade County, FL - Civil roadway engineering services for the design of street improvements including repair of existing sidewalks, new sidewalks and ADA ramps; 1419-Parking and Surcharge 2007. Services included project management and engineering analysis services necessary for preparing a Civil Engineering Services for the project the area bounded by Bird Road to the north, SW 27th Avenue to the east, McDonald Street to the west, and Oak Avenue and Tigertail Avenue to the south. The project will include decorative lighting for all the streets within the project perimeter, perform a topographic survey and establish the existing right-of-way of the project area to generate plans for the lighting design of all the streets within the project area and utility coordination for project area. Client: City of Miami Capital Improvements, Hector Badia, (305) 416-1236.
 - Palm Grove Roadway Improvements, Miami-Dade County, FL - Services include engineering field services, project management assistance, engineering analysis, design services on an "as needed basis" for preparing roadway plans The project limits are bounded by N.E. 4th Court to the west, N.E. 79 Street to the north, N.E. 58 Street to the south, and Biscayne Boulevard to the east within the City of Miami. Services included engineering design, ADA improvements, surveying and mapping, landscape architecture, geotechnical, utility coordination and public involvement. Client: City of Miami Capital Improvements, Hector Badia, (305) 416-1236.



EVELIO CHAVEZ, P.E., Vice President

- N.E. 2nd Avenue Roadway & Drainage Improvements, Miami-Dade County, FL – This project is a part of the master continuing services agreement providing Civil Engineering Services for Roadway Projects and involves the milling and resurfacing of NE 2nd Court from NE 82nd Street to NE 84th Street. Services will include engineering design, environmental permitting, surveying and mapping, geotechnical, ADA improvements and utility coordination. Client: City of Miami Capital Improvements, Hector Badia, (305) 416-1236.
- FDOT General Consultant #1, Miami-Dade County, FL – QA/QC assisting FDOT with a districtwide range of engineering services in bringing to completion the production of numerous projects. Client: FDOT District Six, Teresa Alvarez, P.E, (305) 470-5400, 2002 – 2014.
- Districtwide Miscellaneous PE Design, Miami-Dade County, FL – Project Manager for the complete design of various task work order projects. Services included design, drainage analysis, design and right-of-way surveys, environmental services, field investigations, geotechnical, utility adjustment plans, signalization, structural, lighting and landscape plans for roadways, structures, minor bridge design, intersections, and interchanges. Client: FDOT District Six, Ana Arvelo, P.E., (305) 470-5210, 2006–2013.
 - S.W. 107th Avenue, Miami-Dade County, FL – Project Manager for milling and resurfacing of existing pavement, drainage design, lighting, signalization, surveying, utility coordination, landscaping and public coordination. The project also includes improvements associated with ADA requirements.
 - S.W. 57th Avenue from Coral Way to Tamiami Trail, Miami-Dade County, FL – Project Manager for milling and resurfacing from S.W. 8th Street to S.W. 24th Street including drainage analysis and improvements. Intersection at S.W. 8th Street & S.W. 24th Street improved to increase capacity. Services included: roadway design and right-of-way surveys, field investigations, utility adjustment plans, signalization, lighting, landscape plans and sidewalk and ADA upgrades.
 - Mile Marker 30 Scramble Lanes (Big Pine Key), Monroe County, FL – Project Manager for milling and resurfacing project including the addition of a paved median or two-way left turn lane to the existing two-lane and three-lane undivided roadway sections of SR 5/US 1/ Overseas Highway. Approximately one mile of improvements begin just south of the intersection of Ships Way and extend north to Key Deer Blvd.
- City of Sweetwater Improvements, Miami-Dade County, FL – Project Manager assisting the Department with improvements to the street system of the City of Sweetwater including milling and resurfacing, sidewalk replacement and ADA compliance. Design services include Roadway design, drainage, signing and pavement markings, signalization, lighting, landscaping and right-of-way. Client: FDOT District Six, Ana Arvelo, P.E., (305) 470-5210, 2005–2007.
- City of Miami General Engineering Consultant, Miami-Dade County, FL – Project Manager assisting with a city-wide range of engineering services to complete the production of numerous projects. Client: City of Miami Capital Improvements, David Mendez, P.E., (305) 416-1240, 2004–2006.
- FEMA-DORM Drainage, Miami-Dade County, FL - Project Manager assisting with the management of a \$380M Program for the replacement and upgrade of roadways and drainage systems at over 3,000 sites damaged during Hurricane Irene and the No-Name Storm. The repairs ranged from simple roadway resurfacing to full roadway reconstruction and drainage improvements. Client: Miami-Dade County DERM, Eduardo Vega, P.E, (786) 552-8571, 2004–2006.
- Districtwide Minor Design – Project Manager assisting the Department in preparing a set of contract plans to be used by a selected contractor that included project elements for roadway, signing and pavement markings, signalization, lighting, landscaping and right-of-way services for the Department. Services included design, drainage analysis, design and right-of-way survey. Client: FDOT District Four, Henry Oaikhena, P.E., (954) 777-4445, 1998–2000.
 - S.R. 15 from E. 1st Street to SR 700, Palm Beach County, FL - This 3R project consisted of milling and resurfacing, signalization improvements, upgrading corridor to ADA requirements, sidewalk reconstruction, and safety upgrades. The project also consisted in the evaluation study of a round-about design along SR 15 within the City of Pahokee, Florida. The study consisted in accommodating a round-about design to address the traffic movements along SR 15 where a 90 degree bent existed along the corridor and to address the other traffic movements with the other intersecting streets at the location in question. Project length was approximately 4.0 miles.



EVELIO CHAVEZ, P.E., Vice President

- S.R. 713/Kings Highway from S.R. 70/Okeechobee Road to CR607A/Angle Road, St. Lucie County, FL - This 3R project consisted of milling and resurfacing, shoulder reconstruction, and rebuilding the slope embankment for Canal No. 40 for a total project length of 4 miles.
- S.R. 615 from Virginia Avenue to Orange Avenue, St. Lucie County, FL - This 3R project consisted of milling and resurfacing, signalization improvements, upgrading corridor to ADA requirements, and sidewalk reconstruction. Project length was approximately 1.5 miles.



ROBERTO LEÓN, P.E., PMP, Principal and QA/QC

PROFESSIONAL LICENSES AND REGISTRATIONS

Professional Engineer
PUERTO RICO
License Number: 16949

FLORIDA
License Number: 73680

MARYLAND
License Number: 42480

WASHINGTON, DC
License Number: 906731

CERTIFICATIONS

Project Management
Professional (PMP) 1495575

LEED 10274020-AP-BD+C

EDUCATION

Bachelor of Science
Environmental Engineering
Cornell University, Ithaca, NY
Year Earned: 1996

Master of Science
Environmental & Water Quality
Massachusetts Institute
Technology
Year Earned: 1997

Construction Industry Institute –
University of Texas at Austin
Executive Leadership Course,
2006

TECHNICAL EXPERTISE

Mr. León has spent over 16 years working in the environmental, engineering, architectural, program management and construction industry in the private and government sector. His experience includes projects in the water and wastewater, energy, environmental, transportation and buildings sectors in Puerto Rico, United States and Latin America. Currently, serving as Senior Vice President of Operations of CSA Group, for which he was worked for 16+ years. CSA Group is the largest Hispanic A/E firm in the United States with offices in Puerto Rico, Florida, New York, Pennsylvania, Washington, DC, Haiti, Panama and Peru. They provide services in the Building and Infrastructure Market Sectors.

RELEVANT EXPERIENCE

1. CSA Group, Puerto Rico

- Puerto Rico Water Capital Improvement Program. CSA was the East Region Program Manager for the Puerto Rico Aqueducts and Sewer Authority's Capital Improvement Program. Efforts included the planning and development of the Capital Improvement Plan for the region, conceptual designs, design management, environmental permitting, land acquisition, construction management, and facility start-up services, among others. The Program identified over 140 projects for the region, including two reservoirs. CSA also rendered operations and maintenance services to both filtration and wastewater treatment plants. An evaluation and modernization of PRASA's systems was executed by the Geographic Information System group. Mr. León is the Principal in Charge for this Program and Senior Environmental Engineer.
- Santa Isabel Wind Farm Project. The Santa Isabel Wind Farm Project is the first wind farm project to be built in Puerto Rico on an industrial scale. CSA worked with the client to evaluate the feasibility of building a wind farm in Puerto Rico, installing meteorological towers in several municipalities, conducting environmental studies, and prepared the Environmental Impact Statement and the basis of Design. The project site is approximately 3,709 acres. The project scope includes the installation of up to 65 wind turbine generators (WTG) of 2.3 MW and to be constructed in phases. The initial construction phase design delivers up to 75 MW of electric power to the Puerto Rico Electric Power Authority (PREPA's) transmission grid under a Power Purchase Agreement. Construction of WTGs at all 65 locations will be staged depending on the specific power demands. Following construction, the permanent components will occupy an approximately 20 acres including: WTG foundations, WTGs, access roads, a power collection system, a 115 KV transmission line, an electrical substation, a switchyard, an operations and maintenance building, and meteorological towers. Mr. León is the Principal in Charge and Senior Environmental Engineer.
- Puerto Rico Convention Center District, Puerto Rico. This project represents an estimated cost of \$1.3 billion from a combination of public and private investments. CSA has provided the management of architecture and engineering design of the District infrastructure (including a park system) with a total installed cost of \$78 million, procurement of all environmental permits/endorsements and preparation of all required environmental documents (including EIS, Siting Consultation, Phase I studies, archaeological studies, among others), construction supervision and general technical consulting to the Owner. Also responsible for the coordination between various sub-consultants that dealt with the overall development of the private parcels. In addition, CSA prepared design guidelines for future private developments within the District. Mr. León was the Environmental Engineering and Project Manager for the development of the Puerto Rico Convention Center District.
- Arecibo Resource Recovery Facility. CSA is the lead environmental and engineering consultant to Puerto Rico's first Waste - To Energy (WTE) project estimated at \$500M. This project allows Puerto Rico to diversify energy production and address the waste management crisis currently impacting economic development. The facility will be located in an abandoned brownfield site in Arecibo that was formerly a paper mill/ manufacturing plant. The new facility will process approximately 2,100 tons per day of municipal solid waste, producing approximately 80MW of renewable energy and recovering approximately



ROBERTO LEÓN, P.E., PMP, Principal and QA/QC

AWARDS

Distinguished Engineer of the Year (2009) San Juan Chapter of the Colegio de Ingenieros y Agrimensores de Puerto Rico

Outstanding Young Professional (2008) Puerto Rico Water Environment Federation

“Lideres Emergentes En La Ingeniería Civil < 40 Años” (2006)

Presidential Gold Award (2005), CSA Architects and Engineers

Puerto Rico Industrial Development Corporation Scholarship for Graduate Studies (1997)

MIT Fellowship for Graduate Studies (1997)

AFFILIATIONS

Puerto Rico Society of Professional Engineers (PR SPE)

Puerto Rico Water and Environment Association (PRWEA)

Water Environment Federation (WEF)

Cornell and MIT Alumni Associations

Asociación Interamericana de Ingeniería Sanitaria y Ciencias del Ambiente (AIDIS)

College of Engineers and Surveyors of Puerto Rico (CIAPR)
Cornell Society of Engineers

280 tons of recyclable ferrous and non-ferrous material. CSA prepared the Environmental Impact Statement (EIS) and permitting on an expedited schedule. The approved EIS included fourteen (14) technical and scientific studies. Mr. León is the Principal in Charge for this Project and Senior Environmental Engineer responsible for the project.

- PR-66. PR-66 connects expressway PR-53 and Expressway PR-26 to create a non-stop roadway from San Juan to the eastern part of Puerto Rico. CSA designed the 8 km second phase of the project which includes nineteen bridges along the toll road. This expressway will have four lanes with provisions for future expansion to six lanes. Due to the proximity of El Yunque National forest, the environmental aspects of the project are extremely stringent. The estimated construction cost is \$180 M and an additional \$50M for land acquisitions. The toll plaza located in the center of the project that will include four high speed toll lanes and eight coin change lanes. Mr. León was the Principal in Charge for this Project and Senior Environmental Engineer.
- North Coast Aqueduct- This Aqueduct system was designed to transport 100 million gallons a day (MGD) of potable water from the center of the island to the 15 municipalities along the North coast and to the eastern part of San Juan. CSA conducted the project Feasibility Study, prepared the Environmental Impact Statement and associated environmental studies, and developed the hydraulic model of the pipeline and the interconnections. Additionally, as an extension of the environmental studies, CSA was contracted to monitor water quality and environmental conditions over a three-year (12/96 to 06/00) period in the estuarine reaches of the Río Grande de Arecibo; and to prepare a Watershed Management Plan and Optimization Study.
- San Miguel Four Seasons Resort, Luquillo, Puerto Rico. Senior Environmental Engineer and Project Manager for the environmental studies of the San Miguel Resorts Four Seasons Project in Luquillo, Puerto Rico. The project consists in the development of a 250 unit five-star hotel, 1,150 units of villas, timeshares and residential units, 27-hole golf course, secondary wastewater treatment plant, educational research center, among others, on a 1,300-acre parcel with a total estimated investment of \$579 million. Responsible for the overall coordination and execution of all environmental studies. Activities include the development of an EIS, Siting Consultation, Section 404 Permit, agency endorsements, more than 15 biological and environmental field studies, among others.
- Valenciano Dam and Reservoir. Principal in Charge for the construction of a new dam and reservoir along the Rio Valenciano, which would inundate approximately 554 acres. The Valenciano reservoir would have a drainage area of approximately 14.5 square miles; its maximum storage volume available would be approximately 20,000 acre-feet and yield an average of 14.4 million gallons per day (mgd), with a maximum yield of 21.6 mgd. Mr. León was the Principal in Charge for this Project and Senior Environmental Engineer.
- San Lorenzo Wastewater Treatment Plant Waste Load Allocation Studies. Participated in the applicable studies and was the project coordinator for the development of a waste load allocation study for the San Lorenzo Wastewater Treatment Plant. Activities included the preparation, calibration and modeling of the WWTP discharge to a river to determine possible impacts of a proposed water extraction upstream. The Multi-SMP model was used as the basis for this analysis.
- PRASA Water Supply Analysis. Evaluation of water supply sources, water quality studies, water management, watershed management and water treatment technologies and/or alternatives for Puerto Rico. Mr. León participated in the applicable water quality studies, its' subsequent analysis, report preparation and recommendations.
- Northwest Region Water Distribution System Hydraulic Modeling. Distribution and transmission system modeling of the Northwest Region of Puerto Rico (Aguada, Aguadilla, Isabela, Moca and Rincón) as well as



ROBERTO LEÓN, P.E., PMP, Principal and QA/QC

PROFESSIONAL AFFILIATIONS

Colegio de Ingenieros y Agrimensores de Puerto Rico
(San Juan Chapter: Director 2005-2008, Vice-President 2002-2004; Auditor 2001-2002; Treasurer 1999-2001)

Colegio de Ingenieros y Agrimensores de Puerto Rico,
Environmental Affairs
Commission (President 2005-2006, Vice-President 2004-2005, President of Permits Subcommission 2004-2005)

Colegio de Ingenieros y Agrimensores de Puerto Rico,
Treasurer Mega Fiesta 2001 & 2002

Treasurer, CIAPR Annual Golf Tournament, 2002

Treasurer, San Juan Chapter Golf Tournament 2005

Puerto Rico National Society of Professional Engineers (PR-NSPE, Director 2003-2005)

Puerto Rico Water and Environment Association (PRWEA)

Water Environment Federation (WEF)

Cornell and MIT Alumni Associations

for the systems of the municipalities of Arecibo and Caguas utilizing various modeling packages (CYBERNET, WaterCAD, Microstation, EPANET and LYNX). Mr. León participated in the data gathering (in-house and field), digitalization of pipe networks, water demand analysis and allocation, management and coordination of fieldwork, database management, model calibration and water system modeling.

- **Water & Wastewater Master Plan Development.** Project Manager for the development of an inventory of all water and wastewater infrastructure of Puerto Rico. The project consisted of an inventory developed in the ArcGIS environment that will increase the functionality of the information as well as provide a necessary tool for the operation of the system. Activities in the project included the acquisition and evaluation of numerous design drawings, scanning, georeferencing and digitalization of relevant information, preparation of a robust database structure and data input of required information. Inventory data was evaluated quality checked with the modeling software H2O Map and DHI Mouse to assure its usefulness for future activities.
- **Fajardo Regional Sanitary System.** Facilities planning, conceptual design, preparation and review of EIS, participated in the development of a noise study, and a plant siting study using GIS techniques for the design of the Fajardo Regional Sanitary System.
- **Northwest Regional Aqueduct.** Environmental Engineer for the Northwest Regional Aqueduct System, which provides additional water supply, treatment, and distribution facilities to this region. The project design included construction of the 19 mgd Culebrinas Pump Station, and installation of 29.3 km pipeline to the Aguadilla Water Treatment Plant (WTP); modernization of the Aguadilla WTP, enhancing its capacity to 18 mgd, a 20 mgd regional water treatment plant that will use Lake Guajataca as the source of supply with a 42" pipeline and; improvements to the distribution system, including the construction of approximately 25 additional storage tanks in the region.
- **Southwest Water Supply Feasibility Study.** Environmental Consultant for the feasibility study to maximize the utilization of available raw water in the southwest region of Puerto Rico and meet the conflicting demands of domestic and agricultural supply needs. The region is composed of two major non-contiguous supply systems; the Coamo-Santa Isabel System and the Lajas Valley Irrigation System. CSA's scope of work includes the evaluation of both systems identifying potential sources and alternatives to increase the water supply in the region, and provide the corresponding engineering recommendations and costs estimates.
- **301(h) Waiver Program.** To support final waiver decisions and incorporate them into new National Pollutant Discharge Elimination System (NPDES) discharge permits, CSA was contracted to assist PRASA and AFI with the quarterly 301(h) monitoring studies required by EPA. Extensive 301(h) field-monitoring studies were implemented at each of the plants and quarterly progress reports produced to support the 301(h) waiver demonstrations. Before granting new NPDES permits, EPA requires EQB to concur that the discharges will meet all water quality standards. This effort required modeling potential discharge effects on receiving water quality, submitting a mixing zone application to EQB, and obtaining a Water Quality Certificate (WQC) and Interim Mixing Zone (IMZ) for EPA to incorporate into the NPDES permit. The models are then validated with actual field data. To date, all but the Aguadilla Regional Plant have been granted 301(h) waivers.
- **Port of the Americas.** The project is designed to provide world-class deep-draft port facilities for container ships and for the transshipment of cargo containers for the international and local markets. Mr. León participated in the local and federal EIS documents for the PR Environmental Quality Board and US Army Corps of Engineers (USACE); Site Consultation for the PR Planning Board; and a Joint Permit Application for the PR Department of Natural Resources and the USACE.
- **Hacienda San José.** Residential development with approximately 1,700 units constructed on 362 acres of



ROBERTO LEÓN, P.E., PMP, Principal and QA/QC

land in the Municipality of Caguas. The site plan was tailored to the particular topography, soils, waterways and natural vegetation of the site. The goal of the development plan was to reduce potential impact to the earth crust and minimizes the removal of vegetation. Mr. León participated in the water supply analysis; water well development investigations, and procurement of various environmental permits/endorsements.

- Campo Sur Regional Landfill Environmental Impact Statement, Salinas, PR. Environmental Engineer for the proposed Campo Sur Regional landfill in the southern part of Puerto Rico. Activities included the preparation of a landfill leachate generation study (utilizing the model HELP) that estimated leachate production rates for the proposed landfill. Also assisted in the review and analysis of a sedimentation study, drafting of responses to comments from EIS reviewers and editing/drafting of Supplemental P-EIS documents.
- Solid Waste Studies. Environmental Engineer for various solid waste management projects. Participated in various leachate generation studies for municipal landfills, landfill capacity studies as well as siting studies for a proposed waste to energy plant in Puerto Rico.
- Guajataca Canal and Reservoir Studies, Puerto Rico. Environmental Engineer for various studies leading to the design of improvements to the Isabela Irrigation System Canals and Guajataca Reservoir in the Northwest area of Puerto Rico. Among these studies was the development of a simulation model to estimate the safe yield of the Guajataca Reservoir. Activities included QA/QC processes, validation of model structure and report generation.
- PREPA Guajataca Canal Rehabilitation, Puerto Rico. Environmental Engineer for field inspections and reports associated to an environmental evaluation and rehabilitation assessment for the Isabela Irrigation System Canals (Diversion, Principal-Aguadilla and Moca Canal) in the Northwest area of Puerto Rico. Activities included: coordination of fieldwork (logistics, equipment purchase), field inspections and drafting of report analyzing findings.
- Guajataca Canal Flow Monitoring Project, Puerto Rico. Lead Engineer responsible for performing a statistical analysis (utilizing SigmaPlot software) of 15 minute flow measurements obtained from 22 stations in the Isabela Irrigation System for a period of one year. The study also included a hydrologic/hydraulic analysis of open channel flow intended to assess the water losses in the system and render suggestions regarding the canal system operation and control. Activities included: monthly progress reports, quarterly data reports, client billing, client training on equipment, hydraulic analysis of open channel flow (Flowmaster software), development of rating curves for the stations and project management.
- Value Added Zones-Port of the Americas. Project Manager for consulting services provided to PRIDCO in relation to the development of various industrial parks related to the value added zones of the Port of the Americas. Activities included providing assistance to PRIDCO on matters pertaining to the establishment of a Public-Private partnership as well as development issues of an industrial park.
- CORCO Phase II Site Assessment. Environmental Engineer for a Phase II Environmental Site Assessment of the former Commonwealth Oil Refining Company (CORCO). CORCO is a 500-acre property currently used as petroleum products bulk storage terminal. Responsible for the organization of all laboratory analysis in an MS Access database, result interpretation and report writing.

Publications and Presentations

- "León, Roberto and Paul Craig, "Preliminary Hydrodynamic and Water Quality Modeling of the Río Grande de Arecibo Estuary," Puerto Rico Water & Wastewater Research Institute, February 2001 "
- Canino, Godofredo, León, Roberto and Ferdinand Quiñones, "HELP Parameters and Mass Balance for



ROBERTO LEÓN, P.E., PMP, Principal and QA/QC

Leachate Lagoon in a Proposed Regional Sanitary Landfill,” Colegio de Ingenieros y Agrimensores de PR, Revista Dimensión, May 1999.

- Canino, Godofredo, León, Roberto and Ferdinand Quiñones, “Utilization of a Mass-Balance Simulation Model for the Optimization of the Operation of Guajataca Reservoir, Puerto Rico,” AWRA, International Symposium of Tropical Hydrology, July 1998.
- León, Roberto, “Post-Closure Management of a Hazardous Waste Landfill at the Massachusetts Military Reservation Main Base Landfill,” MIT Master of Engineering Thesis Report, 1997.



RAYMOND VALENTÍN, Health and Safety Specialist

PROFESSIONAL EDUCATION

MS in Environmental, Health, Industrial Hygiene & Safety, Medical Sciences, University of Puerto Rico. 1984

BS in Biology and Chemistry, University of Puerto Rico. 1979

AFFILIATIONS

Hazard Control Mgt Board

Environmental, H&S Auditors Certifications Board

American Society of Industrial Hygiene

American Conference of Gov. Industrial Hygienist

American Society of Safety Engineers

CERTIFICATIONS

OSHA AUTHORIZED TRAINER FOR GENERAL INDUSTRY # 125 01-2011.

Transportation of Hazardous Materials Training. 10/2010

Certified Hazard Control Manager

Certified Professional Environmental Auditor, Health & Safety # 704, Board of Environmental, Health and Safety Environmental Auditors

OSHA Outreach Trainer for the General Industry

LANGUAGES

English
Spanish

YEARS EXPERIENCE

28

TECHNICAL EXPERTISE

Mr. Valentín has over 28 years of experience in proactive & innovative safety management for pharma, chemical, electronics manufacturing & construction industries. Well versed in OSHA, OSHO, NFPA, FM, ANSI, ACGIH, GMP, Six Sigma, and OEP Standards and procedures, he offers safety professional seminars for universities, and public and professional groups. Mr. Valentín expertise also covers, ergonomics, industrial hygiene, process safety management, budget administration, personnel training and supervision, construction contractors safety, safety promotion & job safety analysis. He was invited by PROSHA as speaker in the PR Occupational Injuries and Illnesses Conference held on Dec. 11-13, 2011. In two years, he achieved around 15 safety recognitions in construction projects from PROSHA with the Puerto Rico Finance Infrastructure Authority and two with Puerto Rico Aqueducts and Sewers Authority (PRASA).

RELEVANT EXPERIENCE

1. CSA Group, Inc.

- *Puerto Rico Rapid Transit System and Dynamic Toll Lane Project* – Mr. Valentín provides occupational safety and health audit and consultation services for the project in five of its seven construction phases. The project is part of the PR Highways and Roads Authority buses rapid transit system in PR north coast. Under Mr. Valentín's supervision, CSA performed construction safety audits for four construction companies under contract with the agency. The project has a 76 million budget and a total of around 200 employees. The project is in schedule for its full operation on September 2012.
- *Puerto Rico Water Capital Improvement Program (CIP)*, PRASA - CSA is the East Region Program Manager for PRASA's CIP. Efforts include the planning and development of the Capital Improvement Plan for the region, conceptual designs, design management, environmental permitting, land acquisition, construction management, & facility start-up services, among others. The Program has identified over 140 projects for the region, including two reservoirs. Also, CSA has rendered operations and maintenance services to both filtration and wastewater treatment plants. Mr. Valentín's responsibilities included construction safety and health strategies and verifying general contractors compliance with OSHA regulations as required by PRASA general conditions contract. He provided safety and health support in the water plants operations and maintenance. Mr. Valentín also had the following responsibilities:
 - Provide support to CSA Group Construction managers, verifying general contractors compliance as required in the PRASA general conditions contract and general contractors safety programs, and submit recommendations.
 - Perform field safety visits to construction projects to verify general contractors occupational safety and health compliance.
 - Provide safety support to OMI Caribe in water plants operations thru safety program development like emergency planning and response, confined spaces programs, personal protective equipment, lock out tag out, hazard communication, biological hazards, machine guarding, perform water plants safety observations, perform safety and health trainings, assist in occupational accidents investigations, make occupational safety and health recommendations.
 - Evaluate industrial hygiene plans/strategies (i.e. asbestos, lead abatement plans)
 - Supervise two safety field auditors.
 - Prepare safety visits reports, monthly reports and general contractors safety performance reports.
 - Maintain periodic communication and develop strategies with OCIP Manager to minimize insurance claims from general contractors and third parties.
 - Conduct construction safety training for CSA Group Construction Unit personnel.
 - Provide support to other CSA Group departments in terms of general and construction safety regulations and standards.
 - Make recommendations regarding loss prevention strategies as applicable.
 - Provide support to CSA Group offices in North America and international.



RAYMOND VALENTÍN, Health and Safety Specialist

- *Puerto Rico Water & Wastewater Infrastructure Program*, Puerto Rico Infrastructure and Financing Authority (AFI, by its Spanish acronym) - CSA was the Program Manager overseeing design and construction of a \$1.8 billion program for improvements to the island's water and wastewater infrastructure. The program begun in March 1998 is designed to alleviate a crisis situation in the island's water supply and wastewater systems resulting from deteriorating infrastructure. Mr. Valentín's responsibilities included the safety and occupational health strategies, consisting of:
 - Employees' safety program implementation and follow up construction companies in their safety compliance on projects as required by the program contracts and OSHA regulations.
 - Support to project engineers, evaluating safety programs and plans submitted by construction companies. Perform field safety visits to projects to verify general contractor safety & health compliance.
 - Safety support activities in construction for other organizations performing construction management under AFI contracts.
 - Evaluating industrial hygiene plans/strategies (i.e. asbestos, lead abatement plans).
 - Supervision of three health & safety coordinators.
 - Safety Director in construction projects coordination & other related government agencies. Prepare/revise safety visits reports, monthly reports & regulatory codes. Communication with insurance companies & the client.
- *Puerto Rico North Coast Aqueduct*, PRASA - The North Coast Superaqueduct was designed to transport 100 million gallons a day (MGD) of potable water from the center of the island (Río Grande de Arcibo) to 250,000 families in the 15 municipalities along the North coast and to eastern part of San Juan. The new aqueduct's primary components include a 300-million gallon raw water reservoir, a 100 MGD pumping station with a 72" pipeline, a 100 MGD water treatment plant, two 10-million-gallon treated water storage tanks, and approximately 57.5 kilometers of a 72-inch diameter pre-stressed concrete cylinder pipe (PCCP), 10.1 kilometers of a 36-inch diameter PCCP, and 3.6 kilometers of a 48-inch diameter PCCP water pipelines. CSA conducted the project's Feasibility Study, prepared the Environmental Impact Statement and its required environmental studies, and developed the hydraulic model of the pipeline and the interconnections along the alignment. CSA GROUP is the new administrator of the Puerto Rico North Coast Superaqueduct and its water filtration plant as part of the responsibilities is to assure that the plant operator is in compliance with OSHA and PROSHA regulations. Mr. Valentín was responsible for assisting the Superaqueduct filtration plant operator to update its safety and health program through internal audits, safety program revision, documents update and preparation, developing and delivering regulatory trainings for plant personnel, updating the documents and performing safety evaluation for chlorine process.
- *Schools Modernization Program*, Puerto Rico Department of Education (PRDE) - The project consisted of verifying the remodeling works progress in PR public schools during the summer of 2011. Mr. Valentín was responsible for supervising the work of seven auditors.
- *ARRA Weatherization Assistance Program (WAP)*, AFI - Under the United States Department of Energy (DOE), it was required the assistance to low income families and individuals to reduce energy consumption and residential energy costs through procurement of equipment and weatherization of homes. In partnership with AFI, CSA Group provided program management and technology services for the overall program. Mr. Valentín prepared and delivered construction safety trainings for contractors, inspectors and auditors during the project.
- *Puerto Rico Islandwide Water and Wastewater Infrastructure Program*, AFI - CSA Group worked with AFI as Program Manager overseeing design and construction of a \$2.1 billion program for improvements to the island's water and wastewater infrastructure. The program was designed to alleviate a crisis situation in the island's water supply and wastewater systems resulting from deteriorating infrastructure. The program encompasses four major components: Strategic Projects, Environmental Compliance, Immediate Action Improvement Projects, and Technical Support to the Puerto Rico Aqueduct and Sewer Authority. Mr. Valentín was responsible for:



RAYMOND VALENTÍN, Health and Safety Specialist

- Implementing a safety program for the employees of the consortium formed by the engineering companies of CSA Architects & Engineers/CH2M Hill/CSA Group and to follow up construction companies in their safety compliance on projects as required by the program contracts and OSHA regulations. The projects included 11 major strategic projects and around 700 small projects for a total investment of \$1.8 billion.
- Providing support to Project Engineers, evaluating safety programs and plans submitted by construction companies. Perform field safety visits to projects to verify general contractor safety and health compliance for the construction industry.
- Safety support activities in construction for other organizations performing construction management under AFI contracts.
- Evaluating industrial hygiene plans and strategies as required, like asbestos or lead abatement plans. Responsible for promoting safety among employees.
- The supervision of three health & safety coordinators.
- Acting as Safety Director in construction projects coordination and related government agencies. He prepared and revised safety visits reports, monthly reports, and regulatory codes, and maintained communication with Insurance companies and the client.

Directing CSA GROUP Health & Safety Auditing Program, Mr. Valentín:

- Performed HS auditing for manufacturing and construction projects for companies like R.J Reynolds manufacturing operations in Puerto Rico. The audit included safety and industrial hygiene operations.
- Performed HS auditing for Pfizer Barceloneta operations capital construction projects.
- Performed HS auditing for PRASA at 4 water treatment plants, including raw water and waste water plants.

2. Motorola de Puerto Rico

For this company, Mr. Valentín held the position of Safety and Industrial Hygiene Manager, with the following responsibilities and achievements:

- Organization of the safety and industrial hygiene department.
- Recognized for achieving accident frequency reduction in 1993 by the Puerto Rico Manufacturers Association.
- Recognized in two opportunities by the PR Traffic Safety Commission for achieving 70% plus in the use of the safety belt in a population of 3000 employees
- Avoided cost increments in the manufacturing operation and benefits plan for accident reduction (\$250,000) in the second year, with engineering industrial hygiene controls, training and administrative controls.
- Acted as mentor in three teams in a three-year period in the Motorola Total Customer Satisfaction TCS competition with safety and industrial hygiene projects for total savings of around \$500,000.00.
- Recognized for the achievements obtained in the Ergonomic program. The third year of the program, 600 lost workdays were avoided due to ergonomic related conditions.
- Selected to participate as Motorola EHS auditor in national and international corporate audits for Motorola sites worldwide.
- Praised for the results of the 1993 Corporate EHS audit, received \$1,000.00 bonus recognition.
- Developed and implemented the industrial hygiene program. Designed and implemented the airborne lead baseline compliance and controls strategy.
- Participated in community activities providing safety talks in local schools.
- Received no safety observations in surprise OSHA visits/inspections during a five-year period.
- Monitored and audited the Construction Contractors Safety Programs.
- Provided day-by-day support to the Occupational Physician and Nurses in terms of recording and record keeping of occupational injuries and illnesses.
- Improved the fire prevention system with the installation of new fire alarm and detection system for the whole site.



RAYMOND VALENTÍN, Health and Safety Specialist

3. Bristol Myers Barceloneta, Inc.

Mr. Valentín held the position of Safety and Industrial Hygiene Manager for this pharmaceutical, with the following goals and achievements:

- Achieved a reduction in recordable accidents with a rate lower than 1 for accidents with lost workdays in the second year in a pharmaceutical facility with three chemical bulk plants, two pharmaceutical production buildings, a tank farm and support areas.
- Tripled the head count of the department, two for industrial hygiene officers and one for safety officer.
- Developed or reorganized the safety Inspections Program, the Industrial Hygiene Programs, and the Fire Prevention Program, including the fire brigade.
- From Safety Coordinator was promoted to Safety Manager.
- Received no OSHA observations were received in five surprise visits by the agency.
- Responsible for all Construction and Support Contractors Safety Program including the construction of a Non-Lactam chemical plant with an investment value of 40 millions.
- Had active participation in the start up of the Non Lactam chemical plant in 1990-1991, including areas of process safety management.
- Cost avoidance of around \$ 1,000,000.00 by preventive safety and industrial hygiene activities.
- Coordinated educational safety training activities with vocational schools of the Manatí area.
- Participated in coordination with the North Zone Safety Committee an 8-hour emergency response training for the Puerto Rico Fire Department district officers.
- Recognized by the corporate division for the achievements obtained in the industrial hygiene controls for ethylene oxide, a highly toxic sterilizing material.
- Recognized by Factory Mutual Insurance with no fire prevention observations in a two-year period.
- Developed an industrial hygiene strategic sampling plan for all manufacturing and support areas.
- Performed the Process Safety Assessment for two chemical plants and one distillation tower.

4. Puerto Rico Department of Labor, OSHA

For this agency, Mr. Valentín:

- Performed complex and technical inspections in accordance with the Puerto Rico Safety and Health Act and the 29 CFR 1910.
- Was recognized by the Accidents Prevention Association as Inspector of the Year for 1987.
- Was responsible for conducting industrial hygiene evaluations according with OSHA, NIOSH, and field manuals guidelines.

5. Park Davies Pharmaceuticals

As Job Safety and Analysis Coordinator for this company, Mr. Valentín performed the following responsibilities:

- Developed and implemented a job safety analysis program for the pharmaceuticals manufacturing operations.
- Designed and provided training to managers, supervisors and employees.
- Identified opportunity areas and initiate projects to improve safety conditions in a pharmaceuticals manufacturing operation in coordination with manufacturing, engineering, equipment maintenance and outside suppliers.
- Coordinated with different departments small and big impact projects to control safety hazards.
- Make recommendations for the acquisition of new equipment, room machines and installations modifications, upgrade of current installations.
- Make progress reports of the achievements.



DAVID R. ROSA, Sr. Environmental Scientist / Discipline Manager

EDUCATION

B.S. Natural Science - Biology
University of Sagrado Corazon,
San Juan, PR

Turner School of Construction
Management Training Course,
2011

QUALIFICATIONS

Certified FL Stormwater Erosion
and Sedimentation Control
Inspector

USACE Qualified Environmental
Monitor

ASHTON Biodiversity Gopher
Tortoise Survey Certification

USACE Wetland Delineation
Training

FL Statewide Wetland
Delineation Training

UMAM Wetlands and Seagrass
Training - SFWMD

2012 Annual Environmental
Permitting School

PROFESSIONAL LICENSES AND REGISTRATIONS

Certified FL Stormwater Erosion
and Sedimentation Control
Inspector (#19226), Certified
Dive Master (PADI, DM-
158862), and Ocean
Conservancy Certified RECON
Diver (RD-WC-02-00100).

YEARS EXPERIENCE

+17

TECHNICAL EXPERTISE

David R. Rosa has 17 years of experience in the environmental field including permitting, environmental impact studies, wetland delineations and wildlife studies. David serves as Environmental Discipline Manager / Sr. Environmental Scientist on large scale public and private sector projects. Furthermore, he has worked as a Director of Environmental Operations, Permit Coordinator and resident scientist for several infrastructure projects. He possesses vast experience in studies and evaluations of the environmental effects on the human and natural environment by transportation systems. His experience also involves assisting in the evaluation of alternate transportation corridors, and location/design alternatives within viable sites. Experience includes preparation and assistance in technical studies to address engineering feasibility of alternatives, environmental reports and documents which evaluate the physical, natural, and human impacts of the alternatives, public involvement and interagency coordination, and mitigations. He has managed, coordinated and conducted ESAs Phase 1, surveys for threatened and endangered species, recommending mitigation measures, monitoring selected populations, and developing conservation / protection measures during the planning phase of several projects. His experience also includes stormwater pollution prevention plan preparation, ESBARs, WERs, CSERs, habitat mapping, environmental compliance inspections, alternatives analysis, cumulative impact analysis, impact determination and NEPA, among others. Furthermore, his experience includes Avian & Bat Fatality Monitoring Plan preparation and implementation for wind projects. Also, frequently provides advice, guidance, and information as a member of an interdisciplinary team.

RELEVANT EXPERIENCE

Regulatory Compliance & Regulatory Coordination Services, Muniz Air National Guard Base In Support of Federal Prime Contract W912DR-12-D-00, PR - Project consists in Data gap investigation and implement corrective measures field activities at the MANGB located in Carolina, Puerto Rico. Environmental manager responsible for the coordination and support during regulatory meetings; provide support during data gap investigation and for corrective measures implementation work plans; permit application packages preparation; and agency coordination, among others.

Environmental Permitting & Mitigation - Grand Cayman Resort Expansion Project, The Ritz Carlton Grand Cayman Resort, Seven Mile Beach, Grand Cayman Island. The proposed project involves expanding the existing development which includes: new beaches, waterways, stilt huts and boardwalks construction over coastal waters. Sr. Environmental Scientist responsible for the development and preparation of a mitigation strategy related to submerged aquatic vegetation to be impacted by the proposed project. Also duties included the preparation of general best management practices and environmental guidance to minimize impacts to marine ecosystems.

SR-710 Project Development & Environment Study, FDOT, Palm Beach & Martin Counties, FL - This project involves conducting a PD&E study for the widening of SR 710 for a total length of 25 miles. Sr. Environmental Scientist responsible for preparation of environmental support documents associated to PD&E/NEPA process including Wetland Study Report and Endangered Species Biological Assessment Report and conducting technical reviews of all environmental documents. Duties also include support during the preparation of the Contamination Screening Evaluation Report (CSER), and assessed effects on natural resources, public lands, erosion and sedimentation, freshwater wetland communities, wildlife habitat and migration. Also conducted a wildlife monitoring study to determine potential locations for wildlife crossing. In addition assist in technical studies to address engineering feasibility of alternatives, environmental reports and public involvement and interagency coordination.

Environmental Compliance Support Services, Palm Beach Department of Airports, FL - Environmental inspections at Palm Beach International Airport, F45 Airpot, Lantana Airport, and Pahokee Airport, managed by Palm Beach Department of Airports (PBDOA). The purpose of the environmental compliance support services was to help PBDOA maintain compliance with Multi Sector General Permit (MSGP) under the US Environmental Protection Agency (EPA) / FL Department of Airport. Environmental Manager responsible for completing the environmental inspections within airports facility including fuel farms, report findings and all work products. Responsibilities included updates to Stormwater Pollution Prevention Plans (SWPPP) associated to MSGP for all four (4) Palm Beach airports, presentation preparation and annual trainings as per MSGP requirements.



DAVID R. ROSA, Sr. Environmental Scientist / Discipline Manager

SCIENTIFIC ORGANIZATIONS & MEMBERSHIPS

Florida Association of Environmental Professionals

South Florida Associations of Environmental Professionals

National Association of Environmental Professionals

Society of Wetland Scientists

The Wildlife Society

Renewable Energy Group

AWARDS & ACHIEVEMENTS

CSA Group, Inc. Silver Award (2007); CSA Group, Inc. Bronze Award (2004)

Runway Expansion to the Fort Lauderdale – Hollywood International Airport (FLL), Broward County Aviation Department, Broward County, FL - This project involves design and construction via Design-Build Method of the structures that will carry Runway 9R-27L and the parallel Taxiway over US-1, FEC RR and the Airport's East Perimeter Road. Project Manager/Sr. Environmental Scientist responsible for the day to day operations of this project and directly responsible for managing and completing all work products. Specific responsibilities include preparation of permit applications/modification for SFWMD, USACE permits, Broward County ERL / SWM, Broward County Tree Licenses, Dewatering permits, NPDES-Generic Permits, among others. Duties also include delineation of additional wetland areas, constamination screenings and review for dewatering permits, tree surveys and provide environmental support and SWPPP compliance advice to the design-build team during construction operations.

Cleveland Clinic, NICI Building, Florida – Project Involves the expansion of its existing medical building which consist in the addition of a new Neurology Institute & Cancer Institute Clinic (NICI) covering an area of approximately 2.71 acres. Responsible for the preparation of a Phase 1 ESA to determine if an actual or potential “recognized environmental condition” (REC) exists at the property.

US Army Corps of Engineers (USACE), Modifications to State Road No. 90 / Modified Water Deliveries Project to Everglades National Park, Miami, FL – Sr. Environmental Scientist/Project Manager responsible for the preparation of the Environmental Protection Plan, NPDES-SWPPP, and SPCC Plan, among others. Also, responsible for the environmental coordination and implementation of environmental and noise monitoring for listed species (i.e. Wood stork, Everglades Snail Kite, Eastern Indigo Snake, Gopher Tortoise, and Everglades Mink, among others). Duties also include contract management, change orders and provide additional guidance and support during construction activities in order to meet Project Technical Specification requirements. This project consists in the replacement of one-mile of Tamiami Trail (SR 90 / US-41) with a bridge and removal of this portion of the roadway. In addition, the construction activities include raising and reinforcing an additional 9.7 miles of Tamiami Trail for a total project length of 10.7 miles.

Environmental Assessment, Marine Benthic Survey & Mapping - Replacement of US 1/ SR 5 Low Level Bridges, FDOT D4, Jupiter, FL - Sr. Environmental Scientist responsible for the marine benthic survey and mapping of seagrass and mangrove areas in order to defined potential impacts by proposed project. Duties also include preparation of ERP, USACE, and USCG permit applications and coordination, among others. Also provide support to the contractor during project activities in order to maintain compliance with the Project Technical Specification, permit conditions and environmental regulations. This project involves the replacement of four low level bridges from North of SR 706/Indiantown Rd at Coastal Way to South of CR A1A Palm Beach County, within the Lake Worth Lagoon (OFWs) in Florida.

Marine Benthic Survey, Mapping & Monitoring – Southern Bridges Marine Benthic Survey, Florida Department of Transportation, Palm Beach County, FL – Sr. Environmental Scientist responsible for marine benthic survey from Lake Worth Lagoon as part of the Commitments of the PD&E Study in order to monitor the dynamic nature of the seagrasses and other benthic habitats and to determine the final magnitude of the impact for the future Southern Bridges replacement project. Responsibilities included surveying the area, identifying seagrass bed locations, collecting data, including GPS locations, seagrass bed composition and percent coverage and analyzing the data in the form of calculations, and a written report.

Marine Benthic Survey & Mapping – Venetian Bridge Project, Kiewit Infrastructure South Co., City of Miami, FL - Project consists of the rehabilitation of the historical bridges that was constructed in the 1920's and crosses Biscayne Bay between the City of Miami on the mainland and City of Miami Beach. As part of the construction activities Kiewit requires the utilization of a temporary work platform in order to properly provide construction equipment and material to the project site. Sr. Scientist responsible for conducting a marine benthic survey utilizing SCUBA of the submerged marine resources located within an approximate 100 ft2 area off the south side of Venetian Causeway, east of the Intracoastal Waterway, and adjacent to an existing park on Biscayne Island. Duties also include creation of transects, mapping, report preparation and coordination.



MARIA A. CORONADO BACA, Geologist, Sr. Environmental Scientist /Geologist

PROFESSIONAL LICENSES, REGISTRATIONS & CERTIFICATES

Professional Geologist.
Puerto Rico
License No. 086

Registered Environmental
Assessor Class I, State of
California No. 07170

40 HRS. HAZWOPER

EDUCATION

BS in Geology and General
Science. University of Southern
Mississippi.
1985

PROFESSIONAL AFFILIATIONS

Geological Society of America

Geological Association of Puerto
Rico

American Society of Women
Geoscientists

YEARS EXPERIENCE

25

TECHNICAL EXPERTISE

Ms. Coronado has 25 years of experience in the private and public sectors as a licensed Geologist and Environmental Consultant managing geologic, geotechnical, soil and environmental investigations. Her expertise spans the supervision of earth crust extractions, earth movement and quarry operations. She has served as a technical advisor to the Secretary, Deputy Secretary and the Auxiliary Secretary of Permits, Endorsements and Specialized Services of the Department of Natural and Environmental Resources (DNER). Ms. Coronado was also the Director of the Environmental Processes Division Office at the DNER. Her duties consisted of managing and supervising a multidisciplinary technical team to determine the potential environmental impacts resulting from land development projects and the emission of the DNER's endorsement for such projects.

RELEVANT EXPERIENCE

1. CSA Group, Inc.

- *Metals Recycling Park*, Hugo Neu Americas, SA - Hugo Neu is proposing the development of a scrap metal recycling facility in Guaynabo, Puerto Rico. The project will encompass approximately 14.6 acres in a property commonly known as Finca Vélez, located at the Río Ward. As a Professional Geologist and Environmental Scientist, Ms. Coronado was responsible for writing the EIS, including describing the existing environment conditions pertaining geology, topography, seismology and earth movement activities, and identifying potential environmental impacts to existing geology and topography, and mitigation measures as a result of the development of the project. Among her duties, site visits for reconnaissance purposes are also included.
- *Phase II Environmental Site Assessment (ESA)*, Hugo Neu Americas, SA - It was determined the need of conducting a subsurface soil and groundwater exploration to ascertain the presence of contaminants, for which drilling exploratory borings is required to collect soil samples, and installing monitoring wells to collect groundwater samples for laboratory analysis. As an Environmental Assessor and Professional Geologist, Ms. Coronado was responsible for supervising drilling contractor crew and environmental technician performing location of borings, test pits and sample collection protocol. She prepared samples for laboratory delivery, described soil lithology for boring logs, and performed analysis of laboratory data results and report preparation.
- *Phase I Environmental Site Assessment (ESA)*, Pattern - An assessment of environmental conditions present at the site and adjacent properties was needed to determine potential contamination. It required visiting the site, interviewing owners and neighbors, and revising federal and state databases. As an Environmental Assessor, Ms. Coronado was responsible for gathering and performing analysis of technical data; writing the ESA Phase I Report, including coordinating the preparation of GIS figures and activities related to GIS figures; and the coordination of activities related to field reconnaissance performed by field personnel.
- *Santa Isabel Wind Farm*, Pattern Santa Isabel, LLC - The Santa Isabel Wind Farm Project is the first wind farm project to be built in Puerto Rico on an industrial scale. CSA worked with the client to evaluate the feasibility of building a wind farm in Puerto Rico, installing meteorological towers in several municipalities, conducting environmental studies, and prepared the Environmental Impact Statement and the Basis of Design. The project site is approximately 3,709 acres. The project scope includes the installation of up to 65 wind turbine generators (WTG) of 2.3 MW to be constructed in phases. As Geologist, Ms. Coronado was in charge of evaluating geologic, seismic and topographic conditions at the site. As Environmental Scientist, she was responsible for writing the description of regional and local geology and topography; and sections of the Environmental Impact Statement concerning earthwork movement and mitigation measures.
- *Renewable Energy Power Plant and Resource Recovery in Arecibo, PR*, Energy Answers, LLC - CSA is the lead environmental and engineering consultant to Puerto Rico's first Waste-To-Energy (WTE) project estimated at \$500 million. This project allows Puerto Rico to diversify energy production and address the waste management crisis currently impacting economic development. The facility will be located in an abandoned brownfield site in Arecibo, a former paper mill/ manufacturing plant. The new facility will process approximately 2,100 tons per day of municipal solid waste, producing approximately 80MW of renewable energy, and recovering approximately 280 tons of recyclable ferrous and non-ferrous material.



MARIA A. CORONADO BACA, Geologist, Sr. Environmental Scientist /Geologist

PROFESSIONAL LICENSES, REGISTRATIONS & CERTIFICATES

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Puerto Rico
License No. 086

Registered Environmental
Assessor Class I, State of
California No. 07170

HAZWOPER

EDUCATION

BS in Geology and General
Science. University of Southern
Mississippi.
1985

PROFESSIONAL AFFILIATIONS

Geological Society of America

Geological Association of Puerto
Rico

American Society of Women
Geoscientists

YEARS EXPERIENCE

25

prepared the EIS and permitting on an expedited schedule. As Environmental Scientist, Ms. Coronado worked writing the EIS document. She conducted research and was the liaison with government agencies to obtain information, permits and/or documentation. With GIS unit personnel, she prepared and supervised the preparation of maps and figures for the EIS. As Geologist, she was responsible for the site reconnaissance to ascertain site conditions and existing environment.

2. ADR Environmental Group, Inc

Sacramento, CA

Environmental Consultant, REA

Provide due diligence and risk management services to developers, real estate brokers, and financial institutions.

As Environmental Consultant, REA, Ms. Coronado performed the following tasks:

- Managed environmental investigations. Conducted site reconnaissance.
- Prepared Phase I and Phase II Environmental Site Assessment Reports.
- Prepared Environmental Review Reports.
- Prepared Transaction Screen Environmental Site Assessment Reports.
- Conducted environmental audit investigations and prepared reports.
- Conducted sampling of asbestos and lead materials.

4. California GeoSystems

Glendale, CA

Environmental Scientist and Staff Geologist

Provide environmental and geotechnical services to homeowners, real estate brokers, developers, contractors, private and public agencies.

As Staff Geologist and Environmental Scientist, Ms. Coronado performed the following tasks:

- Reviewed historical documents, municipal public records, and government records.
- Reviewed plan site lay-outs and aerial photographs.
- Reviewed geologic and hydrologic site conditions. Conducted site reconnaissance.
- Prepared Phase I Environmental Site Assessment Reports.
- Managed geologic, geotechnical and soils investigations. Supervised subsurface exploration crews. Conducted sampling of earth materials and assigned laboratory analysis.
- Performed down hole logging of subsurface explorations including seismic trenches.
- Conducted foundation footing inspections for retaining walls, including conventional continuous footings, isolated pad footings, and deepened foundation systems utilizing caissons or friction piles.
- Prepared geotechnical and soil reports for tentative tracts, parcel map subdivisions, hillside development, landslide mitigation, slope repair, structural earthquake damage, and foundation repair by underpinning and implementing Los Angeles Building Code for foundation design, foundation setback, temporary excavations, gross stability, surficial stability, deep-seated slope stability of the site, and surface drainage control.
- Reviewed architectural and structural plans for local government approval.
- Developed proposals for prospective clients
- Supervised and coordinated drafting technician's workflow.
- Interviewed prospective drafting employees and made recommendations for hiring.
- Wrote and implemented Company's Drafting Manual.
- Prepared geotechnical maps, geologic cross-sections, fault trenches, boring logs and graphs for report publication.



BRADLEY T. NOWLAND
Project Manager

EDUCATION

B.S. Geography/minor in Geology; 1985 - Northwest Missouri State University

CERTIFICATIONS / REGISTRATIONS / TRAINING

OSHA 40-Hour Hazardous Waste Operations Safety Training; 1989
OSHA 8-Hour Hazardous Waste Operations Supervisor; 1991
OSHA 8-Hour Hazardous Waste Operations Refresher; Annually
FDEP/NELAC Field Sampling Certification; 2000
Florida Department of Environmental Protection Qualified Storm water Management Inspector, 2003

EMPLOYMENT HISTORY Biovation Environmental Services, LLC 2012-Present

American Environmental Engineering	2008 to 2012
ENTRIX/Water Resource Solutions	1991 to 2008
Camp, Dresser & Mckee	1989 to 1991
1987 to 1989	Nutting Environmental of Florida

EXPERIENCE SUMMARY

Mr. Nowland has twenty years cumulative experience in the fields of environmental compliance, site assessment, remedial systems design and project management for a wide variety of projects. Specific projects include industrial and commercial Environmental Site Assessments, site contamination assessment and cleanup system design, and extensive soil and groundwater sampling activities. Additional experience includes environmental permitting, the design and installation of groundwater wells and storm water management.

Mr. Nowland has been actively involved in numerous environmental audits for the private sector, county and state agencies. Additional experience includes petroleum contamination assessments and remedial investigations for sites involved in local program/county and state cleanup activities. Responsibilities include technical report preparation, sampling and analysis plans, Corrective Action Plans (CAPs) and many aspects of environmental permitting. Mr. Nowland has designed and supervised the construction of numerous groundwater monitor wells, conducted and supervised numerous groundwater, soil/sediment, sludge and surface water sampling events.

In addition, Mr. Nowland provides expertise on contamination evaluation and selection of appropriate laboratory analytical parameters depending on the contaminant of concern. He also develops and implements operations and maintenance (O&M) schedules for pollutant recovery and treatment systems. He has been responsible for all aspects of project work, including technical content of deliverable documents, budget maintenance and reporting, directing work efforts, and schedule compliance.

GENERAL EXPERIENCE HIGHLIGHTS**Project Management**

Mr. Nowland provides support and oversight for projects in South Florida and is involved in the preparation and presenting proposals, work plans for site specific assessment, the coordination and oversight of petroleum storage tank system work. Mr. Nowland provides training and technical direction in many aspects of the company's projects. Mr. Nowland's responsibilities include proposal preparation, overseeing assessment activities, preparation of Site Assessment Reports, Remedial Action Plans, remedial selection and design, and coordinating site activities with regulatory agencies. His activities also include cost analysis of remedial alternatives, recommendation of cost effective technology, and preparation of remedial action plans, interpretation and application of regulations. In addition, Mr. Nowland is also acting as AEE's Fort Myers Office Health and Safety and Quality Assurance Officer. He also responsible for supervision of personnel, project budgets, liaison between clients and regulatory agencies and timeliness of project deliverables.

State of Florida, Cleanup Program

Mr. Nowland's is actively involved with the State of Florida Pre-Approval Program. His participation includes: review of pre-approval proposals and work plans, client contact, planning and supervision of site assessment field activities and reporting. Mr. Nowland also actively interacts with the engineering staff by recommending solutions (chemical oxidation, bioaugmentation, source removal, etc...) for post-site assessment remedial strategies.

Environmental Site Assessments

Mr. Nowland has supervised and conducted environmental site assessments (ESAs) throughout South Florida. Clients included government entities, financial institutions, property management, engineering firms, as well as individual private property owners.

PROJECT SPECIFIC EXPERIENCE HIGHLIGHT

Project manager for various petroleum assessment and storage tank installation/closure work. Also responsible for field technicians and support staff for all aspects of project administration related to the environmental management of hazardous waste and petroleum contaminated sites. Aspects of general tasks and specific projects are as follows:

Project Manager, BP Golden Gate, Naples, Florida, 2000 to Present

Project Manager responsible for the initial site assessment field work which included preliminary direct push contaminant plume delineation. Pending completion of the plume delineation developed a work plan and performed of a pilot testing to aid in the design of a full scale soil vapor extraction and aquifer air sparging system at the project site. Organized and conducted project kickoff meeting with regulatory representatives, site owner and subcontractors to address site-specific issues related to design/construction. Upon full scale system installation conducted operations and maintenance site visits to optimize system performance.

Project Manager, Ace Food Mart, Naples, Florida, 1998 to Present

Project Manager responsible for the initial site assessment field work. Pending completion of the plume delineation developed a work plan and performed of a short term groundwater pump test to determine aquifer characteristics to aid in the design of a full scale soil vapor extraction and groundwater recovery system at the project site. Organized and conducted project kickoff meeting with regulatory representatives, site owner and subcontractors to address site-specific issues related to design/construction.

Upon full scale system installation conducted operations and maintenance site visits to optimize system performance.

Project Manager, Coca Cola Bottling Company, Punta Gorda, Florida, 1995 to 2001

Project Manager responsible for the initial site assessment field work. Pending completion of the plume delineation developed a work plan and performed of a short term groundwater pump test to determine aquifer characteristics to aid in the design of a full scale soil vapor extraction and groundwater recovery system at the project site. Organized and conducted project kickoff meeting with regulatory representatives, site owner and subcontractors to address site-specific issues related to design/construction. Upon full scale system installation conducted operations and maintenance site visits to optimize system performance. After active remediation was complete, prepared and implemented a groundwater natural attenuation monitoring plan. Based on the results of minimal contaminant attenuation in groundwater implemented bioaugmentation to complete site closure.

Project Manager, Better Roads Paving Company, Charlotte Harbor, Florida, 1996

Project Manager responsible for the initial chlorinated solvent and petroleum contamination site assessment field work to define contaminant plume delineation. Pending completion of the plume delineation, developed a groundwater recovery strategy to recover the contaminant(s) plume for air stripping treatment. The treatment system was designed for flow rates of up to 500 gallons per minute. The project was implemented to facilitate the installation of underground utilities for the Charlotte County Utilities Department.

Project Manager, Amoco Oil Company, Charlotte and Sarasota Counties, Florida, 1996

Project Manager responsible for conducting initial RCRA characterization sampling and groundwater assessment activities at multiple service station facilities in Charlotte and Sarasota Counties, Florida. Site sampling and assessment activities were performed to complete the proper closure of 5 x 28 oil/water separator injection wells.

Project Scientist, Broward County Aviation Department, Fort Lauderdale, Florida, 1989-1991

Project Scientist that conducted multiple Phase I and II Environmental Site Assessments for the land acquisition/expansion for the airport. Mr. Nowland supervised and conducted multiple soil and groundwater investigations at a variety commercial business types for a major airport in Fort Lauderdale, Broward County, Florida. Coordinated and developed the field assessment protocol and sampling methods for priority pollutant contaminants.

Project Manager, Charlotte County Utilities, Charlotte Harbor, Florida, 1996

Project Manager that supervised the design and installation of a system of horizontal wells utilizing directional drilling techniques to recover chlorinated solvent and petroleum hydrocarbon impacted groundwater. The recovered groundwater was initially treated in a 20,000 settling/holding tank followed with air stripping as the remediation technology. The treated effluent water was sampled and discharged to the storm water sewer system in accordance with the general National Pollutant Discharge and Elimination System (NPDES) permit managed by the State of Florida.

Project Manager, Florida Department of Environmental Protection, Immokalee, Florida, 2006

Project Manager that supervised the design and installation of a temporary well point dewatering system to facilitate a 4,200 ton source removal of petroleum contaminated soil at a former service station/bulk plant facility. Recovered groundwater was remediated with air stripping technology. The treated effluent water was discharged to the storm water sewer system in accordance with the State of Florida Generic NPDES permit. Additional permitting included the acquisition of South Florida Water Management District General Water Use Permit and the FDOT Right-of Way Drainage Connection Permit.

General Petroleum Storage Tank Assessment and Remediation (South Florida)

Project manager/Technical Lead for both above underground and underground storage tank systems removal and upgrade (State and private client funded). Responsible for interpreting regulations, understanding and working within the various state programs (funds) set up to finance the underground storage tank cleanups; managing the remediation activities; and designing, constructing, and operating remedial systems within the listed underground storage tank programs.

PROFESSIONAL AFFILIATIONS

Geological Society of America

JOHN L. KRABBE, P.E.
Senior Project Manager/Senior Engineer
(813) 961-7794, (813) 431-7085 (Cell)

QUALIFICATIONS:

Mr. Krabbe is a Professional Engineer, and an experienced Senior Project Manager with over 36 years of experience in various management and engineering functions in the chemical process and environmental management services industries. He possesses significant technical expertise in soil and groundwater remedial technologies related to the cleanup of petroleum hydrocarbon and solvent impacted sites.

EXPERIENCE:

PROJECT MANAGEMENT

- **Florida Petroleum Cleanup Program** - Program Manager for various petroleum UST sites in the FDEP State and RAI Preapproval Cleanup Programs. Services have included site assessments, remedial action plans, remedial action construction and implementation, operations & maintenance of treatment systems, and evaluation of alternative innovative remedial technologies. He has been responsible for preparation of cost proposals, permitting, invoice packages and various reports for remediation projects.
 - **Non-Aqueous Phase Liquid Recovery, Fuel Terminal, Pt. Manatee, FL** – Project Manager for the preparation of a Remedial Action Plan (RAP) and Remedial Action Implementation proposal for the recovery of non-aqueous phase liquid (NAPL) product at a fuel terminal in Port Manatee, FL. The RAP proposed an innovative approach for NAPL recovery employing multi-phase extraction along with downstream treatment of the cogenerated offgas and NAPL/water.
 - **Remediation of Public Works Complex, Venice, FL** - Project Manager for the site assessment and remediation of a Florida municipal public works complex impacted with petroleum hydrocarbons and trace chlorinated solvents. Following approval of the SAR he supervised the preparation of the remedial action design and remedial action plan (RAP) which proposed air sparging and soil vapor extraction (AS/VES) as the recommended remedial technology.
 - **Jet Fuel Recovery, MacDill AFB** - Project Manager for the site assessment, free product recovery, and remediation of an aboveground jet fuel storage tank terminal at MacDill AFB. Work included work plan preparation, subcontractor procurement, budget control, scheduling and oversight of field events, report preparation and review, health and safety issues, and invoice preparation and submission. He successfully managed the replacement of the low-point drains at the facility and negotiation of a permit for operating in an environmentally sensitive mangrove area adjacent to the facility. He also directed the second responder phase of free product containment and recovery resulting from a major leak of jet fuel product at Tank No. 2. In addition, Mr. Krabbe managed a project for the repair/replacement of an outfall weir which was located in a stormwater ditch at the edge of the site boundary. The weir served as a retaining wall and discharge point for stormwater under the NPDES permit for the site. The original weir had been extensively eroded and structurally damaged. His responsibilities included supervision of all site work, subcontractor contracting and oversight, and report preparation.
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- **Tank Tightness Testing, MacDill AFB** - Project Manager for the tightness testing of various underground jet fuel storage tanks at MacDill AFB. Work included coordination of field testing events, health and safety issues, subcontractor oversight, client liaison, and report preparation. The testing method used was the Horner EZY 3 Negative Pressure Tank Leak Detection Testing Technique.

REMEDIAL DESIGN AND ENGINEERING

- **Remedial Design and Implementation at LUST Sites** - As senior engineer Mr. Krabbe directs the design, preparation of equipment and construction specifications, construction drawings, and implementation of approved technologies for remediation of soil and groundwater impacted by petroleum hydrocarbons from leaking underground storage tanks. These technologies have included air stripping, activated carbon adsorption, multiphase extraction, soil vapor extraction, air/biosparging, and bioremediation. He also was responsible for the oversight and review of wastewater discharge permits including sanitary sewer and NPDES permits in connection with remedial actions at various petroleum UST sites in Florida. He has completed P.E. review for over 135 RAPs for leaking underground storage tanks.
- **Remedial Application of Innovative Technologies** - Mr. Krabbe has initiated and supervised the preparation and implementation of remedial action plans proposing use of innovative remedial technologies for cleanup of petroleum hydrocarbon contamination in soil and groundwater. These technologies have included biostimulation using biosparging, bioventing and nutrient/surfactants injections; bioaugmentation using specific microorganisms and biofluids subsurface injection procedures; and in situ oxidation.
- **DOE RCRA Remediation, Largo, FL** - As engineering manager, he provided engineering support for the operation and maintenance of a groundwater treatment system for removal of methylene chloride and heavy metals as part of a RCRA corrective action response for a DOE facility. The treatment system included fourteen recovery wells, equalization tanks, an air stripper, metals precipitation tanks, a Lamella clarifier, and a sludge filter press.

HAZARDOUS WASTE MANAGEMENT

- Mr. Krabbe has provided hazardous waste management services for various clients and waste generators. These services included characterization and profiling of the wastes to various disposal facilities, manifesting, transportation, disposal, and compliance management. The hazardous wastes included chlorinated and non-chlorinated solvents, (F-wastes for recycling), sludges, still bottoms, and contaminated soils. Generators included firms in the circuit board, plating, electronics, painting, printing, chemical, and health care industries. He was involved in a project to clean up hazardous and industrial waste materials at a site where over 400 drums of various wastes were profiled and disposed.
 - Mr. Krabbe is knowledgeable of RCRA regulations regarding hazardous waste and underground storage tanks, i.e. 40 CFR 260-263 and 40 CFR 280. He is also
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JOHN L. KRABBE, P.E.

PAGE 3

knowledgeable of DOT regulations related to shipping of hazardous wastes, i.e. 49 CFR 172.200, 172.300, 172.400, and 172.500.

- He prepared a hazardous waste minimization study for an inorganic chemical production plant.

COMPLIANCE

- Mr. Krabbe provides technical P.E. review and seals Stormwater Pollution Prevention Plans (SWPPP) and Spill Prevention, Control, and Countermeasure (SPCC) Plans for DOD and private commercial facilities.

EDUCATION:

M.B.A.; Financial Management; Drexel University; 1977

M.S.Ch.E.; University of Illinois; 1969

B.S.E.S.; Chemical Engineering; Rockhurst College (Magna Cum Laude), 1967

TRAINING:

Project Manager's Environmental Practices

Clean-Up Requirements Under RCRA and CERCLA

Shipping Hazardous Materials

Hazardous and Industrial Waste Management (RCRA) - Florida

Project Planning - Environmental Practices

Quality Assurance Annual Training Program

Land Ban Regulations, Media Training, and Air Quality Regulation

The Effective Negotiating Course

REGISTRATIONS:

Registered Professional Engineer: State of Florida (#33507);

HEALTH AND SAFETY:

OSHA 1910.120 40-Hour HAZWOPER

OSHA 1910.120 8-Hour Annual Refresher

Supervisor Hazardous Waste Site Safety

PROFESSIONAL AFFILIATIONS:

Society of American Military Engineers – President, Tampa Bay Post, 1998

American Institute of Chemical Engineers, Environmental Division

Tau Beta Pi

Alpha Sigma Nu

Alpha Chi Sigma

David J. Levy, P.G.

Education:

Florida State University, 1982
B.S. Geology
Graduated Cum Laude with emphasis in chemistry and mathematics.

Virginia Polytechnic Institute and State University, 1985
M.S. Geological Sciences
Thesis titled Manganese Mineralization Hosted by the Rocky Gap Sandstone in Bland County, Virginia.

Certifications:

Professional Geologist, Florida, (PG0001350) North Carolina (1139)
Certified Hazardous Materials Manager (1463)

Public Service

City of Palm Beach Gardens
City Council, 2004-present
Vice Mayor, 2007-2010
Mayor, 2010-present

Biotech Land Advisory Board, 2007-2008, 2011-present

Loxahatchee River Management Coordinating Council, 2004-2008, 2009-present

Regional Hazardous Materials Oversight Committee, 2006-present
Chair, 2009-present

Palm Beach Gardens Medical Center
Board of Governors, 2011-present

Palm Beach County League of Cities Executive Board, 2008-present

Palm Beach County League of Cities Environmental Committee, 2005-present
Chair, 2009-present

Palm Beach County Water Resources Task Force, 2009-present
Vice Chair, 2009-2010
Chair, 2010-present

Palm Beach County Workforce Alliance Consortium,
Vice-Chair, 2007-present

Singer Island Sunrise Kiwanis Club, 2004-present
Director, 2007-2009

Vice President, 2008-2009

Palm Beach Gardens Kiwanis Club, 2008-present
Annual Football Roast FSU Head Coach

Employment Background:

Florida Department of Environmental Regulation-Environmental Specialist I

Duties: Mr. Levy performed hazardous waste inspections under the Departments authorized RCRA program. As part of these inspections he collected data, evidence of violations, and reviewed paperwork and prepared penalty calculations. In addition, Mr. Levy became familiar with other program areas such as underground storage tanks and industrial waste. He referred potential violations in other program areas to the appropriate Department personnel.

Sparkle Parts, Inc.-Environmental Specialist

Duties: Mr. Levy performed Environmental Audits for existing Sparkle Parts, Inc. clients and ensured that Sparkle Parts, Inc. was in compliance with their hazardous waste storage facility operating permit. The Environmental Audits were done to ensure compliance with several environmental program areas including hazardous waste, industrial waste, air, underground storage tanks, domestic waste, and wellfield protection. Mr. Levy would inspect the facility, identify deficiencies and recommend corrective actions.

Resource Engineering and Planning, Inc.-Geologist

Duties: Mr. Levy assisted and directed subsurface investigations and reviewed environmental compliance for a wide variety of clients. He was involved in the preparation of contamination assessment plans and reports. In addition he prepared phase I and II environmental assessments. Mr. Levy prepared a sample collection quality assurance\quality control (QA\QC) plan and collected groundwater and soil samples using proper QA\QC procedures.

GWL-EMCON Southeast-Geologist

Duties: Mr. Levy was the project manager for the Broward County Environmental Quality Control Board contract. Five contractors were selected to perform the contamination assessments and remedial actions for underground storage tank sites in the Florida Early Detection Incentive Program in Broward County, Florida. During his period of management GWL received outstanding performance reviews and was awarded twice as many contracts as the other four contractors. Mr. Levy used the success of the Broward County contract to obtain a similar contract for GWL the Mobil Oil Corporation. As part of his duties as project manager, he reviewed, signed and sealed documents as a professional geologist for submittal to government agencies. In addition, Mr. Levy was the hazardous waste specialist for GWL-EMCON Southeast. He was involved in the settlement and study of over 20 hazardous waste cases.

Brown and Root Environmental-Project Manager

Duties: Mr. Levy supervised a staff of 6 geologists and engineers. His staff worked on underground storage tank, hazardous waste and industrial waste projects. In addition, Me. Levy prepared project budgets, performed marketing duties and prepared bids and proposals. He was apart of a team that negotiated for a project for the government of Nicaragua.

Risk Management Services, Inc.-President

Duties: Risk Management Services, Inc. is a full service environmental consulting firm dedicated to helping its clients come into compliance with environmental rules and regulations. In addition, Risk Management Services, Inc. helps its clients with innovative solutions to environmental problems. A list of representative projects follows.

Southeast Remediation Technology, Inc.-Principal

Duties: Southeast Remediation Technology, Inc. is an environmental consulting firm which uses innovative technology to remediate contaminated site. Southeast Remediation developed and has applied the Levuk Method successfully at sites throughout Florida.

Palm Beach State College-Adjunct Professor

Duties: Teach an environmental Geology course in the Environmental Sciences Department. Teach a dual enrollment environmental geology course at the Jupiter High School Environmental Academy.

Representative Projects

Electroplater-Daytona Beach

The Florida Department of Environmental Protection inspected an electroplating company in Daytona Beach, Florida. A number of RCRA violations were cited following the inspection. Mr. Levy corresponded and met with the Department to work out a solution to prevent these violations from reoccurring. As part of this solution, Mr. Levy set up satellite accumulation areas, stream lined processes for better house keeping and help redesign the facilities wastewater treatment process.

Gun Range-Palm Coast

The new owners of a property formerly used as a shooting range contacted Mr. Levy to ensure that redevelopment of the property was done in an environmentally safe manner. Mr. Levy collected soil and groundwater samples to determine the impact of the lead bullets on site. Three groundwater samples taken in worse case areas indicated that there was not a groundwater problem. Sample taken from the pistol and rifle ranges indicated that surficial soils would not meet the definition of hazardous waste if excavated. However, surficial soil samples collected from the shotgun range indicated that these soils might meet the definition of hazardous waste. Mr. Levy along with the client met with the Florida Department of Environmental Protection to discuss the findings and prepare a solution to the lead contamination. As a result of that meeting, a source removal plan for the pistol and rifle ranges and a contamination assessment plan for the shotgun range were prepared. Both of these documents were reviewed and approved by the Department. The surficial soils of the pistol and rifle range were excavated and sieved. Over 40 tons of lead bullets were recovered for recycling. Soil testing indicated that the excavated soils could be used for clean fill. The surficial soils of the shotgun range were also excavated and placed into piles. Analytical testing was used to segregate the piles into clean fill, solid waste and hazardous waste. Sampling at the site confirmed the success of the remediation.

Construction Debris Transfer Station-West Palm Beach

Mr. Levy prepared the permit application and conducted the baseline sampling to obtain a permit from the Palm Beach County Health Department for a construction debris transfer station. The permit application required a discussion of site history, a mile sensitive receptor survey and a complete determination of aquifer characteristics below the site. In addition storm water management was a portion of the permit application. Southeast Remediation Technology, Inc. is maintaining compliance for the permit by performing semi-annual sampling and reporting to the Health Department.

Electroplater-Lake Park

Mr. Levy provides environmental consulting services to an electroplater in Lake Park, Florida. These services include preparing a contingency plan, performing environmental audits, conducting hazardous waste training and monitoring domestic waste discharges to the sanitary sewer. Mr. Levy prepared documentation for presentation to the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection in enforcement cases. This documentation has led to the satisfactory conclusion of these cases. In addition, Mr. Levy set up compliance programs at the site including implementing satellite accumulation areas, improving safety equipment and preparing weekly container inspection logs.

Golf Course-Delray Beach

Mr. Levy was part of a team that assessed the effect of MSMA pesticides at a golf course located in Delray Beach. The team performed a contamination assessment and designed a grass clipping management plan. Clippings were collected and tested on a periodic basis to determine disposal. Wastewater generated from the washing of lawn maintenance equipment was also tested prior to disposal in the sanitary sewer.

Car Dealership-North Palm Beach

Southeast Remediation Technology, Inc. completed a contamination assessment and remedial action plan for two petroleum plumes at the site. The lithology consisted of fine to medium sand from the surface to 25 feet. The depth of groundwater was approximately 10 feet below land surface. The first plume was approximately 140 by 80 feet and the second plume was approximately 80 by 50 feet. Southeast Remediation Technology, Inc. completed the remediation on the first plume in 4 months and the second plume in 2 weeks. The site was monitored quarterly for one year and has received a site completion rehabilitation order.

LIONEL VEGA, BScHE, Technical Leader-Permitting

EDUCATION

Bachelor of Science
Chemical Engineering
Univ. of Puerto Rico, Mayagüez
Year Earned: 1984

PROFESSIONAL AFFILIATIONS

American Institute of Chemical Engineers (AIChE)

YEARS EXPERIENCE

29

TECHNICAL EXPERTISE

Mr. Vega is an Air Quality Specialist and former EPA employee (Headquarters – Washington D.C.) with over 25 years of experience on environmental engineering, environmental management and planning, environmental compliance and permitting. Areas of expertise includes:

- Construction and Air Quality Permitting
- Coordination with Local and Federal Agencies
- Air Quality Studies
- Visual Impact Studies
- Federal Government Experience
- Environmental Management and Compliance
- Project Management of environmental impact statements, pollution control, environmental compliance and permitting projects.
- Site Environmental Assessments of industrial and commercial facilities.
- Hazardous waste, wastewater, air emission, and solid waste facilities environmental compliance and permitting.

RELEVANT EXPERIENCE

Construction and Air Quality Permitting

- Luis Muñoz Marín (LMM) International Airport Capital Improvement- Led permitting efforts to obtain a categorical exclusion and construction permit for proposed improvements to the LMM International Airport. The permitting strategy expedited the completion of the permit phase earlier than expected.
- Mycogen Seeds Guayama Facility Emission Source Permits: Provided air quality technical and regulatory leadership for the preparation of emission source permit applications for construction and operation of the new Mycogen facility in Guayama, Puerto Rico. Maintained close coordination with government staff to reduce permit applications review timeframe.
- Hugo Neu Americas: Conducted a regulatory analysis of Puerto Rico Environmental Quality Board and USEPA air quality regulations to determine permit requirements and timeframe to install and operate two large capacity onsite generators to provide full power demand of the proposed Recycling Facility.
- Mayaguez Peak Power Facility, Puerto Rico Electrical Power Authority (PREPA) – Mr. Vega led permitting efforts to increase facility power generating capacity from 84 MW to 212 MW without triggering major permitting requirements under federal and local regulations. Permitting services included Environmental Evaluation Document, Air Quality Construction Permit Application and Title V Permit modification application
- Pattern Santa Isabel: Provided permitting oversight services to make sure that selected permitting contractor followed all steps to obtain all construction permits for the 101 MW Windfarm located in Santa Isabel. Prepared and obtained approval of exemption request from noise regulations to allow construction work to proceed during the late night and early morning period.
- Las Dalias Public Housing Modernization Project: Coordinated preparation of Environmental Evaluation and permitting effort for Las Dalias Public Housing Project. Permits included Construction permit, Erosion Control Plan, Fugitive Dust Control and Construction Waste Disposal permits.
- Jardines de Mayagüez Remodeling Project. Coordinated preparation of environmental document and permitting for the project. Prepared Stormwater Pollution Prevention plan (SWPPP) required under federal regulation.



LIONEL VEGA, BSChE, Technical Leader-Permitting

- Upjohn Barceloneta Title V Preliminary Assessment- Conducted a preliminary assessment of the regulatory, record keeping and monitoring requirements applicable to Upjohn Barceloneta pharmaceutical plant under the 1990 Clean Air Act Amendments (CAA). Drafted a work plan outlining the necessary steps to achieve compliance with the CAA and prepare a Title V operating permit application.
- Pharmaceutical Manufacturing Facilities (Several) Environmental Impact Documents and Air Emission Permits- Prepared environmental impact documents for the manufacturing of pharmaceutical intermediates and products; upgrades to wastewater treatment and pretreatment plants; construction of a raw materials warehouse for pharmaceutical production; construction of an industrial park for lightweight industries; construction of a water treatment system. Prepared multiple permit applications for the construction, and temporary and permanent operation of air emission sources related to the manufacturing of pharmaceutical intermediates and products.

Air Quality Studies

- Relocation of PR-111 segment- Air Quality Study- Performed Air Quality Analysis for Environmental Impact Assessment document prepared to comply with the National Environmental Policy Act. Study required the use of EPA approved emission and dispersion models to estimate carbon monoxide emissions and determine compliance with Carbon Monoxide National Ambient Air Quality Standard at selected receptors.
- Juncos Lateral Expansion Air Quality Study- Prepared Air Quality Analysis for the Environmental Impact Statement to determine if active collection and control system was necessary to control landfill gas emissions of Non Methane Organic Compounds. Also, emissions from fugitive and mobile sources generated during construction and operation were estimated and evaluated.
- Mycogen Seeds Guayama- Prepared Air Quality Analysis for the Environmental Evaluation to determine whether the proposed facility was a major or minor source of air emissions and to quantify air emissions of proposed stationary and nonstationary sources within the facility.
- Feasibility Study of Additional Electrical Power Generation in the North Coast - Technical Permitting Leader for feasibility study aimed to establish additional generating capacity in the northern part of Puerto Rico with minimum permitting effort and in the shortest possible time. Study involved site visits and field data gathering, meetings with PREPA officials and equipment vendors and participation in a preliminary meeting with regulatory agencies and evaluation of environmental permit documents and study the latest applicable regulatory requirements for air emission units.
- Port of the Americas Air Quality Analysis - Prepared Air Quality Analysis for the Environmental Impact Statement of the Port of the Americas; a one billion dollar transshipment port proposed for the municipalities of Ponce, Guayanilla, and Peñuelas.
- Searle Caguas Air Permitting Study- Conducted an Air Permitting Study for Searle Caguas pharmaceutical manufacturing plant to identify an operating scenario for the three steam boilers that provided excellent operational flexibility at the lowest operational cost without requiring a major construction permitting effort.
- Squibb Manufacturing Company Humacao VOCs Emission Estimates- Estimated Volatile Organic compounds process emissions generated in the production of several bulk pharmaceuticals at Squibb Manufacturing Company in Humacao, Puerto Rico. Performed environmental modeling process studies using computer software to estimate emissions.

Visual Impact Studies

- Ridgeline's Santa Cruz Solar Visual Impact Study-Researched and selected study methodology and led study team to perform visual impact study for the Environmental Impact Study of a 60 MW photovoltaic project at Vega Alta and Dorado municipalites. The study included a Visual shed Analysis using Geographic Information System tools to determine areas where the project could potentially be observed, field investigation to select Key Visual points, and photomontage using CAD tools to evaluate visual impacts at key visual points. The Study also included recommendations to mitigate local visual impacts.



LIONEL VEGA, BSChE, Technical Leader-Permitting

Federal Government Experience

- United States Environmental Protection Agency (USEPA)- At USEPA's, Mr. Vega served as a Hazardous Waste and Air Quality Specialist. Mr. Vega provided technical assistance to EPA Regional staff on the review of hazardous waste incinerators Part B permit applications that included trial burn plans required to demonstrate compliance with air quality emission standards. Mr. Vega also managed environmental consultants for the development of technical and permits evaluation guidance, and developed permit policy memoranda to assure consistency of permit application evaluations. In particular, Mr. Vega managed a project to develop a guidance document on observing compliance tests at hazardous waste incinerator facilities. Mr. Vega also conducted over thirty (30) reviews on hazardous waste facility applications to exempt treatment residues from hazardous waste regulations. Applications included treatment residues generated by large chemical manufacturing facilities, pharmaceutical facilities, electroplating facilities etc. that were generated from incinerator, wastewater treatment plants, and batch and continuous manufacturing processes and stored at hazardous waste landfills, surface impoundments or hazardous waste tanks.

Environmental Management and Compliance Experience

- Environmental Engineer of Solvent Recycle and Hazardous Waste Management Facility - Participated in the preparation of Environmental Impact Statement for Safety Kleen Manatí Recycle Center's Expansion and Facility Improvements. Participated as owner representative on RCRA Facility Assessment for Safety Kleen's Manatí Recycle Center. Led implementation of VOC Emission Control Rule on process units and equipment at the Manatí Recycle Center. Directed implementation of rule on burning hazardous waste fuels at cement kiln manufacturing plant. Responded to EPA/EQB Notice of Deficiencies and updated Hazardous Waste Part B Permit applications for Safety Kleen Manatí Recycle Center and Dorado Fuel Storage Facilities. Coordinated and contributed to the preparation of cement kiln RCRA Part B Permit Application to burn hazardous waste fuels. Conducted RCRA inspections of Safety Kleen's Dorado and Manatí facilities to determine compliance status of facilities

Industrial Environmental Consulting Experience

- Hugo Neu Guaynabo Recycling Plant - Prepare Air Quality and Solid Waste sections of the Hugo Neu Guaynabo Recycling Plant Environmental Impact Statement. As part of the EIS work, tackled the challenge of researching and recommending feasible alternatives for the treatment and disposal of Automotive Shredded Residue, a solid waste generated after recycling of automotive parts.
- Renewable Energy and Resource Recovery Plant, Energy Answers Arecibo - Led the preparation of the Environmental Impact Statement, Siting Consultation and Solid Waste Management Facility permit for the project. This project should help Puerto Rico diversify the energy production and manage the waste management crisis currently impacting the Island's economic development. The facility will be located in an abandoned brownfield site in Arecibo which was formerly used as a paper mill manufacturing plant. The WTE facility will process approximately 2,100 tons per day of municipal solid waste, produce approximately 80MW of renewable energy and recover approximately 280 tons of recyclable ferrous and non-ferrous material.
- Pharmacia Distillation - Professional services for the revision of the current partial and generic closure plan for the Pharmacia facility in Barceloneta, Puerto Rico. The revision was specifically designed to address those sections that apply to the closure of the distillation column FA-413, and its' associated ancillary equipment. The goal was to adapt these to specific equipment conditions, while conforming to the most current applicable statutes and regulations.
- CORCO Phase I Real Estate Environmental Assessment Project Manager and Technical Leader for a Phase I Real Estate Environmental Assessment of the former Commonwealth Oil Refining Company (CORCO), a 500-acre property currently used as petroleum products bulk storage terminal in Peñuelas, Puerto Rico. Led field inspection team, obtained information from plant operators, participated in presentation of preliminary findings to client, and coordinated and participated in report preparation.



LIONEL VEGA, BSChE, Technical Leader-Permitting

- Nycomed Pharmaceutical, Phase II Real Estate Environmental Assessment- Project Manager for the Phase II Real Estate Environmental Assessment of Nycomed Pharmaceutical facility in Barceloneta, Puerto Rico. Prepared monthly progress and financial reports, communicated regularly with clients, and coordinated overall project effort.
- SmithKline Beecham Bulk Pharmaceutical Phase II Site Assessment-Environmental Engineer. Participated in a Site Environmental Assessment for the SmithKline Beecham Bulk Pharmaceutical Manufacturing Plant in Guayama, Puerto Rico. Responsibilities included: gathering environmental information; preparing sampling protocols; coordinating and participating in field sampling of soils and groundwater; and preparing final report with conclusions and recommendations.
- Warner Lambert and SmithKline Beecham Wastewater Treatment Upgrades- Environmental Engineer. Contributed to the development of the Operation and Maintenance Manual for Warner Lambert's upgraded wastewater pretreatment plant. Obtained the necessary approvals and permits from the Puerto Rico Environmental Quality Board to upgrade the Warner Lambert and SmithKline Beecham pharmaceutical wastewater treatment plants.
- SmithKline Beecham Bulk Pharmaceutical Plant Storm water Management- Environmental Engineer. Evaluated the storm water management system of a SmithKline Beecham Bulk Pharmaceutical Plant and recommended the implementation of cost-effective storm water management practices to prevent or eliminate storm water contamination. Prepared the corresponding storm water pollution prevention plan for the pharmaceutical plant.
- Warner Lambert Fajardo Pilot Plant Study- Environmental Engineer. Conducted a pilot scale study to verify the performance of a biological denitrification system as a potential treatment alternative to reduce the concentration of nitrates in the effluent of Warner Lambert Fajardo's pharmaceutical wastewater pretreatment plant. Activities included pilot plant operation, sampling and analysis of wastewater streams and report writing.
- Warner Lambert Vega Baja Water Reuse Feasibility Study-Environmental Engineer. Conducted a study on the feasibility of reusing the effluent of Warner Lambert's Vega Baja tertiary wastewater treatment plant as feed water to cooling tower and boiler systems. Conducted literature search on water reuse, performed mass balance calculations, prepared technical memorandum on study results.
- Pacemaker Manufacturer Safety and Health Impact Study- Environmental Engineer. Evaluated the safety and health impacts of proposed solvent changes in several clean manufacturing rooms of a cardiac pacemaker and recommended changes to ventilation system.

Infrastructure Environmental Consulting Experience

- Cerrillos Water Treatment Plant- Technical Leader for the preparation on an Environmental Impact Statement and Siting Consultation for the construction of a 20 MGD water treatment plant in Ponce, Puerto Rico. Cerrillos Treatment Plant will provide necessary potable water to help meet the demand of the Ponce Service Area for the next 20 years.
- Valenciano Reservoir GAP Analysis- Permitting Leader for the evaluation of a Draft Environmental Impact Statement (DPEIS) prepared for the proposed Valenciano Reservoir at Juncos Puerto Rico. Participated in the preparation of a report that included a detailed analysis of the Draft PEIS and identified necessary additional information and studies to comply with Environmental Review Process requirements.
- Juncos Wastewater Treatment Plant Expansion- Technical leader for the preparation of an environmental evaluation for the proposed 1 MGD expansion of the Juncos wastewater treatment plant. Expanded plant will meet increasing demand for wastewater treatment service from the industrial, residential, and commercial sectors in Juncos, Puerto Rico.
- Guajataca Channel Rehabilitation - Environmental Discipline Manager of permitting tasks for the 20-million Rehabilitation Project of the Guajataca Channel. The Guajataca Channel is the main channel that transports water from the Guajataca Reservoir to towns in the northwest region. Coordinated



LIONEL VEGA, BScHE, Technical Leader-Permitting

environmental permitting effort, met with agencies, and provided technical expertise on permitting matters.

- Former Naval Base Roosevelt Roads - Environmental Compliance Leader for the preparation of a Special Plan for the Re-Development of the former Roosevelt Road Naval Base (Portal del Futuro), and the corresponding Strategic Environmental Impact Statement (EIS-S).

Project Management Experience

- Four Seasons San Miguel Resort - Project Manager and Technical Leader for the Environmental Impact Statement and Studies, Siting Consultation and USACE's 404 permit of the Four Seasons San Miguel Resort, a 500 million-resort proposed for Luquillo, Puerto Rico. Prepared monthly progress and financial reports, met regularly with clients, coordinated overall project effort, participated in preparation of EIS, and participated in the development of cumulative impact analysis.
- Puerto Rico Convention Center District: Task Manager and Technical Leader for the Environmental Impact Statement (EIS) and Studies and USACE's 404 permit of PRCCD. Prepared monthly task progress report, coordinated overall task effort, and participated in preparation of EIS.
- Metropolitan Bus Authority Facility Upgrade- Project Manager and Environmental Technical Leader for a 5 million dollars project to upgrade the storm water and underground storage tank systems of the Puerto Rico Metropolitan Bus Authority's Central Facility. Prepared monthly progress and financial reports, met regularly with clients, coordinated overall project effort, participated in preparation of Environmental Plans.



ENVIROSPEC, INC.
CINDI BRUNOT, P.G.
2755 S FEDERAL HIGHWAY, UNIT 3
BOYNTON BEACH, FLORIDA 33435
(561) 369-8885

SUMMARY

- Obtained Professional Geologist License (#1791) in March 1995
- Obtained Certified Florida Environmental Assessor (#260) and Licensed Environmental Professional (#22)
- FDEP Stormwater Management Inspector
- Dedicated, responsible and success driven management professional with over 25-years of project management skills.
- Maintained effective client relations with proficient management and accountability. Negotiated costs, supervised billing and coordinated subcontractors competently. Structured billing systems and controlled payroll and bookkeeping operations.
- Possesses extensive organizational skills with a high level of energy and expertise.

EMPLOYMENT HISTORY

- **Envirospec, Inc.;** Lantana, Florida
May 1995 - Present
President/P.G./Sr. Project Manager
Responsible for Project Management on all projects. Ensure all projects are performed in accordance with generally accepted professional requirements. Interpret laboratory analytical reports, determine aquifer characteristics, supervise soil, water, air and hazardous waste sampling and subsurface drilling activities. Interface with regulatory personnel and clients. Generate project proposals, complete and review final project reports.
- Environmental Consulting Services, Inc.; Lake Worth, Florida
November 1987 - June 1995
Vice President/P.G./Sr. Project Manager

EDUCATION

- FLORIDA ATLANTIC UNIVERSITY, Boca Raton, FL
Masters of Geology – May 1997
Courses Completed: - Modeling of Groundwater Movement * Environmental Geochemistry * Shore Erosion and Protection * Groundwater Solute Transport Modeling * Advanced Engineering Geology * Geology of Florida * Marine Geology * Geostatistics * Groundwater Remediation * Coastal Hazards
- YOUNGSTOWN STATE UNIVERSITY, Youngstown, OH
Bachelor of Science - Geology August 1986
- WAYNESBURG COLLEGE, Waynesburg, PA
Colorado Field Camp July 1984

EMPLOYMENT PROFILE

- **Environmental Consultant**
Experienced in preparation of all types of Contamination Assessment Plans and Reports, Monitoring Only Plans, No Further Action Plans, Emergency Responses, Initial Remedial Actions, Tank Closure Assessment Reports, Environmental Site Assessments Phase I/II, Remedial Action Plans/Reports, Natural Attenuation Plans/Reports.
- **Hydrologist/Geologist**
Responsible for interpreting laboratory analytical reports and determination of aquifer characteristics including hydraulic conductivity, transmissivity, hydraulic gradient and estimation of contaminant plume velocity.
- **Project Manager**
Preparation of proposals and detailed technical reports, determination of soil boring and monitoring well placements, selection of proper EPA analytical methods, scheduling and performing field work, consultation with clients and regulatory personnel. Supervise remedial system installations. Review and investigate of historical and regulatory files relating to environmental site assessments.
- **Operations Manager**
Coordination of all field crews on a daily basis. Requisition supplies when necessary. Delegation of new project management responsibilities. Approved payroll and billing.
- **QA Officer**
Development, implementation and revised Comprehensive Quality Assurance Plan. Maintained and ensured proper calibration of all equipment. Verification of all field sampling and cleaning protocols utilized during assessment activities.
- **Field Technician**
Performed OVA and PID soil screening surveys, supervision of drilling and construction crews, including well installations, subsurface soil penetrations, soil excavations, lithologic interpretations, site specific aquifer testing, groundwater and soil sampling activities, groundwater and well elevation surveys, monthly monitoring well inspections and site reconnaissance for environmental property assessments.

MEMBERSHIPS

- American Institute of Professional Geologists
- Florida Association of Environmental Professionals
- Geological Society of America

CERTIFICATIONS

- Florida Professional Geologist (#1791)
- Certified Florida Environmental Assessor (#260)
- Licensed Environmental Professional (#22)
- OSHA 40 hour Certified/8 hour Supervisor Refresher
- Stormwater Management Inspector



SANDRA WALTERS

President

ACADEMIC BACKGROUND

Masters Degree in Marine Studies, University of Miami, Florida, 1983

Bachelor of Science in Animal Behavior and Marine Biology, University of California, Davis, CA, 1974

SPECIALIZED PROFESSIONAL COMPETENCE

Ms. Walters has 30+ years of professional experience in Florida. She is qualified as an Expert Witness in Florida administrative hearings and court proceedings; has conducted and supervised environmental studies, and developed avoidance and mitigation plans, in all South Florida submerged and upland habitats; has successfully permitted projects ranging from single family homes to developments of regional impact, working with all regulatory agencies; has conducted Phase I and II Environmental Site Assessments, fuel storage tank removals, and acquired No Further Action decisions for many properties; has extensive experience in design and implementation of public participation programs and review and development of comprehensive plans; and has represented clients successfully with many agencies and government boards. She is presently a member of the South Florida Regional Planning Council, appointed by governors Bush, Crist and Scott, serving as chair in 2009; serves on EPA's Water Quality Steering Committee for the Florida Keys National Marine Sanctuary; and served from 2000 to 2004 as a Governor's appointee on Florida's Acquisition and Restoration Council, which supervises purchase and management of State conservation lands.

REPRESENTATIVE PROFESSIONAL EXPERIENCE

Principal, Sandra Walters Consultants, Inc., Key West, Miami, Hollywood & Fort Myers, FL, 1996-present

Provide consulting services to both public and private sector clients in areas of ecological/environmental and land use planning and permitting, including habitat evaluation, mitigation and contamination assessment and remediation; public involvement and outreach; and community and government liaison.

CONTAMINATION SERVICES

- **Pier 1 Petroleum Remediation Estimated Pricing, Port Everglades Master Plan Update**
Principal in charge of site assessment report review and preparation of preliminary estimate of remediation costs, including mobilization; excavation and disposal of overburden; free product and water removal, temporary storage, characterization sampling, and disposal/recycling; site stabilization, remediation design and bidding; and remediation management and oversight.
- **Monroe County Airport Department**
Retained to advise director regarding contamination issues involving spill at Key West Airport fuel farm.
- **Contamination Assessment, Stock Island Fire Station Property, Monroe County Government**
Principal in charge of evaluation of earlier contamination reports and visible contamination evidence at vacant parcels where new fire station is being built, preparation

and implementation of assessment including sampling and testing soils, implemented remediation, and preparation of final report indicating no further action required.

- **Spill Prevention Control and Countermeasure Plan (SPCC), Florida Keys Aqueduct Authority, Marathon, FL**
Principal in charge of plan preparation for FKAA facility consistent with State and federal requirements that specified how oils and fuels were stored, what spill prevention measures were in place, and what steps would be taken if a spill should occur, including notification procedures and contact lists.
- **Monroe County Mosquito Control District, Monroe County, FL**
Reviewed third-party environmental site assessment for 107th Avenue site in Marathon in process of purchase by District for new facility, completed ESA scope as specified by ASTM guidelines, and provided final finding.
- **City of Key West Engineering Services**
Provided ongoing groundwater testing, analysis and reporting services for former underground fuel storage tank site at Key West City Hall; prepare and process application for No Further Action with conditions.
- **Phase I and II Environmental Site Assessments, Florida Keys**
Conduct environmental site assessments for commercial real estate transactions and transportation projects. Conducted assessments following ASTM guidelines for District 4 FDOT and many public agencies and private property owners throughout Florida Keys. Also was qualified and provided expert witness testimony in circuit court regarding Phase I ESA scope and ASTM guidelines.
- **Discount Rock & Sand, Marathon, FL**
Conducted assessment of property and analyzed its redevelopment potential under the City of Marathon Comprehensive Plan and Land Development Regulations, including State regulation for construction and demolition debris disposal facilities; documented and analyzed historic and existing site conditions. Prepared, processed and acquired permit for facility from Florida Department of Environmental Protection, currently working on acquiring final building approval from City of Marathon.
- **Robbie's Safe Harbor Marine Enterprises, Inc., Florida Keys**
Develop agreements with Florida Department of Environmental Protection for solid waste cleanup and above-ground fuel storage tank removal, including field testing, preparation and submittal of tank closure assessment report (TCAR). Prepare and process solid waste transfer station general permit, including representation as expert witness at State administrative hearing decided in client's favor.



OFFICES IN MONROE, DADE, BROWARD AND LEE COUNTIES

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WBE • SBE • DBE • CBE • WOSB

ENVIRONMENTAL STUDIES • PERMITTING • MITIGATION • MONITORING SERVICES

➤ **Horizontal Directional Drill Permitting and Third Party Environmental Monitoring, Islamorada Wastewater Project**

In charge of permitting with DEP, USACE and FKNMS for directional drills under seven channels in Upper Florida Keys to accommodate wastewater pipelines. Work involved extensive coordination with project engineers, contractors, resource management and regulatory agencies; benthic and emergent habitat assessments including detailed mapping and characterization of resources below which pipeline will run; preparation and processing of permit applications; and responses to requests for additional information. Acquired all permits in less than three months due to extensive agency coordination and very-thorough permit application materials. Conducted work as full-time third party environmental monitor for all drilling activities, including constant onsite inspections and oversight; coordination with drilling company and environmental agencies; water quality, wetlands and submerged habitat data collection in the event of a possible frac out of drill operation to document impacts; and preparation of summary reports.

➤ **Mallory Dock Maintenance Dredge, City of Key West**

Principal in charge for successful acquisition of USACE and DEP permit modifications to add Mallory Dock to scope of Navy Key West Harbor dredging project, including collection of all data on submerged habitats required by agencies, coordination with dredging company and environmental monitoring contractor, acquisition of EPA approval for use of offshore disposal site and provision of Quality Assurance services onboard the dredging vessel. Represented City in Navy agency partnership process for harbor dredge and other environmental issues.

➤ **S. Roosevelt Seawall Repair Seagrass Monitoring, Key West**

Supervised assessment and documentation of seagrasses in vicinity of seawall undergoing repairs, including field data collection and photography, update of CAD files delineating seagrass line, measurement of seagrass impacts in project area for mitigation purposes, and report preparation.

➤ **Smathers Beach Seagrass Mitigation Monitoring, Key West**

Member of team that conducted field monitoring of seagrass mitigation project for City of Key West. Roles included field personnel establishing monitoring sites, collecting required data, supervising surveyor, assisting with preparation of monitoring reports, and providing local liaison with City and base of operation for work.

➤ **Key West Mooring Field Seagrass Monitoring Project**

Conducted seagrass monitoring project at Key West Mooring Field that investigated potential shading impacts from boats, including project design, photographic documentation of stations over time, collection of seagrass density and shoot count data, report preparation

and report submittal and processing with DEP. This study was first of its kind in Florida, and several other coastal communities have requested copies of final report.

➤ **Submerged Habitat Study and Sediment Analysis, Key West Harbor and Vicinity**

Conduct survey of submerged habitats in and around Key West Harbor. Divers collected field data from 50, randomly selected sites. This data was then collated into maps showing general distribution of habitats in area, and underwater photographs were organized and printed. Data was compared with that collected at other sites throughout Florida Keys, to assess habitat quality in relation to shipping activities in Harbor. Supervise collection of sediment samples in and near harbor following approved DEP protocol, transmit to State certified laboratory for testing for petroleum contamination and RCRA metals, prepare report summarizing findings.

➤ **City of Key West Stormwater System**

Consultant in charge of bringing City into compliance with ERP requirements for already-completed and future maintenance work of stormwater system, including mapping and characterizing affected wetlands, and developing impact assessment and mitigation plan that incorporates 5.6 acres of wetland restoration and enhancement at former Hawk Missile site in eastern Salt Ponds and creation of connection between Riviera Canal and western Salt Ponds to enhance 131 acres of wetlands and cause significant water-quality improvements. Served as City representative in negotiating a consent agreement with South Florida Water Management District that was unanimously adopted by District Governing Board and City Commission.

➤ **City of Key West Navy Base Reuse Plan**

Member of team that evaluated Key West surplus Navy properties and developed reuse plan. Primary role—planning and environmental assessments including SCUBA examination of Truman Waterfront Mole Pier.

➤ **General Environmental Consultant, City of Key West**

Was awarded general contract for City services, and ranked by City Commission number one of three firms being contracted.

➤ **Permit Compliance for Large Condominium Complex (Seaside and Salt Ponds), Key West, FL**

Retained by property owner to assist with resolution of permit compliance issues with South Florida Water Management District; conducted extensive research of permitting and project history, held meeting with District staff and developed consensus on approach, developed consent agreement, worked with property owner to design and implement significant restoration project in Salt Ponds as well as to restructure onsite restoration projects from those specified in original permits, in progress with implementing multi-year monitoring plan; property owner received award from District for being so forthcoming with restoration efforts and award ceremony had front-page article in local newspaper.



- **Electric Transmission Line Environmental Compliance Monitoring, Florida Keys**
Conducted DEP and USACE permit conditions environmental compliance monitoring of installation of new electric tie-line poles between Big Coppitt Key and Key Haven in wetland and submerged habitats, including confirmation of pre-construction conditions, onsite inspections to assure impacts do not exceed limits established in environmental permits, and long-term monitoring to document post-construction recovery.
- **Residential Redevelopment Project in Marathon, Florida Keys**
Served as project manager for all aspects of environmental planning and permits for 99-slip, 92-unit redevelopment project in Marathon called Marlin Bay Yacht Club, including supervision of all field data collection and preparation of benthic assessments and avoidance and minimization plans, supervision of application preparation and submittal and all responses to requests for additional information, work with DEP to acquire net positive public benefit exception to State submerged land lease riparian restriction, and presentations to Governor and Cabinet regarding lease rule provisions and final lease adoption. Acquired permit and submerged land lease in nine months of filing application.
- **Jewfish Creek Bridge/US Highway 1 Project, Northern Florida Keys**
Member of design-build team in charge of environmental compliance for final design and construction of 65-foot-high bridge over Jewfish Creek and new roadway from North Key Largo to just south of Dade County line, including training of onsite personnel regarding avoidance of listed species; coordination with agencies for permit modifications; assessment of preconstruction environmental conditions; and continuous work with project engineer and contractor to assure all environmental permit conditions are met during four-year project. Work included mapping seagrasses along project corridor.
- **La Siesta Resort and Marina, Islamorada, FL**
Served as principal in charge of benthic assessment and ERP impact assessment and mitigation plan for oceanside and bayside entrance channels and marina basins, including seagrass restoration plan to restore orphan propeller scars in Lignum Vitae State Aquatic Preserve.
- **Dock Appeal Benthic Assessment and Expert Witness Testimony, Upper Florida Keys**
Conducted extensive benthic resource mapping of nearshore habitats in relation to location of single-family home dock that was subject of neighbor appeal of DEP permit, prepared expert witness report, participated in deposition in preparation of hearing before administrative law judge.
- **Grassy Key Beach Cleanup, Florida Keys**
Provided onsite ecological oversight of beach cleanup operation conducted by contractor for DEP, assuring heavy equipment did not harm biological resources and removed only storm-deposited dead seagrass and sediments as specified by DEP and USACE.
- **Cudjoe Key Quarry, Florida Keys**
Planning and permitting for continuation of existing rockmining operation. Develop wetland and endangered species habitat mitigation plan which has received endorsement of USFWS and Florida Game and Fresh Water Fish Commission (FWC) staff; prepare and process DEP and USACE permit applications; process County vested rights application; successfully negotiate development agreement with Monroe County and Florida Department of Community Affairs (DCA). For new owner, prepare and successfully process permit modifications for change of land use to communications facility, successfully negotiate new development agreement with DCA, prepare and process Monroe County permit application, prepare testimony and appear as witness in local court hearing regarding County moratorium on communication facilities.
- **Former Silver Eagle Distributors property, Key West**
Conducted monitoring of mitigation required by environmental resource permit and closed out South Florida Water Management District permitting requirements; following issuance by District of letter of concern regarding perpetual maintenance issues, worked with local police and several non-profit organizations to assist property owner with issues regarding homeless population living within a preservation area and removal of trash and exotic vegetation from site, in order to a find win-win solution and achieve compliance with SFWMD permit.
- **General Environmental Consultant for Florida Keys Overseas Heritage Trail**
In contract with DEP, provided environmental planning services for entire 130-mile linear park throughout Florida Keys, including NEPA review and documentation for permitting of segments and bridge crossings.
- **Stormwater Filter Marsh, City of Naples, Collier County**
In charge of wetland jurisdictional determination, habitat evaluation, and threatened and endangered (T&E) species survey; development of impact assessment and mitigation plan, as needed; and general assistance with preparing and processing environmental resource permit (ERP) applications with DEP and US Army Corps of Engineers (USACE) for creation of filter marsh to provide treatment to stormwater presently being pumped untreated into Naples Bay.
- **Tree Obstruction Survey, Hollywood-Ft. Lauderdale International Airport, Broward County**
Principal in charge of tree obstruction survey and report for entire airport property. Work includes field data collection and preparation of report including a detailed spreadsheet with tree specifications and recommendations for trimming or removal, aerial figures showing all tree locations, and photo exhibits.



- **Environmental Impact Study & Permitting, Ft. Lauderdale-Hollywood International Airport Runway Extension**
Principal in charge of fulfillment of all NEPA requirements including T&E species impact assessment and wetland delineation, coordination with environmental regulatory agencies, and preparation and processing of environmental permit applications for final, selected alternative. Acquired concurrence from all resource agencies on jurisdictional lines and UMAM scores for all wetlands affected by one or more project alternatives, prepared administrative draft and Draft Environmental Impact Statement, participated in DEIS public hearing, prepared EFH and Biological assessments for National Marine Fisheries Service and U.S. Fish & Wildlife Service, prepared responses to all ecological questions for DEIS and FEIS; assisted with preparation of Final EIS.
- **Port Everglades Master Plan Update, Broward County**
Principal in charge of all natural systems data collection and analysis and permitting assessments for five-year master plan update, including incorporation of updated plan into County comprehensive plan.
- **SR-710 PD&E Study, District 4 FDOT**
Part of consultant team in charge of planning, design and environmental study of 27-mile corridor of B-Line Expressway through Palm Beach and Martin counties. Responsible for wetlands and threatened and endangered species field data collection, assessment of contamination potential in vicinity, and documentation of land use patterns along corridor regarding potential for secondary and cumulative impacts.
- **Wetland Delineation, Essential Fish Habitat Assessment and Local Permitting Support for Utility Corridor, Okeechobee, Hills-borough and Miami-Dade counties**
Principal in charge of wetland data collection and jurisdictional delineation for utility corridor, utilizing both federal and State wetland delineation methodologies, including extensive habitat characterization, mapping using sub-foot-accuracy Trimble GPS equipment, and daily downloading and transmitting of data to central processing facility. Also prepared EFH Assessment meeting NMFS requirements for South Dade County segment, including cumulative and secondary impacts analyses, and provided coordination and assistance with local permitting in Martin and Miami-Dade counties.
- **WTA Compartments B & C Environmental Impact Study (EIS), SFWMD, Palm Beach County**
Part of consultant team that developed EIS for improvements to water treatment areas just south of Lake Okeechobee, which is an Acceler8 project associated with Everglades restoration. Work includes full assessment of existing data and sources and evaluation of sufficiency; drafting environmental consequences alternatives, wetlands and T&E species sections; and participating in public involvement activities.
- **Herbert Hoover Dike Culverts 1 and 1A Replacement Project, Glades County, FL**
In charge of all start-up of environmental compliance scope for \$47 million project to replace two 10-foot culverts through the Herbert Hoover Dike near Lake Okeechobee. Work included preparation of Stormwater Pollution Protection Plan (SWPPP) and NPDES notification; development of Environmental Protection Plan; permitting of dewatering plan; development of boating Maintenance of Traffic (MOT) plan; contractor training regarding environmental compliance criteria, including development and printing of waterproof field compliance handbook; turbidity monitoring and reporting, including staff training to meet State permit criteria and work supervision; monitoring of 10 listed species; and preparation and processing of required reports. All plans and reports received U.S. Army Corps of Engineers approval.
- **General Engineering Services, City of Pompano Beach and City of Ft. Lauderdale, Broward County**
Part of consulting team providing engineering services to the City, with SWC scope including environmental, planning and public involvement tasks.

LAND USE PLANNING AND PERMITTING • PUBLIC INVOLVEMENT SERVICES

- **District Six FDOT Communication Services for Construction Projects, Monroe County**
SWC is serving as prime contractor to provide communications services for all FDOT District Six construction projects throughout Monroe County. This includes a full-time public information specialist for the 2.1-mile North Roosevelt Boulevard project in Key West. SWC is currently managing 11 Keyswide assignments.
- **District Six FDOT General Public Information Contract for Design Services, Monroe County**
SWC is member of consulting team that was just awarded a three-year contract for general design services public information and will be responsible for all of Monroe County. SWC previously provided these services for five years under an earlier contract. Work has included US Highway 1 corridors on Big Coppitt Key, from Key West to Stock Island, Big Pine Key, Cudjoe Key and Grassy Key.
- **FDOT Planning, Design & Environmental (PD&E) Studies in Islamorada, Marathon and Big Coppitt Key, Florida Keys**
Member of team that conducted FDOT studies of roadway improvements, including turn lanes, in five-mile corridor in Islamorada, five-mile corridor in Big Coppitt Key, and Sombrero Beach Road in Marathon. Services included public involvement, land use planning, and landscape architecture elements of study, including coordination with local staff and elected officials.
- **Stock Island-Key Haven US 1 Corridor Study, Florida Keys**
Provided public involvement outreach and meeting coordination services for study to identify improvements to US 1 corridor segment; resulted in significant



participation by user groups and relevant and effective planning charrette.

- **Expert Planning Services for Town of Medley, Dade County**
Served as town planning staff, providing review and support for public hearings for adoption of City ordinance.
- **Hawk's Cay Expansion Development of Regional Impact, Florida Keys**
Prepared and successfully processed Application for Development Approval for Hawk's Cay Expansion Development of Regional Impact to South Florida Regional Planning Council. Evaluation included environmental, public facilities, socio-economic, and traffic impacts. Provided continued planning consultation, including 1996 approval of major site plan revision and 7 year extension, approvals of three DRI revisions, and annual reports.
- **Rezoning and Development Agreement for 92-unit Project, City of Marathon, Florida Keys**
Served as principal planning consultant and agent for 92-unit redevelopment project, including recent acquisition of property rezoning and executed development agreement from Marathon City Council. Work involved representation with planning staff, Council members and Florida Department of Community Affairs representatives; and work with Florida Department of Environmental Protection and Governor and Cabinet regarding submerged land lease for 115-slip private marina.
- **Monroe County Planning Services for Expansion, Parrotise Restaurant, Little Torch Key**
Prepared and successfully processed application for conditional use to expand restaurant, including detailed site planning and conceptual stormwater management system; prepared and successfully processed alcoholic beverage permit to provide for outdoor food and beverage service, including thorough review of sound ordinance issues and presentation of findings to Planning Commission.
- **Lower Sugarloaf Key Mixed Use Development, Lower Florida Keys**
Served as planning consultant and agent, developed and processed major conditional use application for mixed use office, workforce housing and market-rate housing project; received 8/0 positive vote from Monroe County Development Review Committee and 5/0 positive vote from Monroe County Planning Commission.
- **Key West Transfer Station & Hauling Services, Inc.**
Prepared and successfully processed application to DEP for renewal of solid waste transfer station permit that provides for substantial expansion and updating of facility, including supervising CADD drawings, engineering of site and preparation of environmental resource permit application for stormwater system, coordination with agency staff to assure application meets standards, and responses to information sufficiency reviews. Participate as expert for client by deposition in lawsuit by competing business.

- **State Aquatic Preserve Management Plan, Florida Department of Environmental Protection**
Responsible for principal drafting of Statewide management plan for 41 State aquatic preserves.
- **Expert Witness Testimony for Monroe County**
Conducted thorough review of land use, environmental and permitting issues for property in North Key Largo which was subject of suit against Monroe County, prepare expert witness report, provide deposition in circuit court proceeding. Work included extensive review of several USFWS HCPs in Key Largo for effects on reasonable development expectations in area.
- **City of Key West Bahama Village Redevelopment Plan Update**
Member of team that updated community redevelopment plan. Primary roles—environmental and public facilities planning; and public involvement, including preparation and distribution of project newsletters and news releases; and development and implementation of proactive community involvement process.
- **City of Key West Economic Development Conveyance Application**
Member of team that developed EDC application for surplus Navy properties. Primary roles—planning and implementing meetings with local officials and interest groups, coordination of public workshops and presentations, and public facilities and environmental data collection and analysis.
- **Marx Investments, LLC Development Feasibility Study, Big Coppitt Key, FL**
Document and analysis historic and existing site conditions; prepare feasibility study to determine the development potential for the property under the regulations of the Monroe County Comprehensive Plan and Land Development Regulations.
- **Habitat Conservation Plan (HCP) and Community Plan for Big Pine Key, Monroe County, FL**
Represented affected property owners to develop HCP following US Fish & Wildlife Service (USFWS) guidelines for federally-endangered Key Deer on Big Pine and No Name keys in Florida Keys. The County implemented parallel process to develop community plan that incorporates HCP into County comprehensive plan and land development regulations. System developed involves complex point system for incidental takings associated with any new structure, and requires mitigation to compensate for impacts associated with issuance of building permits.

Vice President & Manager of Environmental and Permitting Division, 1994-1996

H.J. Ross Associates, Inc., Coral Gables, FL

Create new division of company, manage personnel and project budgets, develop project proposals.

- **US Highway 1 South Project, from Key Largo to Florida City**
Consultant Project Manager—assist Florida Department of Transportation, District 6, in permitting for expansion of



20-miles stretch of US Highway 1, including construction of new bridge with 65 foot water clearance at Jewfish Creek. Permits were required from U.S. Coast Guard, South Florida Water Management District, and ACOE, and coordination with Dade County Department of Environmental Resources Management. Work included preparation of permit applications; creating CADD generated permit sketches; responding to information sufficiency reviews (including extensive evaluation of potential secondary impacts of project on community and environment); supervising field investigations for construction projects and associated mitigation (including mangrove, seagrass, and freshwater emergent habitats); public information; and coordinating with many commenting agencies.

➤ **Development of Regional Impact Application and Environmental Impact Statement for New Runway at Miami International Airport**

HJR project manager for preparation of sections of documents, and overall quality control and editing.

Publisher and Media Consultant, Little Torch Key, FL, 1986-1994

Co-found, and serve as co-publisher and managing editor for seven years of *Island Navigator* newspaper, a feature monthly publication distributed throughout the Florida Keys. Also manage media division working with all kinds of print and broadcast media in production and scheduling of public information and advertising campaigns.

Environmental Planning Consultant, Little Torch Key, FL, 1984-1996

Site evaluation and project design for many commercial and residential parcels of property in the Florida Keys, including acquisition of permits from local, state, and federal agencies; policy analysis and legislative support; expert testimony at Florida administrative hearings; and public information programs.

- Prepare and successfully submit Application for Development Approval for Hawk's Cay Expansion Development of Regional Impact (at Mile Marker 61 in Florida Keys) to the South Florida Regional Planning Council. Evaluation included environmental, public facilities, socio-economic, and traffic impacts. Also annual reports and continuing planning work.
- Provide expert witness testimony in administrative hearing regarding appeal by FL Dept. of Community Affairs of Monroe County development order for beachfront property on Lower Sugarloaf Key.
- Provide expert witness testimony in administrative hearing regarding environmental permitting for marina project on Little Torch Key.
- Successful application to State Conservation and Recreation Lands program for purchase of Big Pine Key property.
- Appointment by Monroe County Mayor to Blue-Ribbon Committee to review land use plan; served as advisor to

Monroe County Commission; and conducted South Florida Regional Planning Council review of draft plan.

- Extensive research and detailed report regarding impacts of inclusion of Florida Keys in federal Undeveloped Coastal Barrier Program.

Environmental Programs Manager, 1980-1984

South Florida Regional Planning Council, Hollywood, FL

Review comprehensive plans of counties and municipalities in South Florida, evaluate in relation to State and regional policy guidelines, and write evaluations including recommendations for improvements. Participate in and manage reviews of Developments of Regional Impact, with emphasis in areas of environmental and public facilities impacts. Environmental programs manager responsible for analyzing and critiquing environmental aspects of development in region, including U.S. Army Corps of Engineers and Florida Department of Environmental Regulation dredge and fill permit applications; prepare and present reports to Council concerning development warranting regional attention.

➤ **Development of Regional Impact Review**

Broward County—Ball Point, Design Center of the Americas, FEC Industrial Park, Harrison Park, Houston Park Marina, Pompano Industrial Park, Weston Phase II; **Dade County**—Airport Corporate Center, American Bankers Industrial Group, Homestead Bayfront Park & Marina, Chapman Field Park & Marina, Brickell Bay Office Tower, Terremark Centre, 1111 Brickell, SE 8th Street & Brickell Avenue, Watson Island; **Monroe County**—Port Bougainville/Garden Cove.

➤ **Court Testimony**

Gave deposition as witness for Dade County, FL in District court case involving beach restoration project on Key Biscayne.

➤ **Project Manager: South Florida Oil Spill Priority Protection Response Strategy**

Prepare detailed work program and budget. Supervise consultant in conducting extensive detailed study and mapping of South Florida coastal marine resources in relation to sensitivity to spilled oil. Supervise consultant in writing, editing, graphics, and printing of Environmental Sensitivity Index maps and report titled The Sensitivity of Coastal Environments and Wildlife to Spilled Oil in South Florida. Atlas and report won first prize from Florida branch of American Planning Association, 1981. Coordinate interest groups and agencies for implementation of strategy, including:

- inventory of cleanup equipment and contact personnel in region
- determination of appropriate spill responses and communication channels
- preparation of regional oil spill response handbook
- distribution of all project products and provision of public information concerning project, including presentations at local, state, and national meetings



- **Project Manager: Regional Hazardous Waste Program required by State of Florida Water Quality Assurance Act**
Coordinate Broward, Dade, and Monroe counties and Florida Department of Environmental Regulation in South Florida program implementation. Develop and distribute consultant request for proposals. Write and execute contracts between Council and State, counties, and consultant for administration of \$490,000 in State funds for program tasks. Coordinate public information. Review progress reports, assure contract compliance, authorize funds disbursement.
- **South Florida Hurricane Evacuation Program (Broward, Dade, and Monroe counties)**
Project Manager: Coordinated U.S. Army Corps of Engineers, technical consultant and local agency task force in plan preparation; developed and implemented public information program.

Sea Awareness Environmental Education Programs, Miami and Little Torch Key, FL, 1976-1981

Develop, market, and run natural history tours for general public to variety of destinations in South Florida and Caribbean.

**Adult Education Instructor, 1977-1980
Coral Gables High School & Key Biscayne Community School, Miami, FL**

Design, promote, and teach full-semester courses in coastal natural systems of South Florida to adults of all ages and backgrounds.

**Research Assistant, 1976-1980
Rosenstiel School of Marine & Atmospheric Science, University of Miami, FL**

- South Florida marine mammal salvage program, conduct study of West Indian manatee to stop deaths in flood control structures, take field data and conduct necropsies, analyze data for comparative studies.
- Analysis of infauna at potential sewage outfall site in South Florida.
- Analysis of sediment plume duration and path during dredging in Biscayne Bay.
- Analysis of fish populations on South Atlantic continental shelf for OCS oil and gas lease EIS.

Marine Biologist, Oceanic Society Charters, Belize, Central America, 1975-1976

Provide educational and research programs in tropical marine ecosystems for sailing/diving charter groups.

PROFESSIONAL REGISTRATIONS/AFFILIATIONS/CERTIFICATIONS

- Serving since 2005 on South Florida Regional Planning Council appointed by Governors Bush, Crist and Scott, board that oversees planning and regional issues for Broward, Dade and Monroe counties. Served as chair in 2009, currently serving as treasurer.

- Member, EPA Water Quality Steering Committee for Florida Keys National Marine Sanctuary
- Appointed in May 2000 by Governor Bush to four-year term on Florida's Acquisition and Restoration Council, which oversees purchase and management of State conservation lands
- Key West Utility Board Advisory Committee
- Certified Woman-owned Business Enterprise (WBE) and Disadvantaged Business Enterprise (DBE) with Florida Department of Transportation; State of Florida; South Florida Water Management District; Miami-Dade (also SBE), Broward (also CBE) and Lee counties; certified Woman-Owned Small Business (WOSB) with federal government
- Former president, Monroe County Federation of Chambers of Commerce; former president, Lower Keys Chamber of Commerce; current member, Key Largo, Islamorada, Marathon, Lower Keys and Key West chambers
- Associate member, Marathon and Lower Keys Association of Realtors
- Member, Florida Keys Contractors Association
- Member, Florida Association of Environmental Professionals and board member of South Florida chapter
- Member, National Water Resources Association and Florida chapter
- Certified diver, PADI #9501031862, advanced research certification from University of California at Davis and Rosenstiel School of Marine and Atmospheric Science, University of Miami



GUSTAVO RIECKEHOFF, P.E., Energy Business Unit Manager

EDUCATION

January 2008. Philosophy Doctor (Ph. D.)/Masters in Science (M. Sc.). Marine Biology Program, Fisheries Management Major. Magna Cum Laude. Thesis: Métodos para la Evaluación de Estrategias Reproductivas en Peces Teleósteos. Bircham International University. Plaza Chueca 8 - Madrid 28004, Spain.

Centro Interdisciplinario de Ciencias Marinas. January 2000-November 2002. Total number of courses. Masters Program: Marine Biology: Marine Resources Management Major.

August 1999 - University of Puerto Rico, Humacao University College. Bachelor Degree in Coastal Marine Biology. Natural Sciences Faculty. Humacao, Puerto Rico.

Specialized Courses:

Histological Techniques for the study of Marine Animals (issued by the Organization of American States - 2001). Geographic Spatial Analysis (2010), University of Puerto Rico, Río Piedras Campus. National Chess Instructor- Issued by the Puerto Rico Chess Federation (2009). Project Management Professional Training (Pending Certification, July 2011). New Horizons Computer Learning Center. Registered Educator Provider- Project Management Institute. Guaynabo, Puerto Rico. Sustainability- University of Illinois at Urbana-Champaign (2012).

TECHNICAL EXPERTISE

Dr. Rodríguez-Class has 16 years of experience as a wildlife biologist and environmental scientist, conducting wildlife research development and implementation, monitoring and other published field studies in a variety of marine and terrestrial habitats. Technical experience includes managing field sampling compliance projects, developing and implementing scientific research to help ecosystem-based management of terrestrial and marine resources. Dr. Rodríguez-Class has been part of a scientific team working in the preparation of Biological Evaluations, Mitigation Plans and Wetland Jurisdictional Determinations Studies to comply with sensitive marine and terrestrial species. in compliance with Section 7 of the Endangered Species Act (ESA), the US Fish and Wildlife Service and the National Marine Fisheries Service. Dr. Rodríguez-Class has been also involved in mediating issues between project proponents, stakeholders and regulatory agencies. He has conducted biological Critical Issues Analysis to determine location of an LNG pipeline crossing a natural reserve and protected areas for a site on the south coast of Puerto Rico. Additional experience includes conducting research and surveys for marine resources management, 310 hours of sea turtles monitoring and 2,600 hours of marine mammals monitoring in Puerto Rico, Costa Rica, Nicaragua, Mexico, and the United States; and Epibenthic Communities and Reef Fishes. Additionally, Dr. Rodríguez-Class is one of the leading scientist in the sharks and ecological marine soundscape research fields in Puerto Rico.

RELEVANT EXPERIENCE

- 1. Maguelles Island. Pontifical Catholic University of Ponce.**
 - 2013- Lead Scientist/Assistant Professor/Dive Master. Marine Biology Internship. Species identification, biodiversity surveys of species abundance and distribution, coastal ecosystems, SCUBA diving as scientific tool, bioluminescence discovery, plankton tow and microscopic life and Close-up examination of the major ocean phyla.
- 2. Marchand Group. Inc. Cabo Rojo, Puerto Rico.**
 - February 2012- Buyé Beach Environmental Evaluation. Buyé Beach Awareness and Educational Environmental Plan. Ecological, Microbiological evaluation of water quality and epibenthic fauna associated to Buyé Beach. Awareness and Educational Environmental Plan to comply with federal and local regulatory agencies.
- 3. Department of Environmental and Natural Resources/ Department of Education.**
 - January 2012-Present. Environmental Consultant. EduAmbiente, Inc. Environmental Educational Guide for Middle Schools.
- 4. Centro Turístico Mojacasabe. Cabo Rojo, Puerto Rico.**
 - March, 2011-Present. Senior Biologist/Environmental Consultant- Centro Turístico Mojacasabe. Cabo Rojo, Puerto Rico. Leader of a scientific team working in the preparation of environmental and benthic studies, monitoring, best management practices, environmental politics, documents and permits for a dock/marina construction in compliance with Section 7 of the Endangered Species Act (ESA), the US Corps of Engineers, Natural Environmental Resources Department, Puerto Rico, Environmental Quality Board, US Fish and Wildlife Service and the National Marine Fisheries Service.
- 5. Tetra Tech, Inc. Carolina, Puerto Rico.**
 - January 2010- July 2013. Senior Biologist/Environmental Scientist. Tetra Tech, Inc. Carolina, Puerto Rico. Part of a scientific team working in the preparation of biological Critical Issues Analysis to determine location of an LNG pipeline crossing a natural reserve and protected areas for a site on the south coast of Puerto Rico (Pre filing Resource Reports including Air Quality and Noise, Land Use, Recreation, and Aesthetics, Socioeconomics, Fish, Wildlife, and Vegetation and Water Use and Quality); Marine Planning Proposals, Biological Monitoring in Bathymetric Surveys, Biological Evaluations and Restorations, Environmental Impact Assessments Reviews, Mitigation Plans, Benthic Studies and biological studies in compliance with Section 7 of the Endangered Species Act (ESA) US Corps of Engineers, Natural Environmental Resources Department, Puerto Rico, Environmental Quality Board, US Fish and Wildlife Service, Department of Defense and the National Marine Fisheries Service. San Juan, Puerto Rico.



GUSTAVO RIECKEHOFF, P.E., Energy Business Unit Manager

CERTIFICATIONS

February, 2013- CPR/First Aid. American Heart Association. Ponce Paramedical College (POPAC). February, 2012- CPR/First Aid. Red Cross. Red Cross Central Office (San Juan). October, 2012. Hazardous Waste Operations Emergency Response (HAZWOPER). Certification. 40 hours. Tetra tech. Engineers and Architects College of Puerto Rico. San Juan, Puerto Rico. February, 2007. Asbestos Inspector. License ASB-0307-0118-SI.

PROFESSIONAL AFFILIATIONS

American Littoral Society, American Academy of Underwater Sciences (AAUS) SCUBA Diving

YEARS EXPERIENCE

16

6. **CSA Group.**
 - 2005- 2009. Scientist and Field Manager/Field Sampling Leader. Regional Wastewater Treatment Plant (RWWTP) 301 (h)/403 (c)/Dye and Mixing Zone/Bacteriological Waiver Demonstration Compliance Studies. On board Kruger B. Research Vessel. Arecibo, Aguadilla, Carolina, Mayagüez, Barceloneta, Cataño, Ponce and San Juan, Puerto Rico. Manatee Watch Program. Lead Biologist/Observer. Weeks Marine Vessel 506. Ponce, Puerto Rico (2005-2006). Part of a scientific team working in the preparation of Environmental Policy Document for the Port of the Americas.
7. **NMFS/ORC MACRO. San Juan, Puerto Rico.**
 - March 2003 – July 2005. Fisheries Interviewer and Regional Representative (June 2003, June 2004). Puerto Rico Recreational Fisheries Program.
8. **Centro Interdisciplinario de Ciencias Marinas**
 - April 2000 – October 2002- Researcher/Teaching Assistant. Morphophysiology Laboratory and Marine Animals Reproduction Course. Centro Interdisciplinario de Ciencias Marinas – IPN, La Paz, B.C.S. México.
9. **Bucknell University. Pennsylvania, USA.**
 - September – December, 1999. Field, Biological Museum and Laboratory Technician. Bucknell University Fish Collection and Vertebrate Laboratory. Laboratory of Environmental/Geological Engineering. Bucknell University. Pennsylvania, USA. Supervisor: Dr. William Raschi and Dr. Elaine Keithan.
10. **Ometepe Biological Station. Nicaragua.**
 - Summer 1997 and 1998 – Teaching and Field Assistant. Fish Biology Course. La Suerte Biological Station. Costa Rica. Vertebrate Biology Course. Supervisor: Dr. William Raschi.
11. **University of Puerto Rico. San Juan, P.R.**
 - 1994 – 1999. Research and Field Assistant. Epibenthic Communities and Reef Fishes Project. Supervisor: Dr. Edwin Hernández Delgado.



ROBERT STEWART, Senior Environmental Scientist

EDUCATION

M.A. Marine Resource Management/Marine Affairs, Rosenstiel School of Marine & Atmospheric Science
University of Miami
2000

B.A. Anthropology and Archaeology
University of South Florida
1997

YEARS EXPERIENCE

19

TECHNICAL EXPERTISE

Mr. Stewart has over 19 years of field and project management experience in the areas of Environmental Construction Compliance, Project Development and Environment (PD&E) Studies, ecological assessments, archaeological surveys, cultural resource identification and preservation, marine resource management, and endangered species monitoring.

RELEVANT EXPERIENCE

1. CSA Central, Inc., Miami, FL

- 2014 - Present: Senior Environmental Scientist - Responsibilities include environmental permit compliance, benthic studies, ecological assessments and water quality sampling.

2. SKS Engineering, Inc.

- 2010 - Present: Senior Environmental Scientist - Responsibilities include environmental permit compliance, construction management, jobsite inspections including erosion control and turbidity sampling, documenting disposal of contaminated soil, establishment of a project permit library, participation in meetings to track environmental issues.
 - S.R. 79 Widening and Reconstruction, Holmes and Washington Counties, FL - Provided supervision for on-site environmental compliance technician. Project consists of widening from a two lane to a four lane roadway, along with bridge replacement and stormwater treatment pond construction. Client: Parsons Brinkerhoff/FDOT, District 3, Bryan Estock (615) 887-3839, 2/2013 - 4/2014.
 - Port of Miami Tunnel Project (POMT) Miami-Dade County, FL - Environmental compliance for construction of the Port of Miami Tunnel, modifications to the MacArthur Causeway Bridge and relocation of approximately 3 miles of roadway. Responsible for overseeing contractor's compliance with environmental permits, performing water quality monitoring, contaminated soil tracking, oversight of environmental aspects of bridge construction and dewatering operations. Coordination with Florida Department of Transportation and permitting agency personnel is also a regular function of this position. Client: Parsons Brinkerhoff/FDOT District 6, Martin Ryan (407) 470-4414, 2010 - 2014.
 - Herbert Hoover Dike Rehabilitation Project, Glades County, FL - Drafted Environmental Protection Plan, Stormwater Pollution Prevention Plan, performed Eastern Indigo Snake and Manatee monitoring and erosion control inspections. Client: SWC, Inc., Sandy Walters, (305) 924-0195, 10/2011 - 4/2012.

3. Consul-Tech Enterprises, Inc., a CSA Group Company

- 2007 - 2010: Senior Environmental Scientist - Responsibilities include environmental permit compliance, benthic studies, ecological assessments and water quality sampling.
 - Reconstruction of US 1/Jewfish Creek Bridge, Florida Department of Transportation - District 6, Miami-Dade and Monroe Counties - Environmental compliance for reconstruction of Jewfish Creek Bridge and 18-mile stretch between Florida City and Key Largo. Responsible for overseeing contractor's compliance with environmental permits and commitments for project. Client: Parson Brinckerhoff Construction Services, Pom Chakkaphak, (904) 237-1171, Deceember 2007 - June 2010.

4. Stewart Consulting, Key Largo, FL

- 2000 - 2007: Permit Compliance Consultant - Performed a full range of resource management services include site monitoring during the permitting, construction and close-out phases of a project to insure compliance with permit requirements.
 - Brickell on the River Redevelopment, Miami-Dade County, FL - Cultural Resource Assessment Survey and Permit Compliance Monitoring. Responsible for supervising fieldwork and overseeing contractor's compliance with Certificate of Appropriateness to Dig Permit. Concluded 2006.
 - Cultural Resource Assessment Survey of Section 9 Township 52S, Range 40E, Miami-Dade County, FL - Responsible for environmental analysis and determination of site potential. Concluded 2005.



ROBERT STEWART, Senior Environmental Scientist

- Cultural Resource Assessment Survey, South Miami Drive, Miami-Dade County, FL - Responsible for conducting an archaeological survey of 3 adjacent parcels and monitoring during construction activities to ensure permit compliance. Concluded 2004.
- Key Biscayne Government Building Complex, Key Biscayne, Florida - Responsible for determining historic and pre-historic environmental conditions, conducting Phase I Archaeological Surveys as well as monitoring during construction activities. Concluded 2003.

5. Biscayne National Park, Resource Management Division, Homestead, FL

- 1999 - 2000: Resource Management Specialist - Responsible for conducting terrestrial and submerged resource management at the park including archaeological site reviews, aquatic vegetation and coral ground damage assessments and endangered reptile identification. Also responsible for budget planning, project design, archival research, field work and report preparation.
- 1998 - 1989: Graduate Intern - Responsibilities included assisting staff resource managers with various tasks including cultural resource identification and preservation, wildlife density surveys, water quality sampling, aquatic vegetation and coral ground damage assessment.

6. Janus Research, Miami, FL

- 1994 - 1998: Consultant - Primary tasks included the planning and implementation of archaeological surveys and excavation on behalf of the Florida Department of Transportation, District 6. Extensive coordination with FDOT representatives and contractors was required. Preparatory responsibilities included the formulation of research design, designation of probability zones based on ecosystem analysis and the determination of personnel requirements. Responsibilities also included field work and direct supervision of field archaeologists and site documentation.

7. Little Salt Spring Underwater Research Facility

- 1996 - Director - Responsibilities included instructing students in field research methods. Directing and supervising field work involving up to 10 students and volunteers. Supervising dive operations in the absence of the University's Safety Officer and the collection of water samples.

8. Archaeological Consultants, Inc., Sarasota FL

- 1993 - Field Technician - Responsibilities included assisting the Project Archaeologist in applying standard archaeological methods of survey and documentation.



ROBERT STEWART, Senior Environmental Scientist



Douglas W. Mann, P.E., D.CE
Coastal Engineering Project Manager

Education

M.S., Coastal and Oceanographic Engineering, University of Florida, 1987

B.C.E., Civil Engineering, University of Delaware, 1985

Associations

American Society of Civil Engineers, Florida Shore and Beach Preservation Association, American Shore and Beach Preservation Association

Registrations

Florida (1991), Delaware (2003), Louisiana (2004), Massachusetts (2006), Virginia (2011)

ASCE-ACOPNE Diplomate of Coastal Engineering

Academy of Coastal Ocean, Port, and Navigation Engineers, ASCE

Relevant Experience

Douglas Mann, P.E. has worked as a coastal engineer since 1987. Mr. Mann is experienced in all aspects of coastal engineering including dredge and fill projects for material disposal and beach nourishment, beach and inlet engineering, coastal structure design (including breakwater, groins, jetties, and Permeable Adjustable Groin (PAG) design and construction) as well as marine-related upland structures. Mr. Mann has been involved in the design of boat ramps, marina renovations, and other boating related projects. Mr. Mann is experienced in Joint Coastal permitting, Environmental Resource permitting, and FDEP Coastal Construction Control Line permitting.

A summary of selected project experience is listed below:

Beach Restoration

City of Deerfield Beach, Beach and Dune Restoration. -

Project manager for a truck haul beach and dune restoration project. Project utilizes FEMA funding

to address repairs to the beach from Hurricane Wilma (2007-2008).

Curry Hammock State Park Beach Restoration, Florida. -

Project manager for the design of a truck haul beach nourishment for the restoration of a small recreational beach in the Florida Keys. Project involves the removal of the existing marl substrate to allow the possibility of sea turtle nesting. (2006-2008).

Broward County Shore Protection Project, Broward County, Florida

Project manager for the development of the General Reevaluation Report for the second renourishment of the Segment II shoreline. Performed economic analyses, engineering of fill quantities, borrow area design, cost estimating, and permitting of the project (1999-2004). Project manager for the implementation of the above project with upland sand source (2012-present).

Delaware Bay Beaches, Design Verification Study, Delaware.

Engineer of record for the design verification of six beach restoration projects along the Delaware Bay shoreline (2013-present).

Pelican Landing Community Association Erosion Control Project

Project manager and engineer of record for a beach nourishment and adjustable groin project for restoration of a portion of Big Hickory Island, Florida (2009-2013).

Seawinds Property Owners Association Emergency Dune Restoration

Designed and permitted an emergency dune restoration for 500 linear feet of dune. Provided construction contract administration (2012).

Coastal Structures

Founders Park Marina Rehabilitation Project Islamorada, Florida

Engineer of record for the replacement of the 77-slip marina. Project included a marina materials evaluation including life cycle costs, revised layouts to accommodate larger boats, and increased structure elevations to accommodate storm surges.

North Ocean Boulevard Seawall Toe Protection Project, Palm Beach, Florida

Project manager and engineer of record for the

design of a rock toe berm to prevent the failure of an exposed ocean front seawall (2005-2006).

Boca Raton North Jetty Weir Relocation, Palm Beach County, Florida

Engineer for the redesign of the north jetty weir. Designed rock improvements and demolition of a portion of the crib jetty (2003).

Boca Raton Inlet Jetties Repairs, Palm Beach County, Florida

Designed the rubblemound repair and cavity filling within the south jetty and the crib repairs to the north jetty. Performed construction observations and contract administration (1994).

Singer Island Breakwater Study, Palm Beach County, Florida

Designed and permitted a 3 breakwater system to minimize shoreline fluctuations caused by the interaction of the littoral drift with natural rock outcrops (1993).

Norriego Point Stabilization Project

Performed a feasibility study to stabilize the public portion of the inlet spit to control erosion, and provide storm protection to the Destin Florida fishing harbor (2009-present). Engineer of record for final design and permitting of the spit armoring project. Addressed numerous inputs from citizens (2011-present).

Cortez Groin Replacement Project, Manatee County Florida

Engineer for the replacement of permeable groins that are controlling end losses from Federal beach nourishment project and protecting upland emergency evacuation route (2012).

Town of Palm Beach Seawall (Midtown) Toe Protection Project, Palm Beach County, Florida

Assisted in the design of a rock toe berm to prevent the toe failure of an exposed ocean front seawall. Provided construction observations (1989).

Inlet Management

Lake Worth Inlet Sand Bypassing Discharge Analysis, Town of Palm Beach, Florida

Analyzed shoreline changes and other coastal processes occurring south of the Lake Worth Inlet to recommend extension of the sand bypassing plant discharge (2006).

Lake Worth Inlet Sand Transfer Plant Replacement Analysis, Town of Palm Beach, Florida

Assisted in the development of alternatives to determine if the existing sand transfer plant should be rehabilitated or replaced (2005).

South Lake Worth Inlet Management Plan Update, Palm Beach County, Florida

Provided update to the littoral budget and refined the sand bypassing protocols for the operation of the plant. Analyzed the optimal location of a sand discharge (2005).

South Lake Worth Inlet Management Plan Study, Palm Beach County, Florida

Authored the development of sand bypassing procedures and associated structural improvements at the inlet. Study resolved long standing legal dispute at the inlet (1997-1998).

Quality Assurance and Quality Control South Palm Beach Island Comprehensive Erosion Control Project EIS, Florida

Lead quality control reviewer for various NEPA documents (2013-present).

Stephen Keehn, P.E.

Program Advisor/Senior Coastal Engineer

Education

M.E., Coastal & Hydraulic Engineering, University of California, Berkeley, 1982

B.S., Engineering, United States Military Academy at West Point, 1972

Associations

American Society of Civil Engineers, Association of Coastal Engineers, American Shore and Beach Association, Society of American Military Engineers, FSBPA Per Bruun Distinguished Services Award Recipient, 1999

Registrations

Professional Engineer: Florida, New Jersey, California

Relevant Experience

Stephen Keehn, P.E. is a Program Advisor and Senior Coastal Engineer and received his Masters in Coastal Engineering from U.C. Berkeley in 1982. He then served with the U.S. Army Corps of Engineers, Jacksonville District in planning, engineering, and construction assignments on beach and navigation projects. He continued this type of work with CB&I, where his major programs included Collier County, Captiva Island, Panama City Beaches in Florida and Fire Island, New York.

He has served as a Project Manager and Senior Coastal Engineer with CB&I since 1992, on numerous beach and inlet projects including four ASBPA Top Restored Beaches. He has worked on over a dozen inlet management plans in Florida, in addition to planning, design and permit of numerous inlet structures and dredging projects. He planned and coordinated a beneficial use of dredged sand project for Panama City Beach using sand from the Panama City Harbor dredging project. Knowledgeable in all aspects of coastal projects to include coastal engineering, geology, hydrographic and Lidar survey, Federal and State

permitting and funding, marine habitats, lands and easements needed to implement a successful project. He was awarded the Per Brunn Distinguished Service Award by the Florida Shore and Beach Preservation Association in 1999.

Prior to 1992, Mr. Keehn served as a Coastal Engineer with the U.S. Army Corps of Engineers, Jacksonville District. During his tenure, he completed numerous feasibility and detailed design reports of coastal protective works. Performed coastal engineering analysis and design for three major beach restoration studies in Florida: the Feasibility Report for the Sarasota County Beach Restoration Project (Venice) (1984), the First Renourishment Design Report, Duval County (Jacksonville), FL (1984), the First Renourishment Design Report for the Dade County (Miami Beach), FL (1984) and revised the cost-benefit analysis for the Smathers Beach (Key West) Nourishment Project. Mr. Keehn designed coastal structures (Jetty Extension and Sand Tightening) at Bakers Haulover Inlet, FL (1984) and was the construction manager on the combined St. Johns River Maintenance Dredging & Jacksonville Beach Renourishment Project (1985) and the Mayport Naval Station Maintenance Dredging (1985).

A summary of selected project experience is listed below:

Collier County, FL Beach Renourishment

Project- Current Senior Project Manager for Collier County's coastal program. Managed renourishment project completed in 2006. Work included preparation of a comprehensive engineering report to identify alternatives, natural resources and scope for the project. Tasks included field inspections, survey data analysis, volumetric and shoreline change calculations, sand search, as well as preparation and presentation of annual monitoring reports. Analysis also included inspection and evaluation of the existing outfall and groin structures along the project area as well as trends related to the sediment budget and inlet effects. The design incorporated techniques to avoid nearshore habitat impacts. Designed and developed plans and specifications for the construction of a 1.09 acre artificial reef in Naples, FL. Integrated FEMA storm losses into project design.

Duties have also included project management for physical and biological monitoring surveys within

the County. Senior Project Manager 2010, 2011, and 2012 emergency truck haul projects. Senior Project Manager for the design and permitting for the 2013-14 Truck Haul Beach Renourishment Project. Responsibilities included weekly meetings between contractor and County, construction management and oversight, payment verifications. Additional efforts included project bidding and development of specifications. Work leading up to the task includes management of conceptual design study and planning and coordination for the 2013-14 project.

Captiva and Sanibel Islands Renourishment Project, Lee County, FL-Project Manager for the 2005-06 Captiva and Sanibel Islands Renourishment Project. Designed the project, managed onsite engineer and assisted the Corps of Engineers in implementing the 2008 emergency project. Managed design and construction of the terminal groin rehabilitation at Redfish Pass. Researched and reviewed monitoring performance of the Captiva and Sanibel Islands beaches in support of the Joint Coastal Permit from the Florida Department of Environmental Protection. Performed similar tasks for the 2013 project, including construction management oversight.

Panama City Beaches Nourishment and Renourishment Projects- Project Manager and Engineer for the 1998/1999, 2005/2006 and 2003 beneficial sand project. In this capacity, Mr. Keehn provided project management, storm loss analysis, sand search and borrow area development, engineering design, managed numerical modeling simulations, permitting assistance, for the 17.5 mile beach restoration project. Mr. Keehn was responsible for assisting with FEMA and Corps of Engineers funding approval for the 2005/2006 and 2011 beach renourishment projects. Provided expertise in negotiations with State and Corps representatives evaluated sand quality for placement within project area and provided quality assurance oversight to client sand quality standard during Corps construction of project. Engineering, design and permitting for the 15-year FDEP permit, approved in 2013.

Longboat Key Comprehensive Plan, Florida Beach Renourishment Project-Project Engineer who analyzed sediment budgets from adjacent inlets, borrow area, beach sand sizes, and beach

monitoring results to develop a comprehensive sediment budget and beach sand standard for a comprehensive beach renourishment design in 1995. Established the importance of grain size in the future renourishment of the island and proposed a design strategy to use available sand sizes for future projects.

Venice Inlet Management Plan-Project Engineer to determine the impact of jetties and the intracoastal waterway on sand by-passing at the inlet. Developed a phased long-range plan which used economical sand sources in the short run and the future construction of a by-passing plant when sand costs rise.

Doctors and Wiggins Pass 2009 Maintenance Dredging-Project Manager responsible for the project management, design, and construction management of the Doctors and Wiggins Pass project. Tasks included contractor selection, construction observations, verification of fill volume placement, and compliance with project permit conditions.

Fort Pierce Inlet, Florida Management Plan-Project Manager to evaluate the impact of a Federal navigation channel and jetties on the adjacent beaches and the development of a long-term sand management plan. Measured tides and currents, conducted dye study, calculated tidal prism and inlet stability.

Wiggins Pass, Florida Inlet Management Plan and Navigation Improvement Project- Project Manager for responsible for improvements to a sand bypassing plan and navigation channel design to increase the maintenance dredging interval and reduce adjacent shoreline impacts within the County and Parks planning objectives. Managed modeling, design, permitting, field investigations (biological and geotechnical), construction and permit activities.

Stacy Buck, M.S.

Senior Marine Biologist

Education

M.S., Coastal Zone Management, Nova Southeastern University, 2007

B.S., Marine Science, University of South Carolina, 1999

Associations

Southeast Florida Coral Reef Initiative (SEFCRI) voting team member, American Academy of Underwater Sciences (AAUS) dive control board member, Florida Association of Environmental Professionals (FAEP), American Shore and Beach Preservation Association (ASBPA), Florida Shore and Beach Preservation Association (FSBPA)

Registrations

SDI Divemaster (2012), SDI Dry Suit Specialty Diver (2009), Enriched Air Nitrox Diver (2003), PADI Rescue Diver (2003), PADI Advanced Diver (2003), AAUS Scientific Diver (2003), NAUI Open Water Diver (1997), Emergency First Responder (CPR, 1st Aid, AED), (renewed 2013), DAN O₂ Administration (renewed 2013), Divers Alert Network (DAN) Member (1997), BOEM Protected Species Observer (2007), Coral Rescue and Relocation Training - Florida Keys National Marine Sanctuary (2008)

Relevant Experience

Stacy Buck has over 14 years of experience in biological and environmental science, the last 10 of which have focused on coastal and marine biology in south Florida. Ms. Buck has conducted biological monitoring services for both public and private-sector clients and has extensive experience in the design and implementation of monitoring programs for marine resources. This experience includes marine habitat characterization of natural and artificial reef communities, implementation of coral restoration/transplantation programs, and

seagrass habitat assessment. Ms. Buck routinely prepares environmental documents in support of State and Federal permit applications including joint coastal (JCP) and environmental resource (ERP) permits. She also coordinates regularly with federal consulting agencies (NMFS and USFWS) to prepare Biological Assessments and Essential Fish Habitat Assessments in support of ESA Section 7 Consultation and the Magnuson-Stevens Fishery Conservation and Management Act. Ms. Buck is responsible for the complete coordination of biological monitoring projects from pre-permit application coordination through final report deliverables. A summary of selected project experience is listed below:

Project Management and Design:

Responsibilities include environmental permitting, development of mitigation and monitoring programs, coordination and implementation of field activities, data analysis and report preparation.

- Town of Longboat Key Beach Renourishment Project, FL (2006 - Present)
- Broward County, Segments II and III Shore Protection Projects, FL (2004 - Present)
- Town of Palm Beach Reach 7, Phipps Ocean Park Mitigative Reef Monitoring Project, FL (2006 – 2008)
- Ocean Ridge Shore Protection Project, FL (2006 – 2008)
- Delray Beach Fifth Periodic Renourishment, FL (2010 – Present)
- USACE, Broward County Segment I Nearshore Reef Assessment and Literature Review, FL (2009 – 2010)
- City of Deerfield Beach Artificial Reef Feasibility Study, FL (2010 – 2011)
- City of Deerfield Beach Force Main Project, FL (2011 – 2012)
- Town of Longboat Key North End Renourishment Project, and Structural Stabilization Project, FL (2010 - 2013)
- Town of Longboat Key Breakwater Project, FL (2009 -2010)

- Siesta Key Beach Nourishment Project, FL (2006 – 2008)

Environmental Documentation & NEPA

Compliance: Preparation of environmental documents in support of National Environmental Policy Act, Endangered Species Act Section 7 Consultation, and Magnuson-Stevens Fishery Conservation and Management Act.

- Southern Palm Beach Island Comprehensive Shore Stabilization Project, Environmental Impact Statement, Biological Assessment and Essential Fish Habitat Assessment, Palm Beach County, FL (2013-Present)
- Broward County Segment II Shore Protection Project, Environmental Assessment and Biological Assessment, Broward County, FL (2013-Present)
- Town of Longboat Key North End Structural Stabilization Project Biological Assessment, Longboat Key, FL (2013)
- City of Delray Beach Fifth Periodic Beach Renourishment Project, Environmental Assessment, Biological Assessment and Essential Fish Habitat Assessment, Delray Beach, FL (2010 - 2011)
- Collier County Beach Renourishment, Environmental Assessment and Biological Assessment, Collier County, FL (2012-2013)
- Town of Longboat Key Beach Renourishment Project, Environmental Assessment, Biological Assessment and Essential Fish Habitat Assessment, Longboat Key, FL (2010 - 2012)
- Town of Palm Beach Reach 8 Beach Renourishment Project, Environmental Assessment, Biological Assessment and Essential Fish Habitat Assessment, Town of Palm Beach, FL (2007)

Biological Monitoring/Assessments: Includes assessment of natural and artificial habitat function via *in situ* sampling and aerial analysis.

- Southern Palm Beach Island Comprehensive Shoreline Stabilization Project, Palm Beach County, FL (2013)

- Town of Palm Beach, Mid-Town Beach Renourishment and Expansion Project, FL (2005 - 2008)
- Town of Palm Beach, Reach 7 Phipps Ocean Park Beach Restoration Project, FL (2006 - 2008)
- Town of South Palm Beach/Town of Lantana Erosion Control Study, FL (2006, 2010)
- Ocean Ridge Beach Nourishment Project, FL (2006 - 2008)
- Town of Palm Beach, Reach 7 Phipps Ocean Park Beach Restoration Project, FL (2006 - 2008)
- South and Central Boca Raton Beach Nourishment Project (2006)
- Broward County, Segment II and III Shore Protection Project, FL (2004 - Present)
- USACE, Broward County Segment I Nearshore Reef Assessment and Literature Review, FL (2009 - 2010)
- Town of Longboat Key Beach Renourishment Project, FL (2006-Present)
- Town of Longboat Key Lindley Street Boat Ramp Seagrass Survey, FL (2011)
- Town of Longboat Key North End Renourishment Project, FL (2010)
- Town of Longboat Key North End Structural Stabilization Project Wetland Delineation and Aerial Analysis, Longboat Key, FL (2013)

Damage Assessment and Coral Restoration (Transplantation):

- Town of Longboat Key Beach Renourishment Project, FL (2006 - Present)
- Founder's Park Marine Restoration Project, FL (2008)

Protected Species Observation/Enumeration Surveys:

- Broward County, Segment II and III Shore Protection Project, FL (2004 - present)
- Town of Longboat Key Beach Renourishment Project, FL (2010)

ROSAMIL COSME, Planner & GIS Specialist

EDUCATION

M.L.A, Landscape Architecture
Polytechnic University of Puerto Rico
Presently attending

M.S. Urban Planning
University of Puerto Rico, 2004

B.A., Environmental Design
School of Architecture
University of Puerto Rico, 1995

PROFESSIONAL LICENSES AND REGISTRATIONS

Urban Planner
Puerto Rico No. 762

SPECIAL EDUCATION

Certification in Regulations and
Environmental Permitting
University of Puerto Rico, 2007

GIS Certificate
Polytechnic University of Puerto Rico
2005

TRAINING

¿Cómo utilizar datos del Censo 2010?
Escuela Administración de Empresas,
UMET, 21 de mayo de 2013 (2.5 horas
contacto)
Sociedad Puertorriqueña de
Planificación

USGBC Caribbean Chapter
LEED AP Exam Preparation Course
Offered by Energy & Environmental
Solutions, October 23-24, 2008

Seminars

“Puerto Rico hacia un Turismo
Sostenible” Puerto Rico Tourism
Company, March ,2006

TECHNICAL EXPERTISE

Ms. Cosme has over 17 years experience in architecture, GIS, urban planning and environmental services. Her expertise spans the architecture field, where she has worked in site, urban and public housing assessments, building surveys, project permitting, architectural drafting and design, and as-built drawings in both Puerto Rico and the Virgin Islands. She has also worked on research for proposals, CAD drafting and graphic presentations. As an urban planner, Ms. Cosme has worked with feasibility studies, master plans and special plans. As a GIS analyst, she has worked on geospatial analysis, vector and raster analysis, site selection, georectification, digitizing, map layouts, data queries, and database, shapefile and feature class creation.

RELEVANT EXPERIENCE

1. CSA Group, Puerto Rico

Architecture

Lirios del Sur- Stairs Additional Services-Stairs Assessment-The project comprises the preparation of an emergency and definitive construction program including construction documents for civil, electrical, and landscape design site work, as well as limited architectural design, for compliance with HUD Section 504 concerning the accessibility of the housing units at Lirios del Sur, a public housing development in Ponce, Puerto Rico. The project's units were being renovated as part of a previously started program. Ms. Cosme worked as field coordinator of the stairs as-built, in order to determine if the stairs comply with the Regulations. (2012, Client: Public Housing Administration)

Las Dalias Modernization Project- The project spanned the comprehensive modernization of 240 dwelling units in 30 four-story residential buildings, and the construction of two new buildings, one for the administration facilities and the other to be used as a Head Start. The design schedule consisted of 125 calendar days divided in three design phases. CSA performed the design work in less than the established time schedule. Ms. Cosme as Technology Designer, worked in gathering the apartments' existing conditions for the modernization process. (2004, Client: Public Housing Administration)

Four Seasons San Miguel Resort Development - The resort development included the construction of a resort hotel, hotel villas, beach facilities, tennis complex, 18-hole golf course and the necessary infrastructure (access roads, wastewater treatment plant, water mains, etc.). CSA was contracted by San Miguel Luquillo Partners to prepare an Environmental Impact Statement for the project. As a Technology Designer, Ms. Cosme worked in the project section drawings and also collaborated in the graphic presentations. (2005, Client: San Miguel Luquillo Partners)

Puerto Rico Convention Center District (PRCCD) - CSA is a part of a multi-disciplinary team developing the new \$1.3 billion Puerto Rico Convention Center District. The convention facility and its anticipated ancillary hotels, restaurants, retail establishments, park system and commercial developments are to be constructed on approximately 110 acres of land in Isla Grande. Ms. Cosme developed the sections drawings of the PRCCD to show the airspace regulations of Ribas Dominicci Airport surroundings for the presentation to Federal Aviation Administration. She also collaborated in Master Plan graphic presentations. (2000, Client: Convention Center District Authority)

Tren Urbano Pedestrian Improvements, Puerto Rico Highway and Transportation Authority (PRHTA)- An urban and architectural design was needed to improve the pedestrian walkways surrounding various Tren Urbano (Urban Train) station. The design was prepared with the accessibility recommendations established by the public rights of way. The project also included the redesign of the Gándara Park, which would help maintain it as the most valuable “green spot” among the vast amounts of urban constructions. Ms. Cosme performed a site assessment around the Piñero, Domenech and Roosevelt Stations, and collaborated in Master Plan graphic presentations.



ROSAMIL COSME, Planner & GIS Specialist

Seminars

Congreso de la Ciudad Habitable
Condado Plaza
August, 2002

“Primer Simposio Internacional de Planificación
Ciudad 2020: Retos y Oportunidades”
August, Caguas

“Las Implicaciones del Puerto de las Américas en Puerto Rico”
Women’s Transportation Seminar
Puerto Rico Chapter, Guaynabo
March, 2002.

PROFESSIONAL AFFILIATIONS

YEARS EXPERIENCE

17

Presentations

Digitized Geolocation of the Public Works
Civil Mega Friday April 19, 2013
Convention Center
with the speakers: Rosamil Cosme; Planner, Alexis Ocasio; Civil Engineer & land surveyor and Ricardo Delgado; Land surveyor, CRD Agrimensores

Landscape Architecture Week
Presentation of the
de los trabajos de grupo de Rural Studio workshop
LMM



Port of the Americas, Puerto Rico Infrastructure and Financing Authority (PRIFA) – The proposed Port of the Americas is one of several strategic initiatives undertaken by the government of Puerto Rico to promote the economic development of the southern region of the island, reduce unemployment, and increase per capita income and direct investments from outside Puerto Rico. The project is designed to provide world-class deep-draft port facilities for container ships and for the transshipment of cargo containers for the international and local markets. The project will be located within the jurisdictional limits of the municipalities of Guayanilla, Peñuelas, and Ponce. Ms. Cosme prepared a survey of building structures and the graphic representation for the Archeology Study Phase 1-A. She also collaborated in Master Plan graphic presentations.(2001,Client: Puerto Rico Infrastructure and Financing Authority)

10th Naval District Preservation Office Project – The project consisted of documenting the structures comprised by the Isla Gande Naval Base, for the State Historic Preservation Office (SHPO). Ms. Cosme collected data, sketched plans, and collaborated in the preparation of as-built drawings of the 10th Naval District at Isla Grande. (1999, Client: State Historic Preservation Office (SHPO).

Architecture & Planning

Special Communities Program, Puerto Rico Highways and Transportation Authority (PRHTA) and the Housing Department of Puerto Rico – CSA conducted infrastructure assessments for Puerto Rico's Special Communities in 9 municipalities (over 65 communities). These projects comprised technical assessments of each community's housing and infrastructure, a preliminary community assembly to determine citizens' needs, preparation of housing and infrastructure recommendations, facilitation of a community assembly to determine the short term infrastructure action plan, preparation of a full historical document, and presentation of the full plan and the community decisions to a panel of high ranking government officials. These assessments culminated in an improvement plan for the communities, which included conceptual costs and time estimates. As Technology Designer and Planner, Ms. Cosme worked in the communities infrastructure and housing assessments. She also prepared the reports for the Puerto Rico Highways and Transportation Authority (PRHTA) and the Housing Department of Puerto Rico. (2003-2004, Clients: Puerto Rico Highways and Transportation Authority (PRHTA) and the Housing Department of Puerto Rico.

GIS

PRASA UnBillable Water Recovery Project (spanish acronym PRANF), Puerto Rico Aqueduct and Sewer Authority - The project comprises the evaluation of different water distribution systems in order to identify and reduce water loss unbilled. Ms. Cosme digitalized the PRASA commercial routes per micro-sectors and also generates figures in which show the different commercial routes. (2012, Client: PRASA)

GIS-AAA Project Capital, Puerto Rico Aqueducts & Sewer Authority (PRASA) – The GIS-AAA Project consists in the creation of a GIS system that combines the data from the Puerto Rico Aqueduct and Sewers Authority's (AAA) commercial, operational and infrastructure areas. The system is being developed in three phases (short, mid and long term) and will be designed so that it can be used by the engineering, operations, commercial, and presidential offices. The system is comprised of a GIS-AAA data model based on the gathering and/or repair of existing AAA, PR Infrastructure Financing Authority, and CSA's information. Also included the installation, programming, and configuration of the servers that would contain the databases and the rest of information. Ms. Cosme worked as a GIS Specialist, digitizing and entering data into database.(2007-2008, Client: PR Aqueducts and Sewer Authority)

Wind Farm, Pattern Energy Group, LP – This project is a site selection study for the establishment of wind turbines as a renewable energy source. CSA collaborated in the environmental analysis and documentation necessary for the sites. Ms. Cosme was responsible for gathering the environmental data of the sites preselected by the Client.

ROSAMIL COSME, Planner & GIS Specialist

Optimization Islandwide, Puerto Rico Aqueducts and Sewer Authority (PRASA) – As a GIS Specialist for the project, Ms. Cosme was responsible for the update and manipulation of the Island Wide Water System GIS database. She was also in charge of handling GIS analysis, and produce schematics per region, maps, and other related GIS products (2010-2012, Client: PR Aqueducts and Sewer Authority)

Río Grande de Manatí Land Use, Puerto Rico Environmental Quality Board – The project comprised the creation of a land uses map for Río Grande de Manatí basin. As a GIS Specialist for the project, Ms. Cosme was responsible for the aerial photo interpretation and digitizing of land uses to generate the watershed land use map. (2005, Client: Puerto Rico Environmental Quality Board, María Ortíz)

Planning

Plan de Manejo de la Reserva de la Isla Verde – The Department of Natural and Environmental Resources contracted the services of CSA Group, LLC for the Development of the Management Plan for the Isla Verde Reef Marine Reserve. This reserve was appointed to the reefs around the island of eolianite known as Isla Verde. It is located in an area of intense tourism development, commercial, residential and air transport in a sector of the Autonomous Municipality of Carolina known as Isla Verde. The Management Plan of the reserve has as its principal objective the establishment of strategies for the management of the conservation and the sustainable use of the marine reserve. The management plans are the result of a participating process between government agencies, users and nonprofit organizations committed to conservation and resource development in order to establish a joint management of the Reserve (co-management). Ms. Cosme worked as planner. (2013, Client: Natural Resources Department (NRD))

Roosevelt Roads Zoning Plan – This project comprises the preparation of a special plan for the redevelopment of the former Roosevelt Road Naval Base (“Portal del Futuro”), and the corresponding Strategic Environmental Impact Statement (EIS-S). Ms. Cosme worked on the coordination between the consultant and the office. She was in charge of converting data from Cad to shapefile, creating GIS data, digitizing and generating maps. She also collaborated on the review of the Special Plan. (2006-2007, Client: Portal del Futuro Authority and Local Redevelopment Authority)

PRASA Water and Wastewater Infrastructure Master Plan, Puerto Rico Aqueducts & Sewer Authority (PRASA) – This Master Plan seeks to identify and analyze PRASA’s water and wastewater major infrastructure needs and the Capital Improvements Program to be established for the next 20 years (2010-2030). Ms. Cosme was stationed at Malcolm Pirnie, where she works on the development of the GIS analysis and maps, required to visualize infrastructure problems and the improvements. (2009-2010, Client: PR Aqueducts and Sewer Authority)

Planning & GIS

Capital Improvements Program, Puerto Rico Aqueducts & Sewer Authority (PRASA) – The Capital Improvement Program was created to develop water and wastewater infrastructure for the East Region of Puerto Rico. CSA is the East Region Program Manager and the efforts include the planning and development of the Capital Improvement Plan for the region, conceptual designs, design management, environmental permitting, land acquisition, construction management, and facility start-up services, among others. The Program has identified over 140 projects for the region, including two reservoirs. CSA has also rendered operations and maintenance services to both filtration and wastewater treatment plants. An evaluation and modernization of PRASA’s systems is being handled by the Geographic Information System group. Ms. Cosme worked as Planner and GIS Specialist in the project. She also worked with the proposed projects data and in the generation of the GIS maps. (2007-2009, Client: PR Aqueducts and Sewer Authority)

Wal-Mart Puerto Rico, Inc. Site Selection – CSA provided the necessary architectural and engineering services for the Site Reconnaissance Services effort for Wal-Mart Puerto Rico, Inc. Some of the services



ROSAMIL COSME, Planner & GIS Specialist

provided by CSA included: Conduct site observations to determine and record the physical location of visible utility elements and other facilities within the site, and obtain field data to verify limitations and opportunities for development. Correlate site observations with information shown on the drawings available; Review Planning Board maps to understand limitations and constraints imposed on the site by its current zoning district among others. MS. Cosme worked in the site selection using GIS, according with the Client criteria. (2005, Client: Walmart)





Ms. Colbert has 20 years of experience in managing and supervising technical projects and in leading inter-disciplinary teams consisting of engineers, geologists, ecologists and other technical experts. Ms. Colbert has extensive experience in all types of environmental permitting in the State of Florida (including Environmental Resource Permits (ERPs), Local Wetlands Permitting, Coastal Construction Permitting, Tree Permitting, Water Use Permit (WUP), industrial wastewater), as well as practical applications of wetland ecology and surface and groundwater hydrology in the South and Central Florida ecosystems. Her experience includes agency coordination, environmental permitting, wetland jurisdictional determinations and mitigation assessments, mitigation design and implementation, wetland monitoring and maintenance, benthic resource surveys, natural resource management, threatened and endangered species studies, habitat evaluation, conservation plans, water quality analysis, NEPA/PD&E environmental assessments, tree surveys, contamination assessments and remediation that consider both ecological and human health risks, GIS and training/teaching. Ms. Colbert is also a Licensed Environmental Professional and has performed numerous Phase I and II Environmental Site Assessments throughout the United States. Ms. Colbert has used this broad background and her project management skills to provide quality driven, technically sound solutions that meet the client's needs in an efficient and cost effective manner. She frequently presents on permitting, wetlands, endangered species and water use issues at the Florida Chamber Environmental Permitting School and Growth Management short courses as well as to professional organizations in the South Florida area.

Education

M.S., Biology, Florida International University, 2000

Post Graduate Studies in Environmental Law/Toxicology, Duke University, 1995

B.S. Biological Science (minor in Chemistry), Florida State University, 1994

Professional Licenses / Certifications

Licensed Environmental Professional #25

Certified FDEP Stormwater, Erosion and Sedimentation Control Inspector

OSHA 40-Hour HAZWOPER/OSHA 8-HR Site Supervisor

PADI Open Water Diver

40-Hour Course in Wetland Identification and Delineation (USACE Regulation IV program)

Florida UMAM Training, SFWMD, 2005

Years of Experience

20

Project Experience

Monroe County Building Department, Key Largo – In-House Biologists— Smart-Sciences' staff worked as in-house biologists conducting plan reviews of permit applications for the Growth Management Division of Monroe County in Key Largo. Review involved research of plan criteria that generally included clearing of vegetation, stormwater management plans, boat docks and seawalls, shore line open space and setbacks so that development of Key Largo is congruent with Monroe County code. Inspections included pre-clearing site visits and final site inspections to make sure the code is followed by applicants and that the environmental protection provided for native species and listed species is acknowledged during development. Many of these properties are located in rockland hammocks containing a number of threatened and endangered plant species unique to this community. Ms. Colbert is very familiar with the plants in rockland hammocks and conservation measures required to protect these habitats. She also inspects rockland hammock restoration areas that are required to be placed under conservation easement.

Overseas Highway, FDOT District Six, Monroe County, Florida — Ms. Colbert was the environmental project manager, acting as a sub-consultant to HDR Engineering, Inc., providing assistance with the environmental, drainage and permitting services required on the Overseas Highway roadway improvements. Ms. Colbert led the wetland and listed species survey for the project that includes mangroves, forested area and beach located adjacent to the corridor, with portions of the corridor crossing over or adjacent to waters of the Florida Keys National Marine Sanctuary (FKNMS). These waters are designated as an Outstanding Florida Water (OFW), and are afforded special protection. Numerous protected species utilize the FKNMS upland and offshore habitats in the project vicinity. Although no direct wetland or listed species impacts are expected as a result of the project, special attention to the surface water pollution prevention plan (SWPPP) and erosion control plan (ECP) will be required to ensure impacts to the FKNMS are avoided. Ms. Colbert worked with the project engineer to provide guidance and avoidance of wetland impacts.

General Environmental Coordination and Support for Florida Keys Overseas Heritage Trail, FDEP, Monroe County, Florida — Ms. Colbert provided environmental permitting and NEPA support to the FDEP for the construction of the 106-mile pedestrian-bicycle path to be completed from Key Largo to Key West utilizing 23 of the historic Flagler Railroad Bridges.

Naval Air Station Key West, Monroe County, Florida,— Ms. Colbert prepared the Integrated Natural Resource Management Plan (INRMP) and Environmental Assessment for Naval Air Station (NAS) Key West. The INRMP delineated a 10-year program for environmental management/natural resource conservation which is fully integrated with each facility's military mission and daily operations. As part of her assessment, Ms. Colbert addressed issues such as water quality, land management, conservation of T&E species, fish and wildlife habitat protection/restoration and the enhancement of natural resource-based recreation for military families and the local communities. Ms. Colbert prepared objectives and planned actions for these items as well as target years for completion and budgets for the action items. She also coordinated activities with federal and state wildlife agencies to ensure cooperative resource management.

City of Opa-locka, Environmental Documentation for Stormwater, Wastewater and Drinking Water Infrastructure Improvements - Ms. Colbert conducted the environmental assessments for the Stormwater, Wastewater and Drinking Water System Planning Reports being prepared by EAC for the City of Opa-locka, funded by the Clean Water State Revolving Fund Program. For each of these projects Ms. Colbert evaluated the flora, fauna, listed wildlife species, wetlands, surface water bodies, vegetated uplands and undisturbed area. Ms. Colbert also identified potentially contaminated sites throughout the City. This information was used to evaluate if the project would have any adverse effects to natural habitats or human health.

Seawall Repairs at Fleet Management, City of Miami Beach, Miami-Dade County, Florida — Ms. Colbert was the project manager and provided environmental support to Bermello Ajamil (B&A) on this bulkhead design and repair project located at the City of Miami Beach's Fleet Management Property within the Port of Miami, which is located within Biscayne Bay. Ms. Colbert led the preparation of environmental permit applications to the Miami-Dade Department of Environmental Management (DERM), the Florida Department of Environmental Protection (FDEP) and the United States Army Corp of Engineers (USACE). The project required a survey of approximately 200 linear feet of submerged seawall prior to repairs at the city's fleet management facility. Video equipment was deployed along vertical transects to document the presence of corals attached to the surface of the wall. Video was later analyzed to determine the species, size and quantity of corals on the wall. Data was used to determine the need and plausibility of mitigation of the corals that were found. Permits were obtained on-time and within budget.

Biscayne Point Neighborhood Improvement Project, EAC/City of Miami Beach, Miami-Dade County, Florida — Ms. Colbert provided environmental support to EAC on this neighborhood improvement project that includes upgrading the stormwater system, landscaping and sidewalks. Ms. Colbert worked with the design engineers as the project plans were developed to evaluate designs that avoided to the extent practical impacts that would require permits. Outfalls discharge into Biscayne Bay, therefore a seagrass survey was performed for the Miami-Dade County DERM Class II Drainage Permit. Seagrass beds were observed in the area of the outfalls, however because the flow volume will not increase, impacts are not anticipated. Seagrass monitoring will be conducted to determine if impacts occur over time.

Brickell Key Bridge Rehabilitation Permitting, FDOT District Six, City of Miami, Florida — Ms. Colbert provided environmental permitting support for this bridge rehabilitation project to include a benthic resource survey, report writing and completing permit applications for the USACE, SFWMD and Department of Environmental Resources Management (DERM).

JUAN M. VILLAR, P.E., Sr. Project Manager / Civil Engineering

PROFESSIONAL LICENSES AND REGISTRATIONS

Professional Civil Engineer
Florida No. 32710

EDUCATION

B.S. Civil Engineering
Florida International University
1975

AFFILIATIONS

American Society of Civil
Engineers

YEARS EXPERIENCE

38

TECHNICAL EXPERTISE

Mr. Villar has over 38 years of experience in the civil engineering field. As a Senior Project Manager, he oversees the budgetary status of projects and delegates responsibilities to Project Managers/Engineers on selected projects including highway design, paving grading and drainage, water distribution, sewage collection systems, pump stations, and storm water management studies for large-scale subdivisions. He also performs Quality Assurance/Quality Control.

RELEVANT EXPERIENCE

1. CSA Central, Inc., Miami, Florida

- 2012 - Present: Director of Engineering - Mr. Villar is responsible for the design, permitting and management of private land development, municipal and roadway projects, including residential (single family, multi-family, mid and high rise condominium and dormitory), commercial (office, warehouse, shopping center, retail centers), industrial (distribution centers, manufacturing facilities of various type, automotive repair, etc.) and municipal utility (water, sewer and drainage) projects. He is also in charge of the preparation of technical proposals, contract negotiations, client relations and directing and coordinating project development activities/tasks and intercompany staff through-out the completion of project designs, permitting and construction administrative/management tasks associated with the development of various type projects within the South Florida region. Other responsibilities are overseeing project scheduling, professional staff/resources, QC reviews and invoicing.
- 1999 - 2012: Senior Project Manager - Design development activities include coordination of soils investigations, survey field design data collection, site plan preparation, identification of existing utilities, determination of the availability of water and sewer service, and identification of concurrency issues and other regulatory impacts. Related activities include the preparation of engineering design plans and support documentation such as quantities take-off's, detailed cost estimates, specifications and various design calculations related to water consumption, fire flow, sewage generation, lift station design, traffic generation, and earthwork analysis.

Design tasks include the design of surface water management (drainage) water distribution (including the analysis of water supply wells), sanitary sewer collection and transmission (pump/lift stations), and paving and grading systems. Preparation and processing of owner's agreements, plan and permitting approvals, and processing through applicable governmental agencies of State, County, and Municipal level.

Construction administration activities include client assistance during bidding, preparation, and issuance of addendums and change orders, processing of pay requests, shop drawing review, as-built review, preparation and processing of certifications and conveyance documentation, and directing of staff field representatives.

PARTIAL LIST OF PROJECTS

PORTS

- Tamiami Airport, Miami-Dade County, FL -Project Manager and Engineer of Record for the civil portion of the job responsible for the design of 1,000 ft westerly extension of Runway 9R/27L and parallel Taxiway "E" with a new taxiway connector. A new drainage system and a swale conveyance system bordering the new taxiway on the north and the runway on the south were constructed. Client: Miami Dade Aviation Department (MDAD), Ernesto Beltre, (305) 876- 0787, 6/2008 - 5/2010.
- MIA Parking Lots, Miami-Dade County, FL - Mr. Villar was responsible for the paving and drainage improvements to the existing parking lots for the following buildings:
 - Building 3040 -The project required milling and resurfacing the east side of the maintenance building, and the replacement of the existing cover plate for a continuous grate to the existing trench drain system. A Storm Water Pollution Prevention Plan was prepared outlining Best Management Practices for the protection of the existing systems. Client: Miami-Dade Aviation Department, Guillermo Garcia, (305) 869- 4111.



JUAN M. VILLAR, P.E., Sr. Project Manager / Civil Engineering

- Building 3050 - The project comprised the installation of a new exfiltration drainage system connecting to an existing MIA's outfall system at Central Boulevard, as well as milling and resurfacing the paved areas. A Storm Water Pollution Prevention Plan was prepared for the connection of the proposed system to the existing outfall system. Client: Miami-Dade Aviation Department, Guillermo Garcia, (305) 869- 4111.
- Building 704 - Milling and resurfacing were required for the parking area on the east side of the building, as well as the design of a new drainage system to be connected to an existing airport outfall system. A Stormwater Pollution Prevention Plan was prepared for the connection of the proposed system to the existing outfall. Client: Miami-Dade Aviation Department, Peter Smith, (305) 876-7051.
- MIA New Parking Lot, N.W. 36th Street & N.W. 49th Avenue, Miami-Dade County, FL - Mr. Villar was responsible for the 100% design of the geometry, paving, grading, drainage and permitting for this lot lying on the southeast corner of the intersection. Regarding the proposed exfiltration drainage system, he was responsible for the preparation of the Stormwater Pollution Prevention Plan (SWPPP), and Best management Practices were designed for protection of the surrounding areas. Client: Miami-Dade Aviation Department, Guillermo Garcia, (305) 869- 4111.
- Miami International Airport (MIA) Park 6 Short Term Parking, Miami-Dade County, FL - Mr. Villar was responsible for the 100% design of the geometry, paving, grading, drainage, permitting, as well as for the preparation of the signing and pavement markings plan for this lot lying north of the South Terminal. The proposed drainage system required him the preparation of the Stormwater Pollution Prevention Plan (SWPPP) for the connection of the proposed drainage system to the airport's existing dual 48" system. On the existing systems, Best Management Practices were designed for protection. Client: Miami-Dade Aviation Department, Chuck Bassil, (305) 876- 0499, 3/2007 - 1/2008.
- Seaboard Marine Cargo Yard, Temporary Pavement Repairs, Port of Miami - Mr. Villar was responsible for the design of the new pavement, milling and resurfacing of a number of localized areas where the pavement has been damaged or non-existent. The design included the repair/replacement of existing drainage structures tops, frames and grates. Client: Port of Miami, Diana Beauchamp Lopez, (305) 347-4892, 10/2006 - 1/2007.
- Seaboard Marine Cargo Yard, Paving Plans for Berth 165-177, Port of Miami - Mr. Villar was responsible for the removal and redesign of the paving & grading of 1,500 ft by 60 ft of existing asphalt with base and subgrade material that was damaged by Hurricane Wilma at Berth 165 to 167. Client: Port of Miami, Diana Beauchamp Lopez, (305) 347- 4892, 10/2006 - 1/2007.
- Port of Miami Redevelopment Program, Port of Miami - Mr. Villar was in charge of the 30% design of the internal roadway system for the Port of Miami cruise and cargo areas. The scope responsibilities included:
 - Julio Graves de Peralta, (561) 752- 2463, 1/1999 - 2/2002.
 - The 100% design of the geometry, paving, grading, drainage and permitting of three Intermodal facilities, two for the new terminal buildings and one for an existing terminal building.
 - The paving, grading and drainage design of the entrance and exit of the new Cargo Gates Facilities.

COMMERCIAL

- Snake Creek Readiness Center, Broward County, FL - Full civil engineering services for the design and construction of a new two story, 108,000 s.f. military training facility consisting of offices, classrooms, training rooms and assembly hall. Client: Florida Department of Military Affairs for the Florida Army National Guard, Uyles W. Keen Jr., (904) 823-0397, 2009 - 2012.
- Univision HD Studios, Miami-Dade County, FL - Project Engineer for a new facility to house two HD studios a large Studio "E" consisting of 15,000 s.f. and a small Studio "F" consisting of 5,000 SF. The facility will contains support spaces including audience holding area, audience lobby, private green rooms, make-up rooms, single-user restrooms, offices and conference room. Client: LeMartec Engineering & Construction Corp., Bert Delgado, (305) 471-8223, 2009 - 2011.
- Scott Rakow Youth Center Renovation, Miami-Dade County, FL - CSA Group was contracted by the City of Miami Beach, to develop a schematic conceptual master plan including the validation of the program scope and budget, and the preparation of a phasing plan that would allow the facility to remain in operation during construction. Client: City of Miami Beach, Humberto Cabanas, (305) 673-7071, 20005 - 2011.



JUAN M. VILLAR, P.E., Sr. Project Manager / Civil Engineering

- Tortola Airport Expansion, - Client: China Harbour Engineering Company, LTD., Jeff Wang, (345) 916-1250
- IOC Olympic Center, Port au Prince, Haiti - Client: International Olympic Committee, Christophe De Kepper, 41 21 621 6111, 2011-2014
- Homestead Bayfront Park, Miami-Dade County, FL - CSA was the civil subconsultant responsible for the design of a new two story concession building with bathrooms facilities and lifeguard offices. CSA's responsibilities included the design of the paving, grading and drainage plans and pavement markings for a parking lot to the northwest of the proposed new building as well as the drainage system surrounding the building. Also included in CSA responsibilities were the design of the water distribution and sewage collection systems. Due to the proximity to the ocean the permits were obtained from South Florida Water Management District. Client: Architecknics, Edward Berounsky, (305) 661-5392, 2009 - 2010.
- Central West Transportation Center, Miami-Dade County, FL - Design Criteria Professional, programming, schematic design, project phasing and construction administration. Client: Miami-Dade County Public Schools, Eduardo Lopez, (305) 995-4853, 2004 - 2008.
- Normandy Shores Golf Club, Design Drainage System, Miami-Dade County, FL - Mr. Villar was responsible for the redesign and plans preparation of the previously permitted drainage system at the Club House parking area. The project entailed the paving, grading and drainage design for the parking lot of the reconstructed Club house and Cart Barn. In addition, CSA Group completed the water distribution system and the sewage collection system for these two buildings and the existing bathroom facilities at certain locations in the golf course. All the permitting for the Civil portions was part of our responsibility. Client: City of Miami Beach, Lourdes Rodriguez, (305) 448-3373, 2/2005 - 4/2006.

ROADWAYS / TRANSPORTATION

- N.W. 135th Street (Opa Locka Boulevard), Miami-Dade County, FL - Mr. Villar was responsible for the design of resurfacing plans, which included drainage improvements, signing and pavement markings, ADA upgrades, driveways and traffic controls. Client: FDOT District Six, Israel Magrisso, P.E., (Retired), (305) 470-5260, 2/1990 - 3/1991.
- Overseas Highway from Bahia Honda Channel to Spanish Harbor & US 1 Highway from SW 88th Street (Kendall Drive) to SW 104th Street, Monroe County, FL - This project comprised the preparation of milling & resurfacing plans, signing and pavement markings plans, ADA upgrades, traffic controls, existing driveways enhancement and installation of new guardrails. Mr. Villar was responsible for the design of resurfacing plans. Client: FDOT District Six, Israel Magrisso, P.E., (Retired), (305) 470-5260, 2/1990 - 3/1991.
- U.S. 1 from S.W. 88th Street to S.W. 104th Street, Miami-Dade County, FL - Mr. Villar was in charge of the design of resurfacing plans which included drainage improvements, signing and pavement markings, ADA upgrades, driveways and traffic controls. Client: Israel Magrisso, P.E., (Retired), (305) 470-5260, 2/1990 - 3/1991.
- SR 874 & Killian Parkway Ramp, Miami-Dade County, FL. - Mr. Villar was responsible for the widening improvements of east and north ramps of the interchange, and the redesign of acceleration lane on mainline. Design elements included pavement design, drainage and traffic control. Client: FDOT District Six, Jesus R. Sanchez, (305) 470-5260, 2/1993 - 3/1994.
- N.W. 67th Avenue from Flagler Street to Tamiami Boulevard, Miami-Dade County, FL - Responsible for the design of 2.4 mile six lane municipal roadway including pavement design, geometrics and drainage.
- N.W. 135th Street (Opa Locka Boulevard), Miami-Dade County, FL. Project Manager for the design of resurfacing plans to include drainage improvements, signing and pavement markings, ADA upgrades, driveways and guardrails.
- Overseas Highway from Bahia Honda Channel to Spanish Harbor, Monroe County, FL - Project Manager for the design of resurfacing plans to include drainage improvements, signing & pavement markings, ADA upgrades, driveways & guardrails.
- Sycamore Road, Hendry County, FL - Project Manager for the design of a 3.1 mile, four (4) lane arterial highway. Project elements included geometrics, drainage and pavement design.
- Tamiami Airport Runway Extension, Miami-Dade County, FL - Project Manager responsible for the design of 1,000 feet westerly extension of Runway 9R/27L and parallel Taxiway "E" with a new taxiway connector. New drainage system and swale conveyance system bordering the new taxiway on the north and the runway on the south.



JUAN M. VILLAR, P.E., Sr. Project Manager / Civil Engineering

EDUCATIONAL

- Northwest Bus Depot and Fuel Station, Orange County, FL – CSA Group’s responsibilities included civil engineering, permitting, lighting, architectural, mechanical and structural design services. Mr. Villar’s was responsible for Civil Engineering Services included paving, grading and drainage, water distribution, sewage collection, parking facilities, perimeter road(s) signing and pavement markings plan, permitting and construction administration. Client: R.L. Burns, Inc., Kory Krueel, (407) 839-1131, 2012 - 2013.
- Coral Reef Senior High, Shenandoah Elementary, Perrine Elementary and John I. Smith Elementary, Miami-Dade County, FL – As Project Manager, Mr. Villar was responsible for the civil design of four Elementary Schools (Design Build). The design included paving, grading and drainage, water distribution and sewage collection systems, parking facilities, perimeter road(s) improvements, a signing and pavement markings plan, and permitting. Client: Miami-Dade County Public Schools, Lourdes Rodriguez, (305) 448-3373, 5/2005 - 9/2006.
- Young Men’s Preparatory Academy, Miami-Dade County, FL - Senior Civil Engineer for the renovation, remodeling, and restoration of an existing 30,000 ft historic structure which included a cafeteria, auditorium, and supporting spaces, as well as the construction of a new building with General Classrooms, Science Labs, Art/3D Labs, Cisco Labs, Media Center, Dining and Kitchen rooms, P.E. Classroom, Lockers and Showers, and “Smart” Technology in all classrooms. Design services included paving, grading and drainage design, water distribution system and the sewage collection system for the existing restored building and the two new buildings added, in addition to completing the staff parking lot across the street. CSA was also responsible for assisting in the permitting process related to the civil engineering services. Client: Miami-Dade County Public Schools, Lourdes Rodriguez, (305) 448- 3373, 5/2009 - 8/2009.
- Water Distribution & Sewer Collection for Educational Facilities. Civil design of four Elementary Schools (Design Build), Miami-Dade County, FL - The responsibilities extended to paving, grading and drainage, water distribution, sewage collection, parking facilities, perimeter road(s) improvements and signing and pavement markings plan. Client: Miami-Dade County Public Schools

WATER AND WASTEWATER

- 60” Force Main, Miami-Dade County, FL - This project comprised the design of a 2-mile 60” force main from the South Miami Wastewater Treatment Plant to an existing 72” force main located at the intersection of SW 212th Street and Old Cutler Road (+/- 2 miles). Mr. Villar was responsible for the preliminary maintenance of traffic preparation for all the alternative routes proposed. He performed quality control reviews for the proposed pipe location in reference to the existing infrastructure and existing residential/commercial communities, and was responsible for keeping a close coordination with FDOT, Turnpike Authority and South Florida Water Management District for street and canal crossings. Client: Miami Dade Water and Sewer Department, Carlos Benavides, (786) 268-5285, 5/2008 - 4/2011.
- Mudd Creek Canal Water Main and Force Main Aerial Crossing, Miami-Dade County, FL – The project comprised the design and permitting of a 16” water main and 16” force main aerial crossing over Mudd Creek Canal along N.W. 6th Street from N.W. 135th Avenue to N. W. 137th Avenue. Mr. Villar was the Project Manager for this project. Contact: Lourdes Mendez-Lopez, (305) 995- 4879, 6/2004 - 2/2005.
- 20” Water Main, Miami-Dade County, FL – The project comprised the design and permitting of a 20” water main on N.W. 7th Avenue from N.W. 79th Street to N.W. 112th Street. Mr. Villar was responsible for the preliminary maintenance of traffic preparation for all the alternative routes proposed. He performed quality control reviews for the proposed pipe location in reference to the existing infrastructure and existing residential/commercial communities. Client: Miami Dade Water and Sewer Department, George L. Aguiar, (305) 669- 7740, 11/1999 - 10/ 2000.
- Normandy Shores Golf Club, Design Drainage System, City of Miami Beach, FL. - Project Manager for the redesign and plans preparation of the previously permitted drainage system at the Club House parking area. The project entailed the paving, grading and drainage design for the parking lot of the reconstructed Club house and Cart Barn. In addition CSA Group completed the water distribution system and the sewage collection system for these two buildings and the existing bathroom facilities at certain locations in the golf course. All the permitting for the Civil portions was part of our responsibility.
- Drainage Plan & H/H Studies for a Public Housing Development. Preparation of master drainage plans for subdivisions of a major development comprising 64,000 Acres. Performed hydrologic/hydraulic studies



JUAN M. VILLAR, P.E., Sr. Project Manager / Civil Engineering

for the overall communities to adapt existing design to current regulations. Directed the preparation of construction drawings of roadways and drainage design necessary to convert raw acreage into a fully developed community in various counties within the State.

- Central & South Florida Sewage Collection Systems. Design and permitting of sewage collection systems (gravity and pressure) for subdivisions of major developments in Central and South Florida. Design included flow calculations for residential, commercial and industrial areas.
- DERM Drainage Improvements Program. Responsible for the design and permitting of drainage improvements to assigned neighborhoods as a result of the street flooding caused by Hurricane Andrew.

HOUSING

- Everglades at the Bay, Miami-Dade County, FL – Mr. Villar was responsible for the complete design of three drainage wells, two exfiltration trenches, and water distribution and sewage collection systems at Two 20-story towers. Client: Cabi Developers, Harold Tannenbaum, (305) 442- 4200, 2004-2006.
- Port St. Lucie, Port Charlotte, Vero Beach, FL. - Responsible for the preparation of master drainage plan for subdivisions of a major development comprising 64,000 acres. Performed hydrologic/hydraulics studies for the overall communities to adapt existing design to current regulations. Directed the preparation of construction drawings of roadways and drainage design necessary to convert raw acreage into a fully developed community in various counties within the State of Florida.
- The Alhambra Grand Plaza Office Condo Building, Coral Gables, FL - Civil Engineer responsible for paving, grading, & drainage for a nine-story building encompassing 1.5 acres. Design elements included water and sewer mains extension drainage, milling and resurfacing, pavements markings and traffic control. 2001-2003.
- Jefferson Place, 233 NE 3rd Avenue, Fort Lauderdale, FL - Civil Engineer responsible for Paving, grading and drainage for a 5-story building in downtown Fort Lauderdale as well as water distribution and sewer collection. Design encompassed three drainage wells and roadway improvements surrounding the site. 2000 - 2003.
- Permitting for Private Housing Development(s). Performed the storm water and wetland mitigation permitting process for a major subdivision in St Lucie County with South Florida Water Management District and in Desoto County with South West Florida Water Management District.



HANS X. FIGUEROA SWEET, P.E., Civil/Environmental Engineer

PROFESSIONAL LICENSES AND REGISTRATIONS

Professional Engineer
Puerto Rico
License Number: 13025

EDUCATION

MS in Environmental Engineering,
Georgia Institute of Technology.
Atlanta, GA.
1993

BS in Civil Engineering, University of
Puerto Rico, Mayagüez Campus.
1990

PROFESSIONAL AFFILIATIONS

Diplomate by the American
Academy of Environmental
Engineering

College of Engineers and Land
Surveyors of Puerto Rico

Former President, Puerto Rico
Society of Professional Engineers

Water Environment Federation

Puerto Rico Water and
Environment Association

YEARS EXPERIENCE

20

TECHNICAL EXPERTISE

Mr. Figueroa has over 20 years of experience as a Civil and Environmental Engineer in the design, specification, analysis, and studies associated with water and wastewater treatment and conveyance infrastructure. Mr. Figueroa also has experience in feasibility studies for industrial, commercial and residential projects, as well as in environmental assessment, storm water management and environmental permitting. He provides technical expert advice to clients in MS4 cases during consent decree negotiations with EPA, and in design, budgeting and implementation of mitigation and compliance measures.

RELEVANT EXPERIENCE

1. CSA Group, Inc.

- *Potomac Submerged Channel Intake*, Washington Suburban Sanitary Commission (WSSC) – Working as a subconsultant to a WSSC Contractor, Mr. Figueroa had a key role in providing preliminary design and project layout drawings for alternatives considered during feasibility study and environmental assessment tasks. Mr. Figueroa also prepared construction cost estimates, and quantitative environmental assessments. Project participation from 2013 to present.
- *Technical Support for the Development Services Group*, WSSC – Working as a subconsultant to a WSSC Contractor, Mr. Figueroa lead the technical team providing revisions and comments to update standard design guidelines for private developers to build consistent and compliant small sewerage pumping stations. Mr. Figueroa also provided benchmarking work related to water looping policies, and the impact of city's environmental site design in water and sewerage infrastructure. Project participation from 2013 to present.
- *North Coast Super Aqueduct*, Puerto Rico Aqueducts and Sewer Authority (PRASA) – As Senior Optimization Engineer, Mr. Figueroa provided technical and engineering support for the operations and maintenance departments of the North Coast Super Aqueduct, a 100 MGD supply treatment and distribution facility. He was responsible for performing distribution pump station troubleshooting and optimization and re-engineering; conducting feasibility analysis for sludge lagoon cleaning; preparing a RFPs for raw water reservoir cleaning; and analyzing WTP hydraulic capacity analysis/maximization evaluation. Project participation from 2011 to 2013.
- *Valenciano Dam & Water Supply System*, PRASA – Mr. Figueroa provided design services for raw water intake, outlet conveyance, and a 15 MGD variable speed pumping station. The project also included facilities for multiple extraction points, trash removal, sediment removal, gravity bypass, and flow regulation. Mr. Figueroa was in charge of the mechanical process design for the raw water delivery system including outlet works and pumping station. Specially challenging was the task of maximizing operational flexibility, and reducing sediment loading with multiple removal facilities. Project participation 2011 and 2013 to present.
- Optimization of Hydropower Generation in the Patillas System, PRASA – Mr. Figueroa worked in the modeling of reservoir operation to optimize generation based on water availability hydrology. He also worked on several aspects of the Islandwide Hydropower System capital improvements program, including cost estimation and improvements program development. Project participation from 2012 to 2013.

2. Hans X. Figueroa Consulting Engineers

As Principal of his firm, Mr. Figueroa provided technical support for optimization of water systems, including design, specification, analysis, and studies related to water and wastewater treatment and conveyance infrastructure. He also provided consulting services in wastewater reuse for water conservation and project sustainability. He performed feasibility studies for industrial, commercial and residential projects, as well as environmental assessments, storm water management, and environmental permitting. Project participation from 2004 to 2013.



HANS X. FIGUEROA SWEET, P.E., Civil/Environmental Engineer

3. Edgardo N. Martinez and Associates (San Juan, PR)

As design engineer, Mr. Figueroa provided professional engineering services for the design, specification, analysis, and studies related to water and wastewater treatment and conveyance infrastructure. Project participation from 2001 to 2004.

4. Alternative Resources, Inc. (Boston, Massachusetts, & PR Office)

As a Senior Engineer for this firm, Mr. Figueroa performed engineering analysis and general consultancy for the environmental impact statement and planning phase of a proposed municipal solid waste facility. This project included site inspections, technical documentation, and evaluation of concepts and location for water and gas ancillary facilities. Project participation from 2000 to 2001.

5. Tighe & Bond, Inc., (Westfield, Massachusetts)

Mr. Figueroa worked as a Senior Engineer for this company, performing design, specification, analysis and studies related to water and wastewater treatment and conveyance infrastructure. Projects included process changes for industrial WWTP; UV disinfection system; lead & copper control; and regional residuals management feasibility evaluation. He also provided engineering services for remediation projects including hydraulic and mechanical analysis of systems at contaminated industrial sites, with soil vapor extraction via vacuum pumping and treatment with thermal oxidation, and pneumatic pumping of oil contaminated groundwater and treatment with coalescing oil water separator. Project participation from 1996 to 2000.

6. Law Environmental, Inc.

As Project Engineer, Mr. Figueroa assisted the Owner's representative in the inspection and startup of a \$6,000,000 (1995) wastewater reclamation (zero discharge) facility using biological nutrient removal (BNR) and reverse osmosis (RO) in a leading pharmaceutical industry. The project included quality control, acceptance testing, and technical documentation. Project participation from 1995 to 1996.

7. UNIPRO Architects, Engineers & Planners

Mr. Figueroa worked as Junior Engineer for this company, performing environmental assessments, storm water pollution prevention plans, and environmental permitting for facility expansions, as well as providing design recommendations for wastewater pre-treatment projects in manufacturing facilities. Project participation from 1992 to 1995.

Throughout his career Mr. Figueroa has worked in the following projects:

- *Feasibility study of submerged water intake*
- *Compliance in enforcement actions as Expert Consultant*
- *Optimization and re-engineering of distribution pumping stations*
- *15 MGD raw water pump station & dam outlet works design*
- *Booster pumping station design, and reduced pressure zones design*
- *Design of packaged water treatment plants*
- *Design-build of the replacement of a 12" sanitary trunk sewer*
- *Bolted steel storage tanks, concrete storage tanks/chlorine contact tanks, and sludge holding tanks*
- *Sewage pumping stations*
- *Sampling and analysis plans for WWTP*
- *WTP compliance improvements (Addressing IESWTR, DBPs)*
- *Small community systems design: water resources/supply systems with conservation district; chlorination systems for water supply wells; dechlorination systems for water treatment wastewaters*
- *Chlorination booster system design*
- *Advanced industrial wastewater treatment plant design & construction inspection*
- *Municipal solid waste transfer station design*
- *Environmental evaluations of industrial projects*
- *Environmental permitting (air, water, waste)*



- *Maintenance of traffic design*



Qualifications Summary: Ms. Sadough joined BHA in 1988 as a Senior Structural Engineer. Since that time she has progressed to hold the position of Chief Structures Engineer. Ms. Sadough's experience ranges the full spectrum of bridge types from curved structural steel to precast post-tensioned concrete members. Her significant design contributions have encompassed all project phases, from preliminary design and Bridge Development Reports to final design, peer review, value engineering, and post design services. In addition, Ms. Sadough has served in the role of Structures Project Manager and Engineer-of-Record for a multitude of high profile FDOT bridge projects requiring the full gamut of considerations ranging from railroads and airports to coastal projects and major Florida waterways. Ms. Sadough's comprehensive knowledge of FDOT design guidelines and policies will minimize District staff review efforts. This is particularly important when utilizing structural component phase submittals to expedite the Design-Build project schedule and reduce cost to the Department.

Years of Experience:

With BHA: 24

Total Experience: 29

Professional Registrations:

FL – PE-44130 (1991)

NV – PE 21575 (2011)

Reference:

Ron Wallace, PE

FDOT District 4 (954) 777-4641

John Danielsen, PE

FDOT District 4 (954) 777-4644

Relevant Project Experience:

SR 9/I-95 Spanish River Blvd. Interchange Improvements Design-Build Project, Palm Beach County, FL, District 4 - This Design-Build project with Astaldi Construction provide access to and from northbound and southbound I-95 as well as Yamato Road to Spanish River Boulevard which will improve access to FAU campus and relieve traffic on the adjacent Glades Road & Congress Avenue Interchanges. The project requires extensive coordination with FAA, CSX and other local agencies. Ms. Sadough is Structures EOR & Project Manager responsible for all design and coordination with FDOT and the contractor during the various phases of plans preparation and will provide construction support services during construction.

SR 5/US-1 Bridge Replacement Design-Build Project, Palm Beach County, FL, District 4 - This Design-Build project with Johnson Bros. involved the replacement of four low level continuous cast-in-place deck bridges founded on pile bents with new FIB structures carrying US-1 over Lake Worth Creek in the town of Jupiter. The project involved phased construction to minimize disruption, seasonal vehicular, waterborne, and pedestrian traffic considerations, construction in a corrosive environment, environmental considerations (seagrass, manatee, sea turtles, wetlands) and enhanced coordination required to accommodate several utilities. Ms. Sadough is Project Manager responsible for all design and coordination with FDOT and the contractor during the various phases of plans preparation and providing construction support services during construction.

SR5/US1 Reconstruction & Widening Design-Build Project, St. Lucie/Indian River Counties, FL, District 4 - Ms. Sadough is the Structural Engineer of record for this design-Build project with Community Asphalt involving the replacement of existing bridges over FEC Railroad & Old Dixie Highway.

NW 25St. Viaduct, Miami-Dade County, FL, District 6 - Cost Savings Initiative for project located within the Miami airport Glide Path involving the change of drilled shaft to 24" prestressed Concrete piles & change of North Line canal bridge (2400 LF) to pipe culvert.

I-595 Reversible Lanes Design-Build project, Broward County, FL, District 4 - As a subconsultant to AECOM on this high-profile \$1.3B Design-Build project, Ms. Sadough led BHA's structural design effort on Zones 1, 2, 3, 4 and 6. Ms. Sadough oversaw and actively participated in the structural design. The extensive external coordination required with the design teams of the multiple adjacent Zones makes Ms. Soheila particularly adept at proactively resolving issues in full FDOT compliance within the condensed timeframes specific to the Design- Build arena.

SR-9(I-95) Design-Build Bridge over Box Culvert South of 45th Street, Palm Beach County, District 4 - This Design-Build project with Hubbard Construction Company involved the construction of new 60 foot single span Modified AASHTO girder bridge over an existing quadruple box culvert. Permit coordination was critical to this project, involving both the South Florida Water Management District and the North Palm Beach County Improvement District. Ms. Sadough was the Structural Project Manager responsible for all design aspects and construction support services during construction.

SR 826/SR 836 Interchange Section 5 Design-Build, Miami-Dade County, FL, District 6 - The SR 826 / SR 836 Interchange is a 4-level System-to-System Interchange with direct connectors that provide for traffic movements in all directions between the two expressways next to Miami International Airport. As subconsultant to BCC on this high-profile \$558M Design-Build project, Ms. Sadough performed peer review of four high-level segmental ramp bridges. The bridges are balanced precast cantilever structures erected with a launching gantry. Additionally, Ms. Sadough performed peer review of all project Category 2 Structures.

I-95 / Palm Beach International Airport Interchange, Palm Beach County, FL, District 4 - Ms. Sadough was the Structural Project Manager responsible for all design aspects and construction support of a four level interchange with eight precast concrete segmental box girder bridges and six steel plate girder bridges over I-95 & CSX Railroad.

Ft. Lauderdale/Hollywood International Airport Interchange, Broward County, District 4 - As prime design consultant on this \$95M Design-Build project, Ms. Sadough served as Senior Bridge Engineer for the complete structural design and load rating of post tensioned pre-cast segmental box girder bridges traversing US-1 and the FEC Railway.

Miami Intermodal Center (MIC) / Miami International Airport (MIA) Interchange, Miami-Dade County, FL, District 6 Developing Master Plan and Preliminary Roadway & Bridge Plans for this multi-billion dollar program comprised of both Airport and roadway services facilities. MIC is proposed to serve as a regional transportation hub as well as an extension of the Airport's ground transportation network.



Mr. Kumar Allady, P.E.
President
RADISE International, L.C.

Professional Registration and Certifications:

- Registered Professional Engineer, Florida # 52845, 1998
- Construction Quality Management for Contractors, USACE, Florida
- Pile Driving Inspection - CTQP
- Drilled Shaft Inspection - CTQP

Professional Affiliations:

- President, American Society of Highway Engineers (ASHE)- Gold Coast Chapter, 2006-2008
- Florida Engineering Leadership Institute - 2008 Class
- Member American Society of Highway Engineers (ASHE)
- Member American Society of Civil Engineers (ASCE)
- Member Florida Engineering Society (FES)

Education:

- Ph.D. Course work and Qualifiers, Ocean Engineering Florida Atlantic University, 1993 - 1997
- M.S. in Civil Engineering, Osmania University, India, 1992
- B.E. in Civil Engineering, Osmania University, India, 1990

Capabilities:

- Business Development
- Office Administration
- Project Management
- Client Relations
- Peer Review
- Value Engineering
- Geotechnical Engineering
- Pile Driving Inspection and EDC Embedded Pile Engineering
- Construction Materials Testing
- Construction Engineering Inspection
- Threshold Inspection
- Structural Engineering
- Ocean Engineering
- Database Programming

Mr. Allady is the founder and president of RADISE International. He has over 20 years of experience in Civil Engineering Services plus 3 years of software related experience. His background includes experience and education in structural engineering and ocean engineering disciplines. Mr. Allady has worked and managed numerous projects for both private and public clientele in South Florida including Palm Beach & Broward Counties, United States Army Corps of Engineers (USACE), South Florida Water Management District (SFWMD) and Florida Department of Transportation (FDOT). His experience includes analysis, design, construction, engineering inspections, QC/QA materials testing of superstructure and substructure elements of Infrastructure projects including pump stations, spillways, multi-storied buildings, parking structures, retaining walls, MSE walls, roadways, levees, dams, storm water treatment areas, water control structures, culverts, weirs, spillways, noise walls, high mast lighting, airports, seaports and bridges.

REPRESENTATIVE PROJECTS:

2065 Prairie Road Well Abandonment, Palm Beach County, FL. Performed drilling services for the environmental remediation project which consisted of the abandonment of two 30-foot deep monitoring wells.

Riviera Beach Marina District South, Riviera Beach, FL. Provided geotechnical engineering and consulting oversight of ESA I's, ESA II's, Asbestos and Lead Paint Surveys, geotechnical and environmental drilling, laboratory testing, asphalt pavement coring and assessment, field permeability testing and open-hole exfiltration tests. Prepared a Geotechnical Report to include foundation design and construction recommendations for the entire development to include the new Marina Events Center, all Pavilion and Park Structures, Tank Structure relocations, Parking, Utilities, Roadway Improvements, and Retaining Walls.

ECRWRF Biosolids Improvement Project, West Palm Beach, FL. Provided geotechnical engineering services for the Dewatering Building and Odor Control Facility at the East Central Region Water Reclamation Facility. Performed field exploration using both SPT borings and hand auger borings.

Everglades Agricultural Area (EAA) Flow Equalization Basin A-1 EAA Flow Equalization Basin A-1 is a six mile by six mile storm water impoundment basin situated in western portion of the Palm Beach County, Florida. This basin would be a 15,000 acre shallow storage reservoir at an estimated depth of four feet. The purpose of the FEB is to attenuate high flows and excess run-off from the EAA region prior to delivery to STA-2/Compartment B and STA-3/4 prior to discharging into the Everglades Protection Area, thus improving water quality. The project will be enclosed by about 24 miles of earthen levees with 15 water control structures. As a geotechnical sub-consultant provided seepage analysis, slope stability analysis, settlement analysis, erosion protection analysis, foundation analysis, construction recommendations for dewatering, excavations, blasting, fill composition and placement, riprap installation, seepage toe drain installation. In addition to regular soils

laboratory testing, also performing specialty bulk soil sample testing which includes large size sieve analysis, remolded permeability tests, remolded triaxial shear tests (3-point) testing. Also being performed is specialty rock testing on riprap materials which includes absorption, soundness, freeze-thaw durability, wetting-drying durability, specific gravity and L. A. Abrasion tests.

Hillsboro Canal Bank Stabilization - The Hillsboro Canal runs west to east from Structure S-39 to US-1 between SW 18th Street and Hillsboro Boulevard in both Palm Beach and Broward Counties, Florida. The District has determined that there is a need to repair and protect the canal banks to keep the conveyance of the Hillsboro Canal at its design capacity. Canal protection methods included Articulated Concrete Block Mat, gabion baskets, riprap and High Performance Turf Reinforcement Mat. As the geotechnical consultant provided professional geotechnical services for this project.

Public Use Capital Improvement Projects-Group B - Geotechnical services to the South Florida Water Management District (District) in development two projects, Bluff Hammock Boardwalk in Highlands County and DuPuis Management Area Equestrian Restroom Facility in Martin County, Florida.

WCA 3A/3B Levee Seepage Management - WCA 3A/3B project is 5,796 acres Acceler8 project of CERP and SFWMD for the Improvement of hydro periods in Water Conservation Areas (WCA) and also reduce seepage losses and return seepage water to Water Conservation Area 3. Geotechnical design for the construct levees and several structures and maintain a separation between WCA seepage water and coastal runoff water.

Dam Safety Inventory - Performed inspection and gathered data for over 100 water control structures from Osceola to Miami-Dade counties. Analyzed numerous as-built drawings for water control structures and tabulated data required to update SFWMD and Army Core dam safety database for south Florida.

The C-111 Spreader Canal Project - Project is one of 68 components of multi-purpose CERP project. This project is part of Acceler8 project for the ecosystem restoration of freshwater wetlands, tidal wetlands and near-shore habitat, maintenance of flood protection, and recreation opportunities. Project is located in south Miami-Dade County and consists of design and construction of a reservoir, infiltration basin, pump stations, culverts, spreader canal, water control structures and water quality enhancements at Ludlum Slough.

Black Creek (C-1) Canal Bank Stabilization - Performed soil testing to determine soil and canal bank characteristics for the severely eroded canal bank adjacent to a residential community. Analyzed three bank stabilization alternatives and, provided design parameters, construction recommendations and cost estimation for the alternatives

Pump Station S-5A, Palm Beach County, Florida - Geotechnical Project Manager. The main objectives of this geotechnical service are to perform field exploration and laboratory testing to determine subsurface conditions for the proposed structure. Our service also includes the geotechnical recommendations for the new generators foundation and evaluation of the allowable soil bearing pressures for the existing office building.

Eastpointe Pump Station Design - Geotechnical services which including seepage analysis underneath concrete panels, Lateral Pile Analysis for the precast piles that will be resisting the concrete panel lateral loads, pile capacity analyses for supporting two new pumps, recommendations for pump station building and recommendations for concrete pavement.

FREDDIE ROMÁN, P.E., CEM, CBCP, LEED-AP, Mechanical Engineer

PROFESSIONAL LICENSES AND REGISTRATIONS

Professional Engineer
Florida No. 66176
Puerto Rico No. 16553
New York No. 086188
Washington DC No. 907160

Certified Energy Manager
Certified Building
Commissioning Professional

LEED Accredited Professional

EDUCATION

BS Mechanical Engineering
University of Puerto Rico

PROFESSIONAL AFFILIATIONS

College of Engineers and Land
Surveyors of Puerto Rico (CIAPR)

Association of Energy Engineers
(AEE)

American Society of Heating,
Refrigeration and Air
Conditioning (ASHRAE)

YEARS EXPERIENCE

16

TECHNICAL EXPERTISE

Mr. Román is a Mechanical Engineer with over 16 years of experience in the analysis, design, and construction of HVAC systems for industrial, residential, and commercial buildings. He has also been involved in contract negotiations, personnel supervision and the performance of energy audits. Mr. Román has managed the mechanical engineering design for multiple water and wastewater projects.

RELEVANT EXPERIENCE

EDUCATION

- 2013: iMath Classroom Renovation, Miami, FL - The project consisted of the space intervention at 5 middle schools to create iMath centers of technological excellence. The design included different modes of learning and teaching with a capacity for 60 students organized by different group sizes. The different facilities included renovation and adaptation of existing MEP systems as well as the desire to provide for better light sources using LED technologies. The project utilized Green technologies in the form of materials and energy efficient MEP systems. Mr. Román was the Lead Mechanical Engineer in charge of the HVAC system design for the project's classroom renovation. Client: Miami Dade County Public Schools, Neils Bellido, PM, (305) 310-6160, nbellido@dadeschools.net.

HOUSING

- 2005 - 2010: Centro American Games Village (Commercial and Residential Complex), Picerne, PR - CSA worked with Picerne Real Estate Group in the development of the 2010 Central American Games Athlete's Village, in a joint effort with the Department of Housing of Puerto Rico. The design and development was performed in compliance with the programmatic requirements for hosting the sports event and its eventual use as a residential community. The program required 385 3-BR apartments, and over 70,000 ft² of ancillary facilities on two parcels of approximately 11 & 15 acres. The Village consisted of the Residential Zone (living quarters & related functions) and the International Zone (support functions necessary for the sports event). Mr. Román was the Lead Mechanical Engineer in charge of the potable, sanitary, and storm water system design for the project's residential and commercial buildings. He was also the mechanical designer of the fire protection system for the residential and commercial areas, including fire sprinklers, hose standpipes, fire pump, jockey pump and fire water cistern. Client: Picerne Real Estate Group,
- 2004 - 2011: Alturas de Cupey Residential Complex, - CSA provided building evaluation, rehabilitation and remodeling design, and construction supervision of 400 housing units, an administration building and a community center for the public housing complex. The apartment remodeling design complies with new building codes and the American with Disabilities Act regulations. Mr. Román was the Lead Mechanical Engineer in charge of the HVAC system design (at the administration and community center), in addition to the potable, sanitary, and storm water system design for the project's residential buildings. Client: Puerto Rico Public Housing Administration (PRPHA)
- 2004 - 2013: Santiago Iglesias Residential Complex, PRPHA - CSA provided building evaluation, rehabilitation and remodeling design, and construction supervision of 400 housing units, an administration building and a community center for the public housing complex. The apartment remodeling design complies with new building codes and the American with Disabilities Act regulations. Mr. Román was the Lead Mechanical Engineer in charge of the HVAC system design (at the administration and community center), in addition to the potable, sanitary, and storm water system design for the project's residential buildings. Client: Puerto Rico Public Housing Administration (PRPHA)
- 2004 - 2006: Jardines de Mayagüez Residential Complex, Picerne Real Estate - CSA provided architectural, engineering and environmental services to develop the Jardines de Mayagüez residential complex, which comprises 200 units on a tract of land located in the Municipality of Mayagüez, Puerto Rico. Mr. Román was the Lead Mechanical Engineer in charge of the potable, sanitary, and storm water system design for the project's residential buildings.
- 2004 - 2010: Lirios del Sur Residential Complex, - The project comprised the preparation of an emergency and definitive construction program, including construction documents for civil and electrical site work, and limited architectural design for compliance with HUD Section 504 concerning the



FREDDIE ROMÁN, P.E., CEM, CBCP, LEED-AP, Mechanical Engineer

accessibility of the housing units at Lirios del Sur, a public housing development in Ponce, Puerto Rico. The project's housing units were being renovated as part of a previously started program. Mr. Román was the Lead Mechanical Engineer in charge of the potable, sanitary, and storm water system design for the project's residential buildings. Client: Puerto Rico Public Housing Administration (PRPHA)

- 2004 - 2009: Sardines de Santa María Residential Complex - Mr. Román was the Lead Mechanical Engineer in charge of the potable, sanitary, and storm water system design for the project's residential buildings.

INSTITUTIONAL

- 2009 - 2011: Arecibo Job Corps Residential Building, Arecibo, PR - The purpose of this project is to finalize the New Male and Female Dormitories Project, which was designed on 2002, and its Phase I, built on 2005. It is also intended to perform Phase II construction in order to complete the original development. Phase II comprises the design-build services for the demolition of an existing dormitories building including the hazardous material abatement, the utilities connection to Phase I systems, the construction of a new dormitories building to house 72 job corps students, the completion of the closure plan for the existing septic tanks, and the construction of a sanitary holding tank to serve the new building. The implementation of design is addressed to result in dormitory facilities that comply with latest codes and regulations, and include minor design changes requested by DOL. Mr. Román was the Lead Mechanical Engineer in charge of the HVAC, potable, sanitary, and storm water system design for the project's residential buildings. Project included the use of water saving fixtures. Client: Department of Labor (DOL)
- 2005 - 2009: Caguas Science Center, Caguas, PR - The project comprised the design and construction of an interactive museum, focusing on technology, with an educational objective, aimed especially at children ages 7 to 11. CSA was contracted to perform permit procurement, environmental studies, and site and building design; prepare construction documents, provide support during procurement phase, and perform construction observation. Mr. Román was the Lead Mechanical Engineer in charge of the HVAC design in support of the visionary project of a Science and Technology Center (CSTC) for the Municipality of Caguas, Puerto Rico. He also designed the potable and sanitary water system, which included the use of water saving fixtures; a rain harvesting system to be used with the water closets; and the fire protection system for the building, including fire sprinklers, fire pump, jockey pump and fire water cistern.

COMMERCIAL/INDUSTRIAL

- 2012 - 2013: August Moon Drive Inn, San Juan, PR - The project comprised the design of an indoor thematic theater, restaurant, and activity center. CSA was contracted to perform permit procurement, environmental studies, and site and building design; prepare construction documents, provide support during procurement phase, and perform construction observation. Mr. Román was the Lead Mechanical Engineer in charge of the design of the indoor structure's HVAC system, in addition to the potable & sanitary water system design.
- 2012: Pfizer Guayama De-Vestiture Project, Pfizer - Pfizer planned a selective demolition project where a new central chiller plant and utilities infrastructure (including purified water, potable water, steam, chilled water, compressed air, and condensing water) was designed for the buildings areas to remain. Mr. Román was the Lead Mechanical Engineer in charge of the HVAC, steam, compressed air, potable water, purified water, hot water, and sanitary water system design.
- 2010-2011: Monsanto Laboratory Building - Mr. Román was the Lead Mechanical Engineer in charge of the HVAC, potable, and sanitary water system design for the laboratory and office building. The project included the use of water saving fixtures.
- 2005-2006: Vega Baja Benadryl Line, Pfizer - Mr. Román performed architectural, structural, mechanical, and electrical design for the Benadryl line in Pfizer's Vega Baja site.
- Printing Plant Maintenance and Mechanical Designs - Machinery maintenance, plant safety procedures, project cost estimates, equipment and materials procurement, HVAC system design and installation, and



FREDDIE ROMÁN, P.E., CEM, CBCP, LEED-AP, Mechanical Engineer

compliance efforts with the Environmental Quality Board, OSHA, and the Environmental Protection Agency. Mr. Román acted as the Plant Engineer in charge of all engineering design and maintenance efforts, solution that would increase productivity for Ramallo Bros. Printing at San Juan, Puerto Rico.

ENERGY

- 2007 - 2009: El Giral Power Plant Complex, Panama – A new gas turbine plant was constructed in at the Giral area in Panama. The project involved the design of fuel distribution system, steam & steam-tracing, reheat, boiler, oil, water, compressed air and HVAC systems. Mr. Román was the Lead Mechanical Engineer in charge of the HVAC, steam, compressed air, potable water, fuel, and sanitary water system design.
- 2006: Electrical Distribution System Upgrade - Renovation and replacement of the main electrical distribution equipment. The new equipment will be located in a new utility building. CSA is rendering engineering services, including the design of the new utility building, the replacement of the new electrical equipment, and procurement and construction services. Electrical design will comply with the 2005 National Electrical Code, latest NFPA applicable codes, and latest Federal standards and regulations. Mr. Román was the Lead Mechanical Engineer in charge of the ventilation system of the new building structure. Client: Veteran's Administration Hospital
- 2005 - 2007: Design San Juan Piping Interconnections, San Juan, PR – PREPA needs to make several plant modifications required to resolve conflicts arising from the re-powering and reverse osmosis projects to be implemented at the San Juan Power Plant. Mr. Román is performing tasks related to the interface between the RO Plant system piping interconnection and the utility pipe rack new point of connection, including the design of the demineralizer feed pumps & water pumps, the RO plant feed pumps, and the air receiver for equipment control. Client: Puerto Rico Energy Power Authority (PREPA)
- 2005 - 2006: Mayagüez Gas Turbines Replacement – Replacement of the existing gas turbines with new, more efficient units. With the implementation of this project, PREPA will significantly increase the electric power generation at that site to satisfy anticipated increases in demand. CSA provided conceptual engineering design for the total project site development; produced the Environmental Assessment document; provided support during the permitting process to obtain the required permit applications; produced demolition drawings & specifications, provided procurement services; developed the Basis of Design document, Equipment Specifications, and the Request for Proposal; provided support during the Bid Evaluation Process; performed engineering design & specifications; and provided project supervision services for the construction of the new plant warehouse, shops and offices. Mr. Román was the Mechanical Engineer involved in the replacement of four gas turbines of 20 MW each, and Lead Mechanical Engineer responsible for the HVAC, potable, sanitary, and storm water system design for the project's office building. Client: Puerto Rico Energy Power Authority (PREPA)
- 2003: Aguirre Phillips Fuel Line – The project comprised the development of the fuel transmission pipeline system from the Phillips Petroleum Refinery to the Aguirre Power Complex. CSA's scope of work included among other tasks the route selection, survey, environmental studies, design, H&H studies, and land acquisition drawings and land appraisals. The project will consist of two pipelines on the same right of way, 1-20 inches for fuel oil No. 6, and 1-16" for fuel oil No. 2. Client: Puerto Rico Energy Power Authority (PREPA)

WATER

- 2005 - 2006: Capital Improvements Program - CSA was the East Region Program Manager for the \$700 Million plus program with over 140 projects identified in the region including two reservoirs. For these water and wastewater projects, CSA offered a wide range of services including: program management, engineering and design management, geographic information system (GIS), environmental compliance, land acquisition, construction management, and start-up and commissioning. Mr. Román was the Mechanical Engineering Leader for the Program in the East Region. His efforts include the performance of conceptual design and design management. Client: Puerto Rico Aqueducts & Sewer Authority (PRASA)



GUSTAVO RIECKEHOFF, P.E., Energy Business Unit Manager

PROFESSIONAL LICENSES AND REGISTRATIONS

Professional Engineer
Florida No. 69542
Puerto Rico No. 17138

Energy Affairs Administration
Certified Renewable Energy
Installer, License No. AAE-PV-
0841

EDUCATION

B.S. Electrical Engineering
Roger Williams University
Rhode Island
1996

PROFESSIONAL AFFILIATIONS

College of Engineers and Land
Surveyors of Puerto Rico

Association of Energy Engineers
(AEE) - Certified Energy Manager

CERTIFICATIONS

North American Board of
Certified Energy Practitioners
(NABCEP)
Photovoltaic Entry Level Exam

30-Hour OSHA Safety
Certification

YEARS EXPERIENCE

16

TECHNICAL EXPERTISE

Mr. Rieckehoff has over 16 years of experience in electrical consulting services, including technical leadership, design, technical specifications, and cost estimates of electrical power, lighting, and communication systems for several pharmaceutical, commercial, federal government, highways, and urban development projects.

RELEVANT EXPERIENCE

1. CSA Group

- *PRIDCO Solar Incentive Program*, PR Industrial Development Company PRIDCO - CSA was contracted by PRIDCO to render professional services for the management of the Solar Incentives Program (PSIP). This program will co-invest \$10 million in renewable energy projects. CSA's fundamental mission in the management of the incentive program under the PSIP for Solar Energy projects would be to support PRIDCO by applying sound and proven program management practices to: Maximize funding use, Expedite the obligation of the funds; Optimize the economic stimulus from the investment of such funds; Comply with Federal and State regulations; Oversee the use of funds and advise PRIDCO regularly on the progress of the program. As a Project Manager for the program, Mr. Rieckehoff ensures the maximization of fund use; and oversees the use of funds and advises the PRIDCO regularly on the progress of the program.
- *Green Energy Funds*, Puerto Rico Energy Affairs Administration (PREAA) - The PREAA contracted CSA Architects and Engineers, LLP (CSA) for the management of the Green Energy Funds (GEF) Tiers 1 and 2 Programs for Renewable Energy projects grants (the Program). The program provides \$290 million in grants for renewable energy projects through the year 2020. As a Project Manager for the program, Mr. Rieckehoff ensures the maximization of fund use; expedites the obligation of the funds; optimizes the economic stimulus from the investment of such funds; ensures that the agency complies with Federal and State regulations; and oversees the use of funds and advises the PREAA regularly on the progress of the program.
- *American Recovery and Reinvestment Act (ARRA) State Energy Plan (SEP) Program*, Puerto Rico Infrastructure and Financing Authority (AFI) - Project Manager responsible for assisting the Puerto Rico Energy Affairs Administration and the Puerto Rico Infrastructure Authority in the execution of the ARRA's SEP Program in Puerto Rico and to run this Programs by applying sound and proven program management practices to: maximize funding from the federal government, expedite the obligation of such funds, optimize the economic stimulus from the investment of the funds, comply with Federal and State regulations, meet the Act's provisions for accountability and transparency, oversee the use of recovery funds and advise the Federal Government regularly on the progress of the Programs. Additional services include: Definition of Project to be Implemented with the Grants; Evaluation of Sub-Grants applications for eligibility of funding; Proposal preparation / assistance; Organize and conduct public meetings and program presentations; Provide training to involved parties, including contractors and suppliers; Evaluation of Proposed Projects to be implemented with the Grants; Development of Equipment Standards; Selection and Acquisition of equipments; Recommended award of Sub-Grants funds; Identification and selection of contractors; Preparation, execution and implementation of contracts; Program / Project Management, including supervision/inspection, acceptance of projects and projects closeouts; and Preparation and issue of program reports. As Manager of the SEP Program, lead the preparation of the State Energy Plan Strategy for Puerto Rico, as well as the Strategy for several cities with direct grants from the US Department of Energy; and lead the preparation of the Funding Opportunities announcements and Guidelines for the SEP Program Sub-Grants to be awarded by the state to municipalities, non for profit organizations and other local government departments.
- *Wyndham Vacation Ownership (WVO) Rio Mar*, Wyndham Vacation Ownership (WVO) - The Wyndham Rio Mar project is located in Rio Grande, Puerto Rico. It required environmental and permitting efforts associated to the development of four parcels of land to be used for timesharing purposes. As a consultant to WVO, CSA was in charge of scheduling, coordinating and executing all efforts related to local/federal agency consultations and endorsements needed for the required construction permits of the development. Environmental efforts included the execution of field studies such as Jurisdictional Determination of Wetlands, Flora & Fauna, Hydraulic/Hydrological, Transit and Archeological studies. CSA was set to render



GUSTAVO RIECKEHOFF, P.E., Energy Business Unit Manager

design development and final design of the parcels included in the development program. Mr. Rieckehoff was the Electrical Engineering Technical Leader for the project.

- *San Juan Waterfront, Forest City* - The project is a redevelopment along the San Antonio Channel, which would provide a pedestrian-friendly, mixed-use waterfront area and create public access along the San Juan coast. The project would consist of both water and upland components and its purpose is to revitalize the currently debilitated and underused waterfront along the San Antonio Channel. The construction activities would impact Piers 7-14 with varying degrees of demolition, removal and new construction. This project includes 91.5 acres, 53.5 acres of public spaces, 1.9 miles of waterfront and 24 blocks. CSA is part of the development team for the San Juan Waterfront project and its current broad scope of work is to perform comprehensive surveying work, assist in the environmental planning and permitting process, perform secondary studies related to the permitting process, and provide support in civil engineering for conceptual design of infrastructure to support the master plan of the development proposed along the San Antonio Channel. Mr. Rieckehoff is the Electrical Engineering Technical Leader for the project.

Mr. Rieckehoff worked as an Electrical Engineer for the following projects:

- *Highway PR-181, Puerto Rico Highway and Transportation Authority (PRHTA)* - The project comprised the construction of an overpass with an approximate length of 1.89 km and a segmental bridge. The bridge will have four lanes with a span of 580 m and approximately 450 m of access ramps. The project also included: construction of new access ramps; pavement widening and rehabilitation; improvements to the drainage system; utilities relocation; highway lighting, pavement markings, traffic signs, traffic signals, and noise barriers installation; and reforestation and other miscellaneous works.
- *Urban Train Pedestrian Improvements, PRHTA* - The project consisted of the urban and architectural design to improve the pedestrian walkways surrounding various Tren Urbano (Urban Train) stations. The design was prepared with the accessibility recommendations established by the Public Rights of Way. The project also included the redesign of the Gándara Park, which would help maintain it as the most valuable "green spot" among the vast amounts of urban constructions. Mr. Rieckehoff was responsible for coordinating the MEP cost estimates and technical leadership for the electrical engineering work.
- *Intersection between PR-181 & PR-17, PRHTA* - The project comprised 4 four-lane elevated structures with the appropriate connecting ramps to PR-181 and PR-17. It also included the construction of five bridges with a total span for the ramps of approximately 4,200 meters, as well as additional improvements to a PR-17 section of approximately 760-meter long. Mr. Rieckehoff was in charge of the electrical engineering work in this project.
- *Macao Roco Ki Beach Resort, Richard Knorr International, LTD* - The Roco Ki Beach Resort project included a five-star luxury hotel, as well as a whole ownership residence club, hotel condos, jungle luxe bungalows, individual residences, residence condominiums, residence villas, and a golf course. As a sub consultant to RKI, CSA provided preliminary cost estimating services, quantity take-off, value engineering, and rendered construction management services by providing key personnel in their onsite organizational structure. CSA was in charge of developing a utilities company capable of satisfying the demand of potable water, sewer, power & telecommunications. Mr. Rieckehoff was in charge of the coordination of the MEP cost estimates and technical leadership for the electrical engineering work.
- *La Belle Creole St. Martin Resort, McConnell Valdés/Reig Capital, Inc.* - The purchase/sale of the La Belle Creole Resort in the island of Saint Martin, West Indies, required related professional services as structural, mechanical and electrical evaluations, and an Environmental Phase I ESA. La Belle Creole Resort was a beachfront property built to recreate a Mediterranean fishing village, replete with cobblestone courtyards and alleys. Inside the villas 166 housing rooms, rustic beamed ceilings and Provencal fabrics underscore the fantasy, with most of them having patios with water views. Recreational features included pool and tennis courts. Existing facilities were abandoned after being seriously damaged by Hurricane Luis in 1995. Mr. Rieckehoff provided electrical engineering services for the project.
- *San Juan Grand Hotel Remodeling, San Juan Grand Hotel* - CSA provided architectural and engineering services for the remodeling of the hotel lobby, meeting rooms, business center, and ballrooms of the San



GUSTAVO RIECKEHOFF, P.E., Energy Business Unit Manager

Juan Grand Hotel. The project included all interior work, including walls, ceiling and carpets, new ductwork, and power and lighting distribution with an aggressive schedule. During the design phase of the main project, a new fitness center and child day care center for the hotel were added to the scope of services. Mr. Rieckehoff provided electrical engineering services for the project.

- *Puerto Rico Convention Center District*, Puerto Rico Convention Center District Authority - CSA is a part of a multi-disciplinary team developing the new \$1.3 billion Puerto Rico Convention Center District. The convention facility and its anticipated ancillary hotels, restaurants, retail establishments, retail and entertainment complex, waterfront cafes, park system, walkways and commercial developments are to be constructed on approximately 110 acres of land in Isla Grande. Mr. Rieckehoff was involved in the electrical design of the site and infrastructure project (power, lighting and communication).
- *Las Dalias Public Housing Modernization*, Puerto Rico Public Housing Authority (PRPHA) - The project comprised the comprehensive modernization of 240 dwelling units comprised in 30 four-story residential building and construction of two new buildings, one for the administration facilities and the other to be used as a Head Start. The design schedule consisted of 125 calendar days divided in three design phases. CSA performed the design work under the established time schedule. Among the responsibilities during the construction phase, CSA supervised the construction contract, revised and approved the contractor's shop drawings and other submittals, monitored the quality and progress of the work, reviewed the contractor requests for payment, and made weekly visits to the site. Mr. Rieckehoff was responsible for performing the electrical design, electrical cost estimates, and electrical specifications of the project.
- *Lirios del Sur Public Housing*, PRPHA - The project comprised the preparation of an emergency and definitive construction program including construction documents for civil and electrical site work, and limited architectural design for compliance with HUD Section 504 concerning the accessibility of the housing units at Lirios del Sur, a public housing development in Ponce, Puerto Rico. The project's housing units were being renovated as part of a previously started program. Mr. Rieckehoff was responsible for performing the electrical design, cost estimates and specifications.
- *Parque de San Juan Low Income Housing*, Desarrollos Insulares, Inc. - Parque de San Juan is a low-income housing project that consists of 56 units of two and three bedrooms in two walk-up type buildings, with a playground, basketball court, laundry room and administration office. CSA provided architecture and engineering design services including mechanical, HVAC, plumbing and electrical engineering. CSA also supervised the construction of the housing project. Mr. Rieckehoff was responsible for performing the electrical design, cost estimates and specifications.
- *Vistas del Rio II Low Income Housing*, Piceme Real Estate Group - CSA provided architecture, engineering design and environmental permitting services for this low-income housing development. The development is located on 5.46 acres in the municipality of Trujillo Alto, Puerto Rico. The project consists of 168 walk-up apartments, of which 72 are two-bedroom and 96 are three-bedroom units. Mr. Rieckehoff was responsible for performing the electrical design, electrical cost estimates, and electrical specifications of the project.
- *Hacienda San Jose*, Levitt Homes Builders Corporation - The project comprised a residential development with approximately 1,700 units constructed on 362 acres of land in the Municipality of Caguas. The site plan was tailored to the particular topography, soils, waterways and natural vegetation of the site. The goal of the development plan was to reduce potential impact to the earth crust and minimizes the removal of vegetation. Mr. Rieckehoff was responsible for performing the electrical and communication site infrastructure design of the project.
- *Alturas de Cupey*, Public Housing Administration - The project consists of the planning and design of a modernization program for 250 dwelling units comprised in 24 buildings of two different typologies: walk-ups (two and three stories) and row houses. Dwelling units mix included 24 one-bedroom units, 96 two-bedroom units, 96 three-bedroom units, 24 four-bedroom units and 10 five-bedroom units. The project also included ancillary buildings, housing administrative offices, maintenance warehouse, auditorium, Head Start, electronic library, covered basketball court, baseball field and playground areas for children. Mr. Rieckehoff was responsible for performing the electrical design, cost estimates and specifications.



GUSTAVO RIECKEHOFF, P.E., Energy Business Unit Manager

- *CAG Village*, Picerne Real Estate Group - CSA worked with Picerne Real Estate Group in the development project of the 2010 Central American Games Athlete's Village, in a joint effort with the Department of Housing of Puerto Rico. The project included the design and development of the CAC Village, in compliance with the programmatic requirements for hosting the sports event and its eventual use as a residential community. The preliminary program required 385 three-BR apartments, and over 70,000 ft² of ancillary facilities on two parcels of approximately 11 and 15 acres. The CAC Village consisted of two discrete components: the Residential Zone and the International Zone. The Residential Zone comprised the living quarters and related functions while the International Zone included Village support functions necessary for the 2010 sports event. Mr. Rieckehoff was responsible for performing the electrical design, cost estimates and specifications.
- *CPR Land Development* - The project required master planning and development of a parcel of land of approximately 259,895 m² to construct a series of lots that could be developed for industrial and commercial use. The Master Plan and Development took into consideration the future design services for the infrastructure of the site, and the architectural and engineering services for the building facilities. Mr. Rieckehoff was responsible for performing the electrical design, cost estimates and specifications.
- *Casillas de Palmas*, Palmas del Mar - Casillas de Palmas is located within the Palmas del Mar Resort in Humacao, Puerto Rico. The complex is composed of 30 "villa" style living units, each with two parking spaces, and one golf-cart parking space. All buildings include elevators, a main emergency generator to provide backup power, and a central air conditioning system in each unit.
- *Electric Distribution Upgrade at VA Hospital*, Department of Veterans Affairs Administration (DOVA) - The Veterans Affairs (VA) hospital currently houses in rooms C-37 and C-38 of Building #1 the main electrical distribution equipment for this building. In order to have all the main electrical equipment for Building #1 concentrated in the same area and to renovate the main electrical system for the building, VA intends to renovate and replace the main electrical distribution equipment at Building #1. The new equipment will be located in a new utility building to be constructed in the south side of Building #1, near the parking area. The hospital will keep normal operations during the construction of this project.
- *Granulation MCC Upgrade*, Pfizer Pfizer Pharmaceuticals, Vega Baja, Puerto Rico - The MCC Granulation Upgrade project required architecture and engineering design services at Pfizer's Building #2, which included the replacement of four Motor Control Centers (MCC) and the installation of new equipment while the existing MCCs were still in operation. The design of a new building structure to house the new MCCs and associated equipment was also needed, as well as rewiring all the equipment from the existing ones to the newly installed. Other work comprised the installation of cable trays for the new conductors and the demolition of existing MCCs after the new ones were operational.
- *Puerto Rico National Cemetery Gravesite Expansion and Cemetery Improvements*, DOVA - DOVA contracted CSA Architects and Engineers, LLP (CSA) for preparing an Existing Conditions Report and construction documents, and to provide schematic design, design development, and construction administration services for the build-out of this project, intended to develop the undeveloped land at the aforementioned cemetery. According to the scope of work and previous to the design process, CSA performed a property condition assessment of the existing site and buildings at the cemetery grounds, performed the site engineering and architecture design, and the engineering and interiors design for the renovation of the existing administration building, and the construction of a Public Information Center, maintenance complex, and two committal shelters.
- *Rooms To Go Mayagüez*, Rooms To Go - Rooms To Go built a 34,997-ft² facility in Mayagüez, Puerto Rico, intended to serve as showroom store. The facility was built in a tract of land of some four acres. CSA provided support with architectural and engineering services including the performance of a due diligence/feasibility study and permit administration, preparation of civil site work design and construction documents, and engineering and construction coordination.
- *Amgen-HVAC Upgrade Design*, Amgen - The project required the design of an HVAC system upgrade for the Full and Finish Building at Amgen's Juncos, Puerto Rico plant.



GUSTAVO RIECKEHOFF, P.E., Energy Business Unit Manager

- *Pfizer Vega Baja Benadryl Line*, Pfizer Pharmaceuticals – The project comprised the architectural, structural, mechanical, and electrical design for the Benadryl line at Pfizer's Vega Baja site. Mr. Rieckehoff was responsible for performing the electrical design, cost estimates and specifications.
- *Pfizer-Barceloneta DEA Indiplon*, Pfizer Pharmaceuticals – Mr. Rieckehoff was responsible for providing technical leadership as part of the electrical engineering services offered in relation to the security measures established in compliance with DEA controlled substances standards.
- *Pfizer-New Barceloneta Laser Drill*, Pfizer Pharmaceuticals - Mr. Rieckehoff was responsible for providing technical leadership as part of the electrical engineering services offered for the design of the necessary modifications, a HA and Operability Review (HAZOP), the procurement of long lead-time items and services during construction, as well as other related services for the modifications to an existing mechanical repair shops and office area in the ground floor of Building 103 to allow for the replacement of an existing Laser Drilling Unit with a modern and more efficient unit.
- *Pfizer-VB Fire Alarm Revision*, Pfizer Pharmaceuticals - Mr. Rieckehoff was responsible for providing technical leadership as part of the electrical engineering services required for the design of the fire alarm system at Pfizer's Vega Baja site.
- *Storage Room for Flammable Liquid*, Pfizer Pharmaceuticals – The project comprised the design and specifications for the purchase and installation of a new room for storing flammable liquids at Pfizer's Barceloneta site.



JOSÉ I. PRATS, P.E., Electrical Engineer

PROFESSIONAL LICENSES AND REGISTRATIONS

Professional Engineer
Florida No. 68962
Puerto Rico No. 12739
New York No. 086843

EDUCATION

B.S. Electrical Engineering
University of Puerto Rico
1991

PROFESSIONAL AFFILIATIONS

Puerto Rico College of Engineers and
Land Surveyors

Institute of Electrical Engineers
Association of Energy Engineers

TECHNICAL COURSES

Photovoltaic's Training for
Installation and Certification

Photovoltaic Systems and
Certification Seminar

Underground Cable Systems
Principles and Practices

YEARS EXPERIENCE

19

TECHNICAL EXPERTISE

Mr. Prats has over 19 years of experience in electrical consulting services, including electrical power, lighting and communication design. He has worked as Project Manager for electrical system projects, and been Technical Leader of MEP Disciplines.

RELEVANT EXPERIENCE

1. CSA Group, Inc.

POWER

- *Fonroche Lajas Solar Farm, Fonroche (2013-Present)*– FONROCHE ENERGY AMERICA intends to develop solar energy generation facilities in Lajas, Puerto Rico. The Lajas facility will generate 20 MW. CSA is working in the design and preparation of construction documents of the electrical substation that will step up from the 13.2 KV electrical lines in the site to 38 KV (voltage of interconnection to the Puerto Rico Electric Power Authority), and the design of the 38 KV electrical line up to the Puerto Rico Electric Power Authority (PREPA) point of connection. Mr. Prats is responsible for the project management, electrical design of the electrical substation, and coordination with the Power Company for the interconnection of the project.
- *QCCells Carolina Solar Farm, Hanwha QCCells America (2013-Present)*– HANWHA QCELLS AMERICA intends to develop solar energy generation facilities in Carolina, Puerto Rico. The Carolina facility will generate 40 MW. CSA is working in the design and preparation of construction documents of the electrical substation that will step up from the 34.5 KV electrical lines in the site to 115 KV (voltage of interconnection to the Puerto Rico Electric Power Authority), and the design of 4 miles of 115 KV electrical line (aerial and underground) up to the Puerto Rico Electric Power Authority (PREPA) point of connection. Mr. Prats is responsible for the electrical design of the electrical substation and 115 KV line, and coordination with the Power Company for the interconnection of the project.
- *Northwest Bus Depot and Fueling Facility Design-Build, Apopka, FL* - Construction of a new fueling facility onsite with parking facilities for 82 school buses. Construction consisted of a 15,000 gallon above-ground diesel fuel storage tank, fuel dispensers and piping systems, containment boxes, monitoring systems, fuel islands, concrete driving surface, concrete curbs, concrete sidewalks, asphalt paving, storm water facilities, water distributing system, portable installation coordination, dumpster enclosure, fencing, wastewater systems, electrical light pole relocation, landscape/irrigation relocation and an electrical sub-panel a minimum of twenty feet (20') from the diesel tank. Mr. Prats is responsible for the design of the parking lot lighting, power design for the diesel dispensing facility and offices. Client: RL Burns Inc./Orange County Public Schools, Kory Krueel, (407) 839-1131, 2012-2013.
- *Weatherization Assistance Program, Puerto Rico Infrastructure and Finance Authority (AFI, by its Spanish acronym) (2009-2012)*- The Weatherization Assistance Program (WAP) enables low-income families to permanently reduce their energy bills by making their homes more energy efficient. Funds are used to improve the energy performance of dwellings of needy families using the most advanced technologies and testing protocols available in the housing industry. In Puerto Rico more than 10,000 residential units will be impacted by the WAP. As Project Manager, Mr. Prats is responsible for the creation of all manuals, forms, and procedures for the Puerto Rico WAP since is the first time funds are allocated to the Island for this program. Tasks performed include client intake, client eligibility, training to auditors and inspectors, and work orders preparation.
- *Energy Answers Arecibo, Energy Answers International (2010-2011)* - The project comprises a resource recovery renewable fuel power plant, which will use fuel derived from the municipal waste. The plant will generate approximately 66 MW, and the energy produced will be sold and delivered to the Puerto Rico Power Authority (PREPA). Mr. Prats had in charge the coordination with PREPA for the interconnection of the facility to the PREPA grid, as well as the design of the interconnection line from the facility and their Transmission Center.



- *Hugo Neu Recycling Facility*, Hugo Neu, Inc. (2012-2013)– The project consists of a recycling facility in Guaynabo, Puerto Rico, which will recycle metals and electronic equipment. The facility will have process and administration buildings. Mr. Prats is responsible for the coordination with PREPA for the electrical offsite from the point of connection to the project.
- *Puerto Rico Convention Center District (2000-2006)* – Infrastructure was provided for a 113-acre site that includes a Convention Center, residential and office buildings, hotels, retail and entertainment complex, waterfront cafes, restaurants and walkways. As the Senior Electrical Engineer for the site and infrastructure project, Mr. Prats was responsible for the electrical design of the project (power, lighting and communication) and the coordination with PEEPA and the PR Telephone Company.
- *115KV Underground Cable Loop*, Puerto Rico Electric Power Authority (PREPA) (2000-2004) - The project connected the Monacillos Transmission Center to the Hato Rey Transmission Center; the Martín Peña Gas Insulated Substation; the Viaducto Substation; the Isla Grande Gas Insulated Substation; the San Juan Steam Plant; the Palo Seco Steam Plant; and the Bayamón Transmission Center. Mr. Prats was the Electrical Discipline Leader and Engineer for all the six phases of this \$130 million project. He prepared design up to the 50% level prior to contract bidding, and participated in the evaluation committee for the selection of the Design Build Construction contractor for the different project phases.
- *Electrical Distribution Upgrade at VA Hospital*, Department of Veterans Affairs Administration (DOVA) (2006-Present) –This project required to upgrade the 4.16 KV and 480 volts system in the main building at the health care facility. The Veterans Affairs (VA) hospital used to house in rooms C-37 and C-38 of Building #1 the main electrical distribution equipment for this building. In order to have all the main electrical equipment for Building #1 concentrated in the same area and to renovate the main electrical system for the building, VA intended to renovate and replace the main electrical distribution equipment at Building #1. The new equipment would be located in a new utility building to be constructed in the south side of Building #1, near the parking area. The hospital would keep normal operations during the construction of this project, which had Mr. Prats acting as Project Manager.
- *Electrical Substation Repairs and Improvements*, DOVA (2011-Present)– This project comprised an upgrade to the Health Care Facility electrical substation from 5 MVA to 15 MVA. The new substation would be constructed keeping the normal operations of the facility. The new construction consisted of a double ended substation with two 38KV/4.16KV transformers and a switchgear with sixteen (16) 4.16 KV feeders. Old substation would be demolished after new substation is energized. Mr. Prats worked as Electrical Engineer for this project.

ROADWAY

- *Dynamic Toll Lane/Bus Rapid Transit - (2012)* The project is a new concept for an express lane with a changing tolling structure in which the toll fare changes according to the traffic conditions in order to keep the lane operating at a specific speed. The lane is shared with a Bus Rapid Transit system. The implementation requires speed sensors, remote cameras, automatic gates and tolling structures. Power and fiber optic communications were designed to support the system at different points. Mr. Prats prepared the electrical drawings for the electrical connection for all the equipment necessary along the lane route. Also obtained the Power Company endorsement.
- *Highway PR-66*, Puerto Rico Highway and Transportation Authority (PRHTA) (2008-2009) - Mr. Prats prepared the preliminary design of this freeway for the Carolina to Canóvanas tract in Puerto Rico. He was responsible for the utilities relocation for the preliminary drawings.
- *PR-181 and PR-17 intersection* (2010-2011) - Mr. Prats prepared the construction drawings and specifications for the utilities relocation, lighting system and communication infrastructure for the intersection improvements.
- *Aguadilla Bridge Replacement* (2011) - Mr. Prats worked as an Electrical Engineer for the preparation of the construction drawings for temporary and final lighting system.



HOSPITALITY

- *Macao Roco Ki Beach Resort*, Roco Ki Beach Resort – (2006) Roco Ki Beach Resort project includes a five-star luxury hotel, with residence club, hotel condos, jungle-luxe bungalows, individual residences, residence condominiums, residence villas, and a golf course. CSA provided preliminary cost estimating services, quantity take-off, value engineering, and provided key personnel for the construction management team. CSA was responsible for developing a utilities company capable of satisfying the demand of potable water, sewer, power & telecommunications. Mr. Prats worked as the Electrical Engineer for the project.

Mr. Prats participated in various design, engineering and management roles in the following projects.

- *Montehiedra Shopping Center* (1993-1994)– The project consisted of a 530,000 ft² enclosed mall, including retail stores, food court and cinemas. Mr. Prats was responsible for the electrical design of the access streets to the shopping center and the secondary electrical distribution system for the shopping center.
- *Hard Rock Café San Juan Rehabilitation* (2003) –CSA provided architectural and engineering services for the post fire restoration of the Hard Rock Café location in the historical sector of San Juan. The services included pre-design, schematic and preliminary design, construction documents and construction administration.

HOUSING

- *Special Communities Program*, PRHTA and the Housing Department of Puerto Rico (2002-2003)- CSA conducted infrastructure assessments, design, and construction inspection for Puerto Rico's Special Communities in nine municipalities (over 65 communities). These projects consisted of technical assessments of each community's housing and infrastructure, a preliminary community assembly to determine citizens' needs, preparation of housing and infrastructure recommendations, and facilitation of a community assembly to determine the short term infrastructure action plan. CSA provided design of the selected improvements and construction inspection.
- *Las Dalias Modernization*, Public Housing Administration (2002-2003)– The project comprised the comprehensive modernization of 240 dwelling units in 30 four-story residential buildings, as well as the construction of two new buildings, for the administration facilities and a Head Start. CSA performed the design work on an aggressive 125-day schedule, supervised the construction contract, revised and approved the contractor's shop drawings and other submittals, monitored the quality and progress of the work, reviewed the contractor requests for payment, and conducted weekly site visits. Mr. Prats was responsible for the QA/QC of the electrical drawings.
- *Lirios del Sur*, Public Housing Administration (2004) – The project comprised the preparation of an emergency construction program including construction documents for civil and electrical site work, and limited architectural design for compliance with HUD Section 504.
- *Santiago Iglesias*, Public Housing Administration (2004-2005) – The project consisted of a building evaluation, rehabilitation and remodeling design, and construction supervision of 280 housing units, an administration building, and a community center for the Santiago Iglesias public housing complex. The apartment remodeling design complied with new building codes and the ADA regulations. Other elements of the project included improvements to parking areas, garbage stations, grading and utilities systems.
- *Cerro Gandía* (2002)– The project required assessment, design, and construction supervision services for the housing rehabilitation efforts being performed on the Cerro Gandía Community.
- *Jardines de Mayagüez*, Picerne Developers (2004) - Architectural, engineering and environmental services were required to develop the Jardines de Mayagüez residential development, a residential complex which comprises 200 units on a tract of land located in the Municipality of Mayagüez, Puerto Rico. Mr. Prats was responsible for the QA/QC of the electrical drawings.



- *Parque de San Juan (2006-2007)* - Parque de San Juan is a low-income housing project which consists of 56 units of two and three bedrooms in two walk-up type buildings, with a playground, basketball court, laundry room and administration office. CSA provided architecture and engineering design services including mechanical, HVAC, plumbing and electrical engineering. CSA also supervised the construction.
- *Toa Alta Estates (2003-2004)* - CSA provided architecture and engineering design for this federally subsidized housing project for middle to low income families, consisting of 208 living units, with 88 four-bedroom units, 70 three-bedroom units, and 50 two-bedroom units. The project also includes a clubhouse and swimming pool. Mr. Prats was responsible for the electrical design.
- *Vistas del Río II (2000-2001)*- CSA provided architecture and engineering design as well as environmental permitting services for this low-income housing development. The project is located on 5.46 acres in the Municipality of Trujillo Alto, Puerto Rico, and consists of 168 walk-up apartments, of which 72 are two-bedroom and 96 are three-bedroom units. Mr. Prats was responsible for the electrical design of the apartments and site infrastructure.
- *CAG Village, Picerne Developers (2006)* - CSA worked with Picerne Real Estate Group in the development project for the 2010 Central American Games Athlete's Village, in a joint effort with the Department of Housing of Puerto Rico. The project includes the design and development of the village with two discrete components; the Residential Zone of living quarters and related functions; and the International Zone for support functions of the 2010 sporting event. The preliminary program required 385 three-bedroom apartments, and over 70,000 ft² of ancillary facilities on two parcels.
- *Sierra Bayamón Apartments (2001)* - This residential project consisted of four buildings with a total of 262 housing units. The remodeling included the modernization of the apartments, site improvements, laundry and mailbox building remodeling, and the construction of a clubhouse with a leasing office, community room, gym and pool. Mr. Prats participated as the Senior Electrical Engineer of the project.
- *Arecibo Job Corps, Department of Labor (2000)*- Architecture and engineering services were required for the design of two new 72-bed dormitory buildings and site improvements at the Arecibo Job Corps Center. CSA provided overall project management, permitting and compliance, programmatic analysis, including the documentation of the site and existing structures to be demolished, the design of site improvements, topographic survey of 3 acres of the site, and a geotechnical study.
- *Hacienda San Jose, Levitt Homes (1998-2002)*- The project comprised the residential development with approximately 1,700 units constructed on 362 acres of land in the Municipality of Caguas. The site plan was tailored to the particular topography, soils, waterways and to protect the natural vegetation of the site. Mr. Prats was responsible for the electrical and communication infrastructure design for the project.
- *CPR Land Development (2004)* - Master planning and development of a parcel of land of approximately 259,895 m² were necessary to construct a series of lots that could be developed for industrial and commercial use. The Master Plan and Development took into consideration the future design services for the infrastructure of the site, and the architectural and engineering services for the building facilities.

INDUSTRIAL

- *DOW Agroscience (2012-Present)* - Mr. Prats is responsible for the 38 KV electrical substation and electrical offsite design. Also is responsible for obtaining the endorsement from the Power company for the project.
- *GSN Lab (2005)* - Architectural and engineering design and support services were provided while constructing the ICN Dutch Holdings BV Laboratory Project to be located in the Humacao Manufacturing Facility. The new GSN Laboratory would be located in an existing room where the ceiling and all partitions were removed, the floor was repaired and the HVAC was retrofitted to comply with project requirements.



JOSÉ I. PRATS, P.E., Electrical Engineer

- *Rezulin & Sudafed-Actifed*, Warner Lambert Vega Baja (1996-1997) - This project scope comprised the design of various rooms for the processes required for each product. Mr. Prats was responsible for the electrical design of the project.
- *Coating Pan Replacement Project*, IPR Pharmaceuticals-Carolina (1998) - This project replaced an existing coating pan with an increased volume Accelacota. The project included the remodeling of the room to fit increased equipment sizes and utilities. Mr. Prats was responsible for the electrical design of the project.
- *Aguirre Phillips Fuel Line* (2004-2005) - CSA performed a route selection study, environmental assessment and permits, provided the design of the pipeline system, performed geotechnical studies along the route, completed land surveying to support the design, prepared H/H studies, identified land owners, completed registry studies, and prepared parcel plans for this project to construct a pipeline system for fuel oil No. 6 and fuel oil No. 2 to bring fuel from the Phillips Petroleum Refinery pier, located at an approximately ten miles from the Aguirre Complex.
- *MCC Granulation Upgrade* (2000-2001) - Mr. Prats was the Project Manager and Electrical Engineer for the replacement of four Motor Control Centers at Warner Lambert (Pfizer) facilities. The project included the construction of a new electrical room.
- *Anaquest-Guayama* - (1993) The project required a \$100 million Pharmaceutical Facilities Expansion, which included three new process buildings. Mr. Prats was responsible for the field supervision and management of piping, mechanical, electrical, and instrumentation equipment scope.

WATER-WASTEWATER

- *Capital Improvements Program East Region*, Puerto Rico Aqueducts & Sewer Authority (PRASA) (2003-2005) - Mr. Prats was the MEP Discipline Leader for this Capital Improvement Program for the development of water and wastewater infrastructure in the East Region of Puerto Rico.
- *AFI Water Program*, Puerto Rico Infrastructure Financing Authority (PRIFA) (2000-2003) - Mr. Prats worked as the Electrical Engineer for this \$2.1 billion capital improvement program for the development of water and wastewater infrastructure.



SELVIN BRUCE, P.S.M., Director of Surveying

PROFESSIONAL LICENSES AND REGISTRATIONS

Professional Land Surveyor
Florida No. 5290

EDUCATION

Engineering Certificate, Union of Lancashire & Cheshire Institutes, England, 1974

General Certificate Education, The Associated Examining Board, UK, Mathematics, Physics, Engineering Science, Engineering Drawing, Engineering Workshop Theory and Practice, Chemistry, 1975

Structural Engineering
University of Technology formerly College of Arts Science and Technology, Jamaica, WI. 1978

Chemical Waste Management, OSHA hazardous Waste Site Operators Training Curriculum, 1991

CERTIFICATIONS

Steenland Center for Professional Development; Certification Law and Procedures Boundary Position, 1994

Certification in Automated Surveying Procedures and Data Processing, AGA Computer Services, Inc.; 1994

YEARS EXPERIENCE

35



TECHNICAL EXPERTISE

Mr. Bruce has over 35 years of experience in surveying and mapping. He has served as project manager on numerous projects ranging from hydrographic, construction, condominium, boundary, topographic, mean high water, subdivision, to design and transportation surveys. He is also a Vice-President and Director of Surveying at the Doral Office. Responsibilities include preparation of cost proposals, participation in survey related presentations, monitoring budgets, supervising overall field and office surveying operations, handling various surveying needs for clients, selecting and employing new of employees.

RELEVANT EXPERIENCE

1. CSA Central, Inc., Miami, Florida

- 2012 - Present: Director of Surveying - Responsibilities include the training of all survey staff in data collection utilizing both the Electronic Field Book, The Cadastral Electronic Field Book, and the post processing of field collected data utilizing the DOS Processor and CAiCE's Data Processor, the preparation of proposals, control, maintenance and right-of-way maps for various FDOT Districts, plats, surveys, etc. and performing the necessary quality control to ensure client needs are met. Duties also include the supervision and organization of all survey staff throughout Monroe, Miami-Dade, Broward, and Palm Beach Counties.

2. Consul-Tech Enterprises, Inc., Miami, Florida

- 2006-2011: Director of Surveying - Responsibilities include the training of all survey staff in data collection utilizing both the Electronic Field Book, The Cadastral Electronic Field Book, and the post processing of field collected data utilizing the DOS Processor and CAiCE's Data Processor, the preparation of proposals, control, maintenance and right-of-way maps for various FDOT Districts, plats, surveys, etc. and performing the necessary quality control to ensure client needs are met. Duties also include the supervision and organization of all survey staff throughout Monroe, Miami-Dade, Broward, and Palm Beach Counties.

3. Biscayne Engineering Company, Inc., Miami, Florida

- 1987-2006: Professional Land Surveyor - Responsible for the daily operations of Surveying and Mapping for both field and office. - boundary surveys, topographic surveys, sectional surveys, construction layout for buildings and roads, land development surveys, project designs and right of way surveys, specific purpose surveys, preparation of control surveys and right of way maps. Preparation of proposals, conduct presentations and contract negotiations.

4. Job & Job Engineers, Inc., New Jersey

- 1983-1987: Field Crew Supervisor - Responsible for various construction layout projects, Right of Way Surveys, preparation of Right of Maps, boundary surveys, hydrographic surveys and topographic surveys.

5. Paul N. Howard Company, Inc., N.C. (Jamaica WI Contract)

- 1979-1983: Field Crew Chief - Responsible for topographic survey in preparation of construction of 15 miles of bauxite conveyor belt line through mountains and valleys. Layout of conveyor belt line. Control survey for 500 square miles of swamp land and consequently the layout of dikes, pump stations and canals for said swamp land. Computation of quantities of materials removed from burrow Pits for construction of roads

PARTIAL LIST OF PROJECTS

INSTITUTIONAL

- Civil Engineering Services, Pembroke Pines, FL - Surveying Project Manager for Miscellaneous Civil Engineering Services to the South Broward Hospital District for the design and construction administration. Services include contractor submittal review, responses to requests for information, change order and construction change directives, consultant concerning replacement of work, evaluation of claims, evaluation of substitutions, preparation of design and documentation for alternate bid or

SELVIN BRUCE, P.S.M., Director of Surveying

proposal requests and contract administration services. Client: Memorial Healthcare System, Joseph Alcure, Jr., (954) 433-7184.

- Memorial Regional Hospital South Parking Lot Reconstruction, Hollywood, FL - Services included the reconstruction of doctors and employee parking lot. Performed full civil engineering services including paving, grading and drainage plans, water and sewer plans, permitting, construction observation, architectural, site lighting, boundary and topographic survey.
- Memorial Regional Hospital West Bed Tower Crane Monitoring Surveying, Pembroke Pines, FL - Surveying services included as-built, specific purpose and topographic survey for the crane stability.
- Miscellaneous Surveying and Mapping, Miami, FL - Site survey work for the temporary relocation of child care facility. Services include As-Built, boundary, specific purpose, topographic, sketch to accompany legal descriptions, Review of Title Documents, (i.e. Title Commitments, Attorney's Opinion of Title, etc.) Miami Children's Hospital, Pedro Silva, (305) Pedro Silva, (305) 663-8474, 2008 - Present.
- Imperial Point Medical Emergency Department Expansion, Broward County, FL - A 204 bed medical center, scope included the expansion of the emergency department facility. Services included site plan preparation and processing, preparation of paving, grading and drainage plans, water and sewer plans, plans approval and permitting, construction observation, landscape, irrigation, boundary and topographic survey. Client: HDR Architecture, Inc., Brendan Ellis, (813) 262-2792, 2008-2011.
- Coral Springs Medical Center Emergency Department Expansion, Broward County, FL - A 200 bed medical center, scope included the expansion of the emergency department facility. Services included site plan preparation and processing, preparation of paving, grading and drainage plans, water and sewer plans, plans approval and permitting, construction observation, landscape, irrigation, boundary and topographic survey. Client: HDR Architecture, Inc., Brendan Ellis, (813) 262-2792, 2008-2011.
- South Broward Drainage District, Broward County, FL - Project consisted of a full design survey of lake shores as destroyed by hurricane Wilma for the purpose of restoration and final stake-out. Lakes included: Sunset Lakes 1 & 3 and Harbor Lakes.
- Lake Emerald, Broward County, FL - Survey Project Manager for surveying services of shoreline area for changes due to past hurricanes. Performed hydrographic survey which verified project network controls and topographic survey for 12,000 feet shoreline. Client: South Florida Resource Conservation & Development Council, Inc., 2006

CONTINUING CONTRACTS

- Miscellaneous Location Survey Consultant, Miami-Dade/Monroe Counties, FL - Project Manager for continuing service contract providing professional surveying and mapping services for various projects throughout the district. The projects consist of providing field surveys for right of way & design projects to be assigned by the Survey Location Department on a task work order basis. Client: FDOT District Six, Charles Clarke, P.S.M., (305) 470-5100, 2013 - Present.
 - SR 992 Coral Reef Drive, Miami-Dade County, FL
 - SR 698/Flagler & NW 1 St.@NW, Miami-Dade County, FL
 - SR 989/SW 112 Avenue, Miami-Dade County, FL
- FDOT Districtwide Right-of-Way Mapping Services, Miami-Dade/Monroe Counties, FL - Project Manager responsible for providing for Right of Way Mapping and Surveying Services for various projects throughout the District. These services shall include, but are not limited to, the preparation of Right of Way Maps, Right of Way Control Surveys, Maintenance Maps, Parcel Sketches, Title Search review, plotting of legal descriptions, providing the department with qualified personnel (when needed) as determined by the District Right of Way Surveyor in the function of the Right of Way Department and for the performance of miscellaneous surveying and mapping services on various types projects. Client: FDOT District Six, Cristina Kinman-Albury, P.S.M., (305) 470-5249, 2008 - 2014.
- General Engineering Consultant #1, Miami-Dade County, FL - Project Surveyor assisting FDOT with a districtwide range of engineering services in bringing to completion the production of numerous projects. Client: FDOT District Six, Teresa Alvarez, P.E., (305) 470-5100, 2006 - 2014.
 - S.R. 93 (I-75) at N.W. 138th Street (Hialeah Gardens Boulevard), Miami-Dade County, FL -Project Surveyor for the improvements at the intersection at NW 138th Street and Hialeah Gardens Boulevard to include the addition of a southbound left turn lane from NW 138th Street onto Hialeah Gardens



SELVIN BRUCE, P.S.M., Director of Surveying

Boulevard and the restriping of the northbound turn lanes from NW 138th onto Hialeah Gardens Boulevard. Sidewalk and pedestrian ramps are also included. Services include roadway design, drainage, signing and pavement markings and signalization. Client: FDOT District Six, Ana Arvelo, P.E. (305) 470-5100, 2008 - 2011.

- ND PES Drainage Mapping Program, Monroe County, FL – Party Surveyor for professional surveying and mapping to locate approximately 70 drainage structures to address permit requirements stipulated under NPDES Permit ID Number FLR04E132, issued to District 6. Client: FDOT District 6, Ricardo Salazar, P.E., (305) 470-5264, 2008 – 2010.
- City of Miami Civil Engineering Services for Roadway Projects, Miami-Dade County, FL – Project Surveyor for Civil Engineering services to include complete planning, design, programming, pavement analysis, surveying, geotechnical, options evaluations, public meetings, detailed assessments and recommendations, cost estimation, opinions of probable construction costs, quality control reviews, field investigations, observations, post design services, construction administration and other related services. Projects included roadway reconstruction or resurfacing, drainage improvements, swale restoration, curbs, gutters, sidewalks, lighting improvements, landscaping, signage and striping, verification of City's pavement analysis report within project area, surveying, geotechnical and utility locations. Client: City of Miami Capital Improvements, Alice Bravo, P.E., (305) 416-1207, 2008 - Present
- Center Grove Street & Lighting Improvements, Miami-Dade County, FL – Civil roadway engineering services for the design of street improvements including repair of existing sidewalks, new sidewalks and ADA ramps; 1419-Parking and Surcharge 2007. Services will include project management and engineering analysis services necessary for preparing a Civil Engineering Services for the project the area bounded by Bird Road to the north, SW 27th Avenue to the east, McDonald Street to the west, and Oak Avenue and Tigertail Avenue to the south. The project will include decorative lighting for all the streets within the project perimeter, perform a topographic survey and establish the existing right-of-way of the project area to generate plans for the lighting design of all the streets within the project area and utility coordination for project area. Client: City of Miami Capital Improvements, Hector Badia, (305) 416-1236.
- Palm Grove Roadway Improvements, Miami-Dade County, FL – As part of a master continuing services agreement providing Civil Engineering Services to Roadway Projects. Services include engineering field services, project management assistance, engineering analysis, design services on an “as needed basis” for preparing roadway plans The project limits are bounded by N.E. 4th Court to the west, N.E. 79 Street to the north, N.E. 58 Street to the south, and Biscayne Boulevard to the east, within the City of Miami. Services will include engineering design, ADA improvements, surveying and mapping, landscape architecture, geotechnical, utility coordination and public involvement. Client: City of Miami Capital Improvements, Hector Badia, (305) 416-1236.
- N.E. 2nd Avenue Roadway & Drainage Improvements, Miami-Dade County, FL – This project is a part of the master continuing services agreement providing Civil Engineering Services for Roadway Projects and involves the milling and resurfacing of NE 2nd Court from NE 82nd Street to NE 84th Street. Services will include engineering design, environmental permitting, surveying and mapping, geotechnical, ADA improvements and utility coordination. Client: City of Miami Capital Improvements, Hector Badia, (305) 416-1236.
- Miscellaneous Engineering Surveying Consultant, Miami-Dade/Monroe County, FL – Surveying Project Manager providing field surveys and mapping for projects assigned by the Department on a Task Work Order basis. Services included the re-establishment of survey baselines, reference points, bench marks, check cross sections, cross sections for final estimates and monumentation of right-of-way lines after construction is complete. Mapping will include annotation of existing maps and new monumentation maps. Managerial assistance will include managing other consultants acting as a Department representative by negotiating man hours, revising and preparing scope of services, revising survey information, providing guidance and direction in how to accomplish project goals. Client: FDOT District Six, Scott Perkins, P.S.M., (305) 470-5100, 2006 - 2011.
- Miscellaneous Right of Way Mapping Services, Broward/Palm Beach, FL –Project Manager assisting the District's Right of Way Mapping office in the completion of various projects. Contract C-8365/FM No. 230012-1-32-04. Client: FDOT District Four, Louis Cefoila, P.S.M., (954) 486-1400, 2006 - 2010.



SELVIN BRUCE, P.S.M., Director of Surveying

- S.R. 7 (US 441) from S.R. 816 (Oakland Park Boulevard) to S.R. 934 (Sample Road), Lauderdale Lakes through Margate, FL - Mr. Bruce served as the Project Manager for the preparation of right-of-way control survey and maps. 2009 - 2010.
- S.R. 708 (Blue Heron Blvd.) from S.R. 9/I-95 to S.R. 8 (U.S. 1), Palm Beach County, FL - Project Manager for the preparation of signed and sealed right of way control survey, maps and monumentation maps. 2008 - 2009.
- S.R. 817 (University Drive) from Miami-Dade/Broward County Line to Sheridan Street, Miramar to Pembroke Pines, FL - Project Manager for the preparation of signed and sealed right-of-way control survey, maps and monumentation maps. 2008.
- S.R. 845 (Powerline Road) from S.R. 814/Atlantic Boulevard to S.R. 834/Sample Road, Pompano Beach, FL - Project Manager for the preparation of signed and sealed right-of-way control survey and overseeing the preparation of right-of-way maps. 2007 - 2008.
- Design of Upgrades for Sanitary Sewer Pump Stations, Miami-Dade County, FL - Project Manager responsible for providing full area survey for as-built submittals including the following information: a) Above ground information (pavement, sidewalks, fences, structures, power poles, etc); b) Existing underground utilities within the property (inverts, catch basin, manholes, electricity, cable TV, phone, gas, etc) and c) Existing above ground utilities within the pump station area (valves, meter boxes, fire hydrants, over head cables. Project consisted of complete professional engineering services to implement the construction of pump station & force main improvements associates with existing MDWASD 0372 located at 3950 NW 213 Street in Miami-Dade County. Client: Millian, Swain & Associates, Inc., Julio Menache, (305) 441-0123, 2007 - 2010.
- Professional Surveying, Topographic and Mapping Services, Miami-Dade County, FL - Project Manager responsible for performing professional surveying, topographical and mapping services on a city-wide basis for various city projects. Basic services include boundary surveys, right-of-way surveys, legal descriptions, construction layout surveys, control surveys, hydrographic surveys, mean water line surveys, topographic surveys and specific purpose surveys. Client: City of Miami Beach, Richard Saltrick, (305) 673-7000 ext. 6565, 2007-2009.
- Professional Surveying Services, Broward County, FL - Project consisted of full design survey of 25 miles of secondary canals resulting in the preparation of Right of Way Maps. The following canals are: N-30, N-30A, N-23, N-17, N-12, N-8, N-4, N-5, N-5A, N-11, S-14, S-2, CC-9A, S-15, S-8, S-9, S-10, S-30, S-25, S-24, S-22. Client: Central Broward Water Control District, Michael Crowley, (954) 432-5100, 2006 - 2011.
- City of Miami Streetcar, Miami-Dade County, FL - Survey of various roadways along the streetcar corridor along the east-west loop and the north-south loop. Both loops are comprised of approximately 10 miles in length of roadway. Client: City of Miami, Leo Villalobos, (305) 416-1280, 2007 - 2009.
- MDX General Engineering Consultant Services GEC A, Miami-Dade County, FL - Survey Project Manager responsible for surveying and mapping services under a contract that requires multiple task orders or authorizations performed throughout Miami-Dade County. Client: HNTB, Jose de Almagro, P.E., (305) 551-8100.
- General Land and Engineering Surveying Professional Services, Miami Dade County, FL - Project involved High Accuracy, Second Order Class II, Survey for Metro Mover throughout the downtown area of the City of Miami to include Right of Way Mapping, topographic survey and ultimately construction layout and As-Built. Client: Miami-Dade County Public Works Department, Leo Ona, (305) 375-1909, 2006 - 2009.
- City of Sweetwater, Miami-Dade County, FL - Surveyor and Mapper for project consisting of full design survey of miscellaneous projects throughout the City of Sweetwater limits to assist in the completion planned projects. Client: FDOT District Six, Ana Arvelo, P.E, (305) 470-5210, 2005 - 2007.
- Continuing Professional Surveying Services, South Kissimmee Lake, FL - Survey Project Manager performing hydrographic surveys for the C-33, C-34 and C-38 Canals. Client: South Florida Water Management District, (561) 682-6682, 2006.



INTERCHANGE

- S.R. 826 (Palmetto Expressway) Interchange at Miller Drive, State Road 874 and Bird Road, Miami Dade County, FL - Project consisted of sectional survey, control survey, drainage and utility survey, Project Network Control Survey, location of soil borings, full digital terrain modeling, and preparation of Right of Way Map all tied into Florida State Plane Coordinate System North American Datum 1983/90 readjustment and National Geodetic Vertical Datum of 1929 (NGVD 29). Client: FDOT District Six, Jason Chang, P.E., (305) 470-5331, 1996-2008.
- S.R. 874 Killian Parkway, Miami-Dade County, FL - Design Survey for the reconstruction of a six lane to eight lane limited access toll plaza facility. The project included two new mainline toll plazas, a ramp toll plaza, and the demolition of an existing toll plaza. The new plaza provides for open road. The project also includes improvements to Killian Parkway. Client: Miami-Dade Expressway Authority, Alfred Lurigados, P.E. (305) 637-3277, 2004-2008.
- I-95 & Okeechobee Road Interchange, Palm Beach County, FL - Project consisted of the preparation of control survey resulting in the preparation of right of way mapping. Total length of project 2 miles.

MAJOR ARTERIAL

- SR 5/US 1/Overseas Highway from South of MacDonald Avenue to South of Coppitt Road, Monroe County, FL - Survey Project Manager for the 3R milling and resurfacing of approximately 5.213 miles located between Stock Island and Big Coppitt Key. This corridor is designated as an Urban Other Principal Arterial, with an Access Class 3 Classification between MP 0.000 and MP 5.077 and an Access Class 6 between MP 5.077 and MP 5.213. Design elements included Engineering design, drainage, surveying and mapping, lighting, signalization, structures, traffic engineering, utility coordination, geotechnical, photogrammetry and public involvement. Client: FDOT District Six, Ali Toghiani, (305) 470-5343, 2012 - Present.
- S.R. 90/S.W. 8th Street from S.R. 821 (HEFT) to S.R. 826 (Palmetto Expressway), Miami-Dade County, FL - Survey Project Manager for milling and resurfacing project that includes safety improvements, ADA upgrades, and additional safety upgrades at the intersections of S.W. 92nd Avenue, S.W. 102nd Avenue to S.W. 99th Place, and S.W. 109th Avenue. Furthermore, upgrades to include provisions for Turbo Lanes at the intersection of S.W. 102nd Avenue will be made. Design elements include roadway design, signing & pavement markings, drainage, maintenance of traffic, surveying and mapping, geotechnical, landscape architecture, bridge design, lighting, signalization and traffic engineering. Client: FDOT District Six, Ana Arvelo, P.E. (305) 470-5210, 2010-Present.
- S.R. 968/W. Flagler Street from NW/SW 14th Avenue to NW/SW 2nd Avenue, Miami-Dade County, FL - Reconstruction/Resurfacing of SR 968/West Flagler Street existing curb and gutter sections, including upgrading sidewalks and pedestrian cross-walks to ADA compliance, upgrading traffic signals, lighting and drainage system, intersection improvements and landscaping enhancement. Services include roadway design, quality control, constructability reviews and surveying and mapping services. Client: Gannett Fleming, Inc., Naldo Gonzalez, P.E., (786) 846-9540, 2009-Present.
- Venetian Causeway, Miami-Dade County, FL - Survey Project Manager for local landmark to complete construction plans for twelve (12) existing bridges. The project will include complete replacement of eleven (11) bridges and a partial replacement of one (1) bridge. Scope will include approach roadway, drainage, hydrographic surveying, maintenance of traffic, utility adjustments, geotechnical, aerial photogrammetry, lighting, permits, cost estimates, architectural details and all necessary incidental items. Client: Triangle Associates, Inc., Osiris Quintana, P.E., (305) 817-8443, 2008 -2011
- S.R. A1A (Ocean Drive), Hallandale Beach, Broward County, FL - Surveying Project Manager to assist to FDOT District 4 with a RRR Milling and resurfacing of SR A1A from south of Seacrest Parkway (MP 0.870) to Azalea Terrace (MP 2.011). Services include roadway design, drainage, signalization, maintenance of traffic, signing and pavement markings, utility coordination, landscaping, geotechnical, photogrammetry, and public involvement. Client: FDOT District Four, Bing Wang, P.E., (954) 777-4406, 2006-2009.
- S.R. 5 (US-1) Yamato Road, Palm Beach County, FL - Surveying Project Manager for 3R Milling and resurfacing project located on S.R. 5/U.S. 1 just south of Yamato Road to the C-15 Canal. This project includes the analysis of existing roadway conditions to extend the service life of the existing roadway, roadway slopes, geometry, clear zone, and strain poles and appropriate implemental and analyses.



SELVIN BRUCE, P.S.M., Director of Surveying

Services also included roadway design, drainage, signalization, maintenance of traffic, signing and pavement markings, utility coordination, landscaping, geotechnical, photogrammetry, and public involvement. Client: FDOT District Four, Leslie Wetherell, P.E., (954) 777-4438, 2006-2008.

- S.R. 820 Hollywood Boulevard, Broward County, FL - Design survey for milling, resurfacing, paved shoulders and drainage improvements from 44th Avenue to just west of Interstate 95. Client: FDOT District Four, James Scully, P.E., (954) 777-4633, 2006-2009.
- Miami Garden's Drive (S.R. 860) from I-75 to N.W.57 Avenue, Miami-Dade County, FL - Project included preparation of project network control sheets, full topographic and digital terrain modeling, drainage and utility survey all tied into Florida State Plane Coordinate System North American Datum 1983/90 readjustment and National Geodetic Vertical Datum of 1929 (NGVD 29). Client: BND Engineers, Inc., Kevin Keane/Laura Vallejo, (305) 599-8495.
- S.R. 80, Palm Beach County, FL - Project included Topographical survey, digital terrain model, design survey and right of way mapping. Project limits 8 miles approximately, from I-95 west along S.R. 80.
- S.R. A1A, Palm Beach County, FL - Project included preparation of right of way mapping. Project limits 4 miles starting at the Breakers northward.
- Davie Boulevard, Broward County, FL - Design survey consisting of digital terrain model, drainage survey from I-95 west to S.R. 441.
- N.W. 135th Street from S.R. 9 to US 441, Miami Dade County, FL - Project included topographic survey, cross sections, drainage and utility survey for design and construction purposes.
- U.S. 1 (S.R. 5) from 216th to 220th Street (Route Survey). S.R. 826 Miami-Dade County, FL - Project included preparation of project network control sheets, full topographic and digital terrain modeling, drainage and utility survey all tied into Florida State Plane Coordinate System North American Datum 1983/90 readjustment and National Geodetic Vertical Datum of 1929 (NGVD 29).

COMMERCIAL

- Meridian Park of Commerce Land Acquisition Due Diligence, Broward County, FL - Alta Survey, boundary survey, topographic survey for Parcel 7, Lots 28-33. Client: Cleveland Clinic Foundation, Graig Kluge, (216) 903-1892, 2013
- South Dade Landfill Cell 3 & 5, Miami-Dade County, FL - Complete surveying and mapping services for design of new landfill at South Dade Landfill Cell 5 and the Closure of South Dade landfill Cell 3. The project included surveying, data collections, landfill cell design using liner systems, leachate collection system design, gas extraction system design, permitting services required for regulatory agencies, and construction management services. Services included topographical survey to include the recovery of all necessary horizontal and vertical controls and recovery of existing property monuments sufficient to determine of physical location land corners. Public land corners such as section corners and subdivision corners were also located. Client: Westthorp & Associates, Inc., Brenda Westthorp, (305) 759-4757, 2007 - 2011.



DARRYL J. HAUSER, P.S.M., Right-of-Way Project Manager

REGISTRATIONS

Professional Surveyor and Mapper
Florida No. 6277, 2001

EDUCATION

G.I.S. Post Baccalaureate Study
University of Florida, 1992

B.S. Surveying & Mapping
University of Florida, 1990

Skills

MicroStation
GeoPAK
G.I.S.

Survey Field Work (Party Chief,
Instrument Operator, Rodman)
HP 48GX Calculator
Spanish language skills.

YEARS EXPERIENCE

20

TECHNICAL EXPERTISE

Mr. Hauser has over 20 years of experience and has worked in almost all areas of surveying and mapping in both the public and private sectors. He has worked in numerous locations such as the Tampa Bay Area, North Central Florida, Southern Maryland and Washington, DC; prior to relocating to South Florida and working for over 12 years with the FDOT in Miami. Along with his many FDOT projects (see partial list below), Mr. Hauser also involved himself with two different technical advisory committees and has represented FDOT District VI at statewide surveyor's meetings; working to improve the quality of surveying and mapping for the State of Florida.

RELEVANT EXPERIENCE

1. CSA Central, Inc., Miami, Florida

- 1/2012 - Present: Right-of-Way Project Manager - Oversee production of right of way maps and control surveys for FDOT improvements, as well as coordinating with the FDOT to equip office to meet departmental standards. Supervise survey field crews and CADD procedures. Manage the preparation of plats, establishment of primary control networks and construction surveys with extensive use of MicroStation and Geopak in map preparations and reviews.

2. Consul-Tech Enterprises, Inc., Miami, Florida

- 12/2006 - 12/2011: Right-of-Way Project Manager - Oversaw production of right of way maps and control surveys for FDOT improvements, as well as coordinating with the FDOT to equip office to meet departmental standards. Supervise survey field crews and CADD procedures. Manage the preparation of plats, establishment of primary control networks and construction surveys with extensive use of MicroStation and Geopak in map preparations and reviews.

3. Florida Department of Transportation District Six, Miami, Florida

08/2001 - 11/2006: Right of Way Mapping Project Manager - Provided professional oversight and opinions in reviewing surveys, determining limits of ownership and land acquisition procedure. Manage Transportation District distribution of maps and related records to all parties outside the department. Provided historical background information on maps and corresponding transportation corridors. Represent District at State Land Surveyor's meetings, statewide Surveying and Mapping Technical Advisory Committee; appointed to advise committee on methods to instruct consultants in right-of-way mapping preparation and standards and District Surveying and Mapping department leadership in other venues. Advise, instruct, and train less experienced personnel on survey, mapping, and departmental procedures. Advise department heads and coordinated with other offices on how to better equip office with training and material resources. Manage preparation and revision of maps and other related documents for roadway improvements, including the direction of survey crew in acquiring field data. Certify right-of-way maps, and assist in the acceptance and rejection of awarding contracts.

02/1996 - 08/2001: Assistant P.S.M./Right of Way Mapping Project Manager - Managed preparation of maps and other related documents for roadway improvements. Used MicroStation, Geopak coordinate geometry software to check consultants or produce maps and legal descriptions in-house. Advised, instructed and trained less experienced personnel on survey, mapping and departmental procedures. Represented District on the statewide Right of Way Mapping Technical Advisory Committee.

02/1994 - 02/1996: Professional Land Surveyor Trainee - Toured various departments in District VI and Tallahassee, learning of agency functions. Assisted in preparation of maps and surveys with MicroStation, Geopak, and quality control reviews. Performed field survey work using total stations, levels, and other survey equipment; assisted crew chief with survey field computations. Prepared problems for Professional Engineering Trainee's exam for Surveying and Mapping Department.



PARTIAL LIST OF PROJECTS

INSTITUTIONAL

- Civil Engineering Services, Pembroke Pines, FL – Project Surveyor for Miscellaneous Civil Engineering Services to the South Broward Hospital District for the design and construction administration. Services include contractor submittal review, responses to requests for information, change order and construction change directives, consultant concerning replacement of work, evaluation of claims, evaluation of substitutions, preparation of design and documentation for alternate bid or proposal requests and contract administration services. Client: Memorial Healthcare System, Joseph Alcure, Jr., (954) 433-7184
- Memorial Regional Hospital South Parking Lot Reconstruction, Hollywood, FL - Services include the reconstruction of doctors and employee parking lot. Services includes full civil engineering services include paving, grading and drainage plans, water and sewer plans, permitting, construction observation, architectural, site lighting, boundary and topographic survey.
- Memorial Regional Hospital West Bed Tower Crane Monitoring Surveying, Pembroke Pines, FL – Surveying services as-built, specific purpose and topographic survey for the crane stability.
- Miscellaneous Surveying and Mapping, Miami, FL – Site survey work for the temporary relocation of child care facility. Services include As-Built, boundary, specific purpose, topographic, sketch to accompany legal descriptions, Review of Title Documents, (i.e. Title Commitments, Attorney's Opinion of Title, etc.) Client: Miami Children's Hospital, Pedro Silva, (305) 663-8474.
- Imperial Point Medical Emergency Department Expansion, Broward County, FL - A 204 bed medical center, scope will include the expansion of the emergency department facility. Responsibilities include site plan preparation and processing, preparation of paving, grading and drainage plans, water and sewer plans, plans approval and permitting, construction observation, landscape, irrigation, boundary and topographic survey. Client: HDR Architecture, Inc., Brendan Ellis, (813) 262-2792, 2008 - 2011.
- Coral Springs Medical Center Emergency Department Expansion, Broward County, FL – A 200 bed medical center, scope will include the expansion of the emergency department facility. Responsibilities include site plan preparation and processing, preparation of paving, grading and drainage plans, water and sewer plans, plans approval and permitting, construction observation, landscape, irrigation, boundary and topographic survey. Client: HDR Architecture, Inc., Brendan Ellis, (813) 262-2792, 2008 - 2011.
- Miami Children's Hospital, Miami, Florida. Mr. Hauser oversaw preparation of signed and sealed boundary and topographic survey of property, as well as specific purpose survey's of property. 2007

CONTINUING CONTRACTS

- Miscellaneous Location Survey Consultant, Miami-Dade/Monroe Counties, FL – Project Surveyor for continuing service contract providing professional surveying and mapping services for various projects throughout the district. The projects consist of providing field surveys for right of way & design projects to be assigned by the Survey Location Department on a task work order basis. Client: FDOT District Six, Charles Clarke, P.S.M., (305) 470-5100, 2013 – Present.
 - SR 992 Coral Reef Drive, Miami-Dade County, FL
 - SR 698/Flagler & NW 1 St.@ NW, Miami-Dade County, FL
 - SR 989/SW 112 Avenue, Miami-Dade County, FL
- Districtwide Right-of-Way Mapping Services, Miami-Dade/Monroe Counties, FL – Project Surveyor responsible for providing for Right of Way Mapping and Surveying Services for various projects throughout the District. These services shall include, but are not limited to, the preparation of Right of Way Maps, Right of Way Control Surveys, Maintenance Maps, Parcel Sketches, Title Search review, plotting of legal descriptions, providing the department with qualified personnel (when needed) as determined by the District Right of Way Surveyor in the function of the Right of Way Department and for the performance of miscellaneous surveying and mapping services on various types projects. Client: FDOT District Six, Cristina Kinman-Albury, (305) 470-5249, 2008 – 2014.
- Districtwide Miscellaneous Engineering Surveying Consultant, Miami-Dade County, FL - Project Surveyor of various roadways in assisting FDOT with a districtwide range of engineering services in bringing to completion the production of numerous projects. Client: FDOT District Six, 2006 - 2011



DARRYL J. HAUSER, P.S.M., Right-of-Way Project Manager

- **FDOT General Engineering Consultant #1, Miami-Dade County, FL - Project Surveyor** assisting FDOT with a districtwide range of engineering services in bringing to completion the production of numerous projects. Client: FDOT District Six, Teresa Alvarez, P.E., (305) 470-5100, 2006 – Present
- **City of Miami Civil Engineering Services for Roadway Projects, Miami-Dade County, FL – Project Surveyor** for Civil Engineering services to include complete planning, design, programming, pavement analysis, surveying, geotechnical, options evaluations, public meetings, detailed assessments and recommendations, cost estimation, opinions of probable construction costs, quality control reviews, field investigations, observations, post design services, construction administration and other related services as need to complete projects. Projects include: roadway reconstruction or resurfacing, drainage improvements, swale restoration, curbs, gutters, sidewalks, lighting improvements, landscaping, signage and striping, verification of City’s pavement analysis report within project area, surveying, geotechnical and utility locations. Client: City of Miami Capital Improvements, Alice Bravo, P.E., (305) 416-1207, 2008 - Present
- **Center Grove Street & Lighting Improvements, Miami-Dade County, FL – Civil roadway engineering services** for the design of street improvements including repair of existing sidewalks, new sidewalks and ADA ramps; 1419-Parking and Surcharge 2007. Services will include project management and engineering analysis services necessary for preparing a Civil Engineering Services for the project the area bounded by Bird Road to the north, SW 27th Avenue to the east, McDonald Street to the west, and Oak Avenue and Tigertail Avenue to the south. The project will include decorative lighting for all the streets within the project perimeter, perform a topographic survey and establish the existing right-of-way of the project area to generate plans for the lighting design of all the streets within the project area and utility coordination for project area.
- **Palm Grove Roadway Improvements, Miami-Dade County, FL – As part of a master continuing services agreement providing Civil Engineering Services to Roadway Projects.** Services include engineering field services, project management assistance, engineering analysis, design services on an “as needed basis” for preparing roadway plans The project limits are bounded by NE 4th Court to the west, NE 79 Street to the north, NE 58 Street to the south, and Biscayne Boulevard to the east, within the City of Miami. Services will include engineering design, ADA improvements, surveying and mapping, landscape architecture, geotechnical, utility coordination and public involvement.
- **Miscellaneous Right of Way Mapping Services, Broward/Palm Beach, FL – Project Surveyor/Mapper** assisting the District's Right of Way Mapping office in the completion of various projects. Contract C-8365/FM No. 230012-1-32-04. Client: FDOT District Four, Louis Cefoila, P.S.M., (954) 486-1400, 2002 -2010.
 - S.R. 7 (US 441) from S.R. 816 (Oakland Park Boulevard) to S.R. 934 (Sample Road), Lauderdale Lakes through Margate, FL - Project Surveyor/Mapper for the preparation of right-of-way control survey and maps. 2009-2010.
 - S.R. 708 (Blue Heron Blvd.) from S.R. 9/I-95 to S.R. 8 (U.S. 1), Palm Beach County, FL – Project Surveyor/Mapper for the preparation of signed and sealed right of way control survey, maps and monumentation maps. 2008-2009
 - S.R. 817 (University Drive) from Miami-Dade/Broward County Line to Sheridan Street, Miramar to Pembroke Pines, FL - Project Surveyor/Mapper for the preparation of signed and sealed right-of-way control survey, maps and monumentation maps. 2008.
 - S.R. 845 (Powerline Road) from S.R. 814/Atlantic Boulevard to S.R. 834/Sample Road, Pompano Beach, FL - Project Surveyor/Mapper for the preparation of signed and sealed right-of-way control survey and overseeing the preparation of right-of-way maps. 2007 – 2008.
- **Central Broward Water Control District, Broward County, FL - Project** consisting of full design survey of 25 miles of secondary canals resulting in the preparation of Right of Way Maps. The following canals are: N-30, N-30A, N-23, N-17, N-12, N-8, N-4, N-5, N-5A, N-11, S-14, S-2, CC-9A, S-15, S-8, S-9, S-10, S-30, S-25, S-24, S-22. Client: Central Broward Water Control District, Michael Crowley, (954) 432-5100, 2006 - 2009



DARRYL J. HAUSER, P.S.M., Right-of-Way Project Manager

MAJOR ARTERIAL

- SR 5/US 1/Overseas Highway from South of MacDonald Avenue to South of Coppitt Road, Monroe County, FL – Project Surveyor for the 3R Milling and resurfacing of approximately 5.213 miles located between Stock Island and Big Coppitt Key. This corridor is designated as an Urban Other Principal Arterial, with an Access Class 3 Classification between MP 0.000 and MP 5.077 and an Access Class 6 between MP 5.077 and MP 5.213. Design elements will include Engineering design, drainage, surveying and mapping, lighting, signalization, structures, traffic engineering, utility coordination, geotechnical, photogrammetry and public involvement. Client: FDOT District Six, Ali Toghiani, (305) 470-5343, 2012 - Present.
- S.R. 90/S.W. 8th Street from S.R. 821 (HEFT) to S.R. 826 (Palmetto Expressway), Miami-Dade County, FL –Project Surveyor for milling and resurfacing project that includes safety improvements, ADA upgrades, and additional safety upgrades at the intersections of S.W. 92nd Avenue, S.W. 102nd Avenue to S.W. 99th Place, and S.W. 109th Avenue. Furthermore, upgrades to include provisions for Turbo Lanes at the intersection of S.W. 102nd Avenue will be made. Design elements include roadway design, signing & pavement markings, drainage, maintenance of traffic, surveying and mapping, geotechnical, landscape architecture, bridge design, lighting, signalization and traffic engineering. Client: FDOT, Ana Arvelo, P.E, (305) 470-5210, 2010 – Present.
- S.R. 968/W. Flagler Street from NW/SW 14th Avenue to NW/SW 2nd Avenue, Miami-Dade County, FL - Reconstruction/Resurfacing of SR 968 / West Flagler Street existing curb and gutter sections, including upgrading sidewalks and pedestrian cross-walks to ADA compliance, upgrading traffic signals, lighting and drainage system, intersection improvements and landscaping enhancement. Consul-Tech will render roadway design, quality control, constructability reviews and surveying and mapping services. Client: Gannett Fleming, Inc., Pablo Bielecki, P.E., (786) 846-9540, 2009 – 2011.
- S.R. A1A (Ocean Drive) - Hallandale Beach, Florida, Broward County – Project Surveyor for RRR Milling and resurfacing of SR A1A from south of Seacrest Parkway (MP 0.870) to Azalea Terrace (MP 2.011). Services include roadway design, drainage, signalization, maintenance of traffic, signing and pavement markings, utility coordination, landscaping, geotechnical, photogrammetry, and public involvement. Client: FDOT District Four, Bing Wang, P.E., (954) 777-4406, 2006 – 2009.
- SR 5 (US-1) Yamato Road, Palm Beach County, Florida – Project Surveyor for 3R Milling and resurfacing project located on S.R. 5 / U.S. 1 just south of Yamato Road to the C-15 Canal. This project includes the analysis of existing roadway conditions to extend the service life of the existing roadway, roadway slopes, geometry, clear zone, and strain poles and appropriate implemental and analyses. Services also include roadway design, drainage, signalization, maintenance of traffic, signing and pavement markings, utility coordination, landscaping, geotechnical, photogrammetry, and public involvement. Client: FDOT District Four, Leslie Wetherell, P.E., (954) 777-4438, 2006 – 2009.
- S.R. 874 Killian Parkway, Miami-Dade County, FL – Project Surveyor for the reconstruction of a six lane to eight lane limited access toll plaza facility. The project includes two new mainline toll plazas, a ramp toll plaza, and the demolition of an existing toll plaza. The new plaza provides for open road. The project also includes improvements to Killian Parkway. Client: Miami-Dade Expressway Authority, Alfred Lurigados, P.E. (305) 637-3277, 2003 – 2008.
- S.R. 820 Hollywood Boulevard, Broward County, FL – Project Surveyor survey for milling, resurfacing, paved shoulders and drainage improvements from 44th Avenue to just west of Interstate 95 Client: FDOT District Four, James Scully, P.E., (954) 777-4633, 2006 – 2009.
- City of Sweetwater, Miami-Dade County, FL – Project Surveyor and Mapper for project consisting of full design survey of miscellaneous projects throughout the City of Sweetwater limits to assist FDOT –District Six in completing planned projects.
- City of Miami Streetcar Corridor, Miami-Dade County, FL - Survey of various roadways along the streetcar corridor along the east-west loop and the north-south loop. Both loops are comprised of approximately 10 miles in length of roadway.
- S.R. 997 (Krome Avenue) from S.R. 5 (U.S. 1) to S.W. 296th Street, Miami-Dade County, FL – Managed preparation of Right of Way Corridor Maps.
- S.R. 997 (Krome Avenue) from S.W.296th Street to S.W.292nd Street, Miami-Dade County, FL – Prepared Right of Way Maps and legal descriptions in-house.



DARRYL J. HAUSER, P.S.M., Right-of-Way Project Manager

- S.R. 997 (Krome Avenue) at S.W.288th Street, S.W.216th Street, S.W.200th Street, S.W.184th Street, Miami-Dade County, FL – Prepared Right of Way Maps and legal descriptions in-house.
- S.R. 997 (Krome Avenue) at S.W.272nd Street, S.W.256th Street, S.W.192nd Street, S.W.168th Street, S.W.136th Street, Miami-Dade County, FL – Oversaw preparation of Right of Way Maps and legal descriptions.
- S.R. 997 (Krome Avenue) from S.W.296th Street to S.R. 90 (U.S.41/Tamiami Trail) – Oversaw preparation of Right of Way Corridor Maps.
- S.R. 997 (Krome Avenue) from S.R. 90 (U.S.41/Tamiami Trail) to S.R. 25 (U.S. 27/Okeechobee Road), Miami-Dade County, FL – Oversaw preparation of Right of Way Corridor Maps.
- S.R.112 (Arthur Godfrey Road) from S.R.907 (Alton Road) to S.R.A-1-A, Miami-Dade County, FL – Prepared of Right of Way Corridor Maps in-house.
- S.R.823 (Red Road/N.W. 57th Avenue) from S.R. 25 (U.S. 27/Okeechobee Road) to S.R.934 (W.21st Street, Hialeah), Miami-Dade County, FL – Oversaw preparation of Right of Way Maps (no legal descriptions).
- S.R.823 (Red Road/N.W. 57th Avenue) from S.R.934 (W. 21st Street, Hialeah) to W.44th Place, Hialeah, Miami-Dade County, FL – Oversaw preparation of Right of Way Maps and legal descriptions.
- S.R.823 (Red Road/N.W. 57th Avenue) from W.44th Place, Hialeah to S.R.924 (Gratigny Parkway), Miami-Dade County, FL – Oversaw preparation of Right of Way Maps and legal descriptions.
- S.R. A-1-A from 41st Street, Miami Beach to 63rd Street, Miami Beach, Miami-Dade County, FL – Oversaw preparation of Right of Way Corridor Maps.
- S.R. A-1-A from 63rd Street, Miami Beach to 96th Street, Surfside, Miami-Dade County, FL – Oversaw preparation of Right of Way Corridor Maps.
- S.R. 25 (U.S. 27/Okeechobee Road) from S.R. 826 (Palmetto Expressway) to W.19th Street, Hialeah, Miami-Dade County, FL – Oversaw preparation of Right of Way Control Survey, Right of Way Maps and legal descriptions.
- S.R. 25 (U.S. 27/Okeechobee Road) from W.19th Street, Hialeah to S.R. 953 (Le Jeune Road/N.W.42nd Avenue) – 2nd S.R. 25 (U.S. 27/Okeechobee Road) at W.16th Avenue, Hialeah, Miami-Dade County, FL – Prepared of Right of Way Maintenance Map in-house.
- S.R. 953(Le Jeune Road/N.W.42nd Avenue) from N.W. 36th Street to S.E. 11th Place, Miami-Dade County, FL – Oversaw preparation of Right of Way Control Survey, Right of Way Maps and legal descriptions.
- S.R. 936 (Ingraham Highway) from Everglades National Park to S.W/N.W.6th Avenue, Florida City, Miami-Dade County, FL – Oversaw preparation of Right of Way Maintenance Maps.
- S.R.5 (U.S.1/Biscayne Boulevard/Brickell Bridge) from Miami River to S.E.4th Avenue, Miami-Dade County, FL – Prepared of Right of Way Parcel Sketches and legal descriptions in-house.
- S.W 2nd Avenue Bridge from S.R. 90 (U.S.41/Tamiami Trail) to S.W.2nd Avenue, Miami-Dade County, FL – Oversaw preparation of Right of Way Control Survey, Safe Upland Environmental (T.I.I.T.F.) Survey, Right of Way Maps and legal descriptions.

COMMERCIAL

- Meridian Park of Commerce Land Acquisition Due Diligence, Broward County, FL - Alta Survey, boundary survey, topographic survey for Parcel 7, Lots 28-33. Client: Cleveland Clinic Foundation, Graig Kluge, (216) 903-1892, 2013
- Fontainebleau III Ocean Club, Miami Beach, FL - Surveying and Mapping Services performing right-of-way mapping services. Client: Coscan Construction, Leonard O'Neil, (954) 620-1000, 2005 – 2007.
- Raintree Golf Course, Pembroke Pines, FL - Mr. Hauser oversaw the preparation of signed and sealed ALTA/ACSM survey of property. 2007



Jeffrey L. Andrews, PSM, CH
Director of Hydrographic Survey

Education

M.S., Ocean Science, Nova Southeastern University, 1995

B.S., Marine Biology, University of North Carolina, 1979

Associations

American Congress on Survey and Mapping, The Hydrographic Society of America, National Society of Professional Surveyors, Florida Society of Professional Surveyors

Registrations

Professional Surveyor and Mapper License Florida (#5805)

ACSM Certified Inshore Hydrographer (CH) (#104)

Relevant Experience

Jeffrey Andrews has been performing marine sand searches and offshore geotechnical, geophysical and hydrographic surveys since the early 1980s. During his career, Jeff has conducted more than 50 marine sand searches and mapped more than 100 million cy of beach compatible sand on the continental shelf. Mr. Andrews has unique experience and knowledge about existing sand resources and about techniques of sand resource prospecting and mapping. Jeff was also the project manager of a project with the FDEP (Florida Department of Environmental Protection) in which all existing information about sand resources along the Florida coast was compiled into a GIS database interfaced with an Internet Mapping System. A summary of selected project experience is listed.

Hydrographic and Topographic Surveys -

Directed bathymetric and upland surveys in Florida, Georgia, North Carolina, Virginia, New Jersey, New York, Massachusetts, Alabama, Louisiana, Texas, Alaska, Puerto Rico, Brazil and

the Bahamas. Prepared all hydrographic and topographic survey reports; including technical writing and supervision of data analysis. Over thirty years of conducting bathymetric and topographic surveys, and provided navigation/positioning for numerous offshore projects.

Recent projects include:

- Broward County, Florida, Beach Profile Survey (2013)
- Broward County, Florida, Nearshore Multibeam Survey (2012)
- Broward County, FL. Nearshore Multibeam Survey (2011- 2012)
- Broward County, Borrow Area Hydrographic Survey (2009)
- Broward County, Beach and Offshore Survey (2009)
- Broward County Airborne Laser Bathymetric Survey (2008)
- Manatee County Port Dolphin Pipeline, FL, Offshore Survey (2010)
- Delray Beach, Florida, Pre Construction Hydrographic Survey (2013)
- Delray Beach Cultural Resources Survey Dives (1998)
- Panama City Beach, Beach and Offshore Survey (1998, 2009)
- Anna Maria Island / Passage Key Shoal (1999)
- Anna Maria Island Offshore Survey (1998)
- Captiva Island Borrow Area Bathymetric Survey (2005, 2008)
- Dade County, Florida, Erosion Monitoring Hydrographic and Topographic Survey (2013)
- Port of Miami, Florida, Side Scan Sonar Survey and Multibeam Survey (2012)
- Atchafalaya River, LA. Multibeam Survey (2011-2012)
- BP Oil Spill Berm construction and monitoring profile surveys, Louisiana (2010-2012)

- Shell Island, LA. Borrow Area Bathymetric Survey (2011)
- LCA Gulf Stabilization at Point Au Fer Island, Louisiana, Beach and Offshore Survey (2010)
- Longboat Key, FL, Beach and Offshore Survey (2010)
- Dauphin Island, AL, Beach and Offshore Survey (2010)
- Caillou Lake, LA, Beach and Offshore Survey (2010)
- Holly Beach, LA. Borrow Area Bathymetric Survey (2000)
- Fire Island, New York, Beach and Offshore Survey (2009)
- Lido Key, Beach and Offshore Survey (2009)

Offshore Geotechnical and Geophysical Investigations - Mr. Andrews oversees CB&I sand search and geotechnical investigation plans and reports, including technical writing supervision of data analysis. Mr. Andrews oversees all CB&I offshore sand search geotechnical investigations and geophysical, including bathymetric, seismic, side scan sonar and magnetometer surveys, jet probes and vibracores, and sand grain compatibility analysis.

Recent Projects include:

- Town of Palm Beach, Florida. Offshore Geotechnical Investigation (2007)
- Broward County Florida, Florida Offshore Geotechnical Investigation (2009)
- Manatee County, Florida, Offshore Geotechnical Investigation (2012-2013)
- Manatee County, Florida, Port Dolphin Pipeline, Offshore Geotechnical Investigation (2010)
- Delray Beach, Florida. Offshore Geophysical/Cultural Investigations (2011)
- Panama City, Florida. Geotechnical Investigation and Offshore Survey (1998, 2004, 2005)
- Pinellas County Florida, Florida Offshore Geotechnical Investigation (2009)

- Anna Maria Island Offshore Survey Geotechnical Investigation (1998-1999, 2005, 2008)
- Captiva Island, Florida, Side Scan Sonar survey to clear seafloor for Pipeline Placement (2012)
- Captiva Island, Geotechnical Investigation (2000-2001)
- Wiggins Pass, Florida, Channel Geotechnical Investigation (2012)
- Port of Miami, Florida, Side Scan Sonar Survey and Multibeam Survey (2012)
- Carolina Beach Inlet, NC, Vibracores Investigation of proposed Borrow Area (2012)
- BP Oil Spill Berm Sand Investigations, Louisiana (2010-2011)
- Caillou Lake Land Bridge, LA, Geotechnical Investigation (2010-11)
- Point Au Fer, LA, Geotechnical Investigation (2010-11)
- Dauphin Island, AL, Geotechnical Investigation (2010-11)
- Longboat Key, Florida, Offshore Geotechnical Investigation (2010)
- Longboat Key, Florida, Florida. Offshore Geotechnical Investigation (2009)
- Bay County Florida, Florida Offshore Geotechnical Investigation (2009)
- Cape Romano Island, Florida Offshore Geotechnical Investigation (2008 -2009)
- West Bell Pass, Louisiana. Vibracore Investigation (2008)
- Siesta Key, Florida Geotechnical Investigation (2007)
- Eastern Texas Offshore Geotechnical Investigation (2007)
- Bay County Florida, Florida. Offshore Geotechnical Investigation (2007)

FELIX FUENTES, P.E., Senior Project Engineer

EDUCATION

B.S. Civil Engineering
Florida International University
1997

PROFESSIONAL REGISTRATIONS

Professional Engineer
Florida No. 59324, 2003

CERTIFICATIONS

- TIN: F53224072
- CTQP QC Manager
- Final Estimates Level 1
- FDOT Project Engineer's School
- Troxler Nuclear Density Gauge
- ATSSA Advanced MOT
- HAZMAT Certified
- Critical Structures Construction Issues

YEARS EXPERIENCE

18

TECHNICAL EXPERTISE

Mr. Fuentes has over 18 years of experience in project engineering and construction management with astute knowledge in areas of geotechnical and transportation engineering. In-depth concentration on various FDOT projects from inspections and contract management. He is able to develop quality processes and procedures, capable of addressing and coordinating all project phases and expeditiously providing feedback to project key personnel. Experienced in delivering projects to meet project requirements and capable of managing teams, resolving conflicts, engaging teams and transferring knowledge.

RELEVANT EXPERIENCE

1. CSA Central, Inc., Miami, FL

9/2013 – Present: Senior Project Engineer - Responsibilities include the supervision of project personnel and direct job assignments and ensure the necessary equipment, transportation and training is provided; contract administration and supervision of inspection personnel for Construction projects. Oversees preparation of progress and final estimates; oversees preparation of supplemental agreements and work orders; processing of Material Certifications, work schedule reviews; plan reviews, claim analysis; permit compliance; resolve conflicts during construction; public involvement/public relations; provide contractor quality control oversight; partnering; correspondence and documentation.

- Port of Miami Tunnel (FM No. 251156-3-62-01), Miami-Dade County, FL – Senior Project Engineer performing CEI and materials testing services for the installation and construction of an eastbound and westbound underwater tunnel connecting the Port of Miami (Dodge Island) to Watson Island as well as connections to the Port of Miami roadway system and widening of McArthur Causeway Bridge. Client: FDOT District Six, Teresa Alvarez, P.E., (305) 470-5100, 2014.
 - Tunnel connection between Watson Island and Port of Miami (Dodge Island) will consist of an eastbound and westbound tunnel with two traffic lanes, curbs, walkways, ventilation fans and additional safety features beneath Government Cut. The eastbound tunnel is approximately 3,693 ft. in length while the westbound tunnel is approximately 3,980 ft.
 - Connections to the Port of Miami roadway system will consist of three overlapping bridges will be constructed when the tunnel is complete, each to provide improved access for specific areas entering or exiting the Port. The new bridges will carry both cargo and cruise traffic. These bridges will replace the current bridge that separates inbound cruise traffic from outbound cargo traffic.
 - Widening MacArthur Causeway Bridge will be expanded from three to four lanes in each direction The expanded width will create acceleration and deceleration lanes for trucks and buses using the tunnel, allowing them to avoid contact with other vehicles as they exit and enter the tunnel portals. Existing lighting will be adapted as necessary.

2. ACS/I-595 Express, LLC, Davie, FL

1/2011 – 9/2013 – Construction/Quality Control Manager

- I-595 Express Lanes, Broward County, FL - Construction/Quality Control Manager for the construction of 10.5 miles of roadway to include widening of S.R. 84 westbound and eastbound, I-595 westbound and eastbound and the construction of tolled 595 Express, interchanges and bridges. Responsible for coordinating CEI activities and act as a liaison between the CEI, OCEI and the main contractor. Provide directives on quality control processes and procedures to the main contractor and perform audits for conformance to contractual requirements. Recommended non-compliance reporting to the Resident Engineer & QC Managers, supervised and conducted project auditing process, including audit planning, audit checklist preparation, conducting audits, audit report submittal and non-conformance resolution. Performed continuous site visits to assess project progress and provided oversight on CEI field processes through audits and corrective actions. Oversee the implementation and reporting of the quality assurance and quality control management plans. Client: FDOT District Four, Paul A. Lampley, (954) 845-9552, 2011 – 2013.



FELIX FUENTES, P.E., Senior Project Engineer

3. Bouygues Civil Works, Miami, FL

4/2010 – 12/ 2011 – Quality Control Manager

- Port of Miami Tunnel, Miami-Dade County, FL - Quality Control Manager for the construction of two 42' diameter tunnels of approximately 4,000 feet in length that once built will reduce the amount of cargo traffic that will flow thru Downtown Miami. Secondary projects consist of roadway construction, both on Watson and Dodge Island, along with one new bridge construction and two existing bridge reconstructions. Responsible for management of the in-house Quality Control inspection team, the subcontracted QC laboratories and their technicians, implementation and maintenance of the quality control at both the Tunnel Segment Casting yard and the project site, development of Inspection and Testing Plans (ITP), liaison between district 6 project management and BCWF construction teams, development and review of Non Conformance Reports, Field Change Reports and Corrective Action Reports. Responsibilities also included performing audits on subcontractors and their facilities for conformance with BCWF's Quality Control Program, Review Shop drawing packages and ensured compliance with the Specifications and Concessioner Agreement. Client: FDOT District Six, Isa Nunez, P.E., (305) 986-2551, 2010 – 2011.

4. Carnahan, Proctor and Cross, Margate, FL

8/2009 – 4/ 2010 – Project Engineer

- Biscayne Grouping, Miami-Dade County, FL - Project Engineer for a \$32 Million grouping included landscaping, milling and resurfacing, bridge rehabilitation and a high profile reconstruction job around the Biscayne Boulevard Corridor. Responsible for the Julia Tuttle Causeway milling and resurfacing, Macarthur Causeway milling, resurfacing and the Biscayne Blvd and Landscaping improvements. Client: FDOT District Six, Ivan Hay P.E., (305) 650-0016, 2009 – 2010.

5. Target Engineering Group, Miami, FL

5/2006 – 8/2009: Senior Project Engineer/Office Engineer -

- S.R. 817 University Drive RRR Project from a point south of Pines Blvd to a point south of Griffin Road, Broward County, FL - Assistant Office Engineer for a FDOT Hybrid Project Administrator in the review of the Contractor's Baseline Schedule and updates, approval and oversight of Contractor's Quality Control Plan including required addendums, review and recommendation for approval of the Contractor's Drilled Shaft Installation Plan, review and recommendation for approval of the Contractor's Pile Installation Plan, recommending contract time adjustment via weather and holiday letters, monitoring Contractor's Requests for Information and Shop Drawing Submittals. Client: FDOT District Four, Rit Ky, (954) 520-2626, 3/2009-8/2009.
- Fort Pierce Operation, St. Lucie County, FL - Office Engineer providing CEI services for of milling and resurfacing a 1 mile length of S.R. 76, in the implementation of a new right turn lane with stabilized unpaved shoulders and new concrete sidewalks and drainage swales. Responsible for general oversight and coordination of the works. Client: FDOT District Four, Elizabeth Jett, P.E (772) 205-5763, 11/2008 - 3/2009.
- SR 91/Florida's Turnpike from Sunrise Blvd. to Atlantic Blvd., Broward County, FL - Project Engineer For the widening and landscaping of \$97 Million project included the construction of two new major bridges, widening of three existing bridges and miscellaneous roadway improvements. The Turnpike within the project limits covered three 2-foot wide lanes with 12-foot shoulders. Plans for the new highway included four 12-foot-wide lanes with 10-foot-wide outside shoulders and drainage improvements. The bridges carrying the Turnpike over local roads will be widened to accommodate the eight lanes of traffic and full outside shoulders. New bridges will replace the Commercial Blvd and Ramp AB bridges. Specific duties included technical supervision and assisting the Department's Project Manager in construction management and administration, interpretation of contract documents, schedule and claims review, and supervision of project personnel. Client: Florida Turnpike Enterprises, Pacifico Castillo, P.E., (954) 444-8050, 2/2008 -11/2008.
- Cypress Creek Toll Plaza ORT, Broward County, FL - Project Engineer for the retrofitting plaza with 55 mph SunPass lanes. The CEI services consisted of \$5,000,000 worth of work encompassing two new gantries equipped with the latest in vehicle detection. As part of the ORT Lite work, the plaza's tunnel was equipped with new toll collection hardware and software. Provided project oversight and coordination with the different disciplines on the project for timely completion. Client: Florida Turnpike Enterprises, Pacifico Castillo, P.E., (954) 444-8050, 8/2007 - 2/2008.



FELIX FUENTES, P.E., Senior Project Engineer

- Hurricane Wilma, Broward County, FL – Senior Project Engineer providing project administration in assisting the Construction Managers with the verification and approval of hurricane invoices. Also responsible for assisting the District Construction personnel with the gathering of backup information needed for hurricane funds encumbrance. Client: FDOT District Four, Bill Wang, P.E., (954) 776-4300/ Kim Gutierrez (954) 369-8821, 4/2007-8/2007.
- Broward County Camera Project, Broward County, FL – Senior Project Engineer providing project engineering and management for the management of the CEI inspection team, coordination between the Turnpike and the Contractor associated with MOT issues and lane closures, final estimates preparation and documentation. Client: Florida Turnpike Enterprise, Pacifico Castillo, P.E. , (954) 444-8050, 5/2006-3/2007.

6. Metric Engineering, Inc., Miami, FL

12/1998 – 5/2006: Project Administrator/Project Manager/Roadway Inspector

- I-95/I-595 Video Monitoring System CEI Services, Broward County, FL – Project Administrator providing construction management services for all construction related activities for example, plans review at the design phase, trenching and backfilling the conduit runs, inspection and verification of the concrete poles and their installation and the construction documentation in the FDOT system, (Site Manager and Hummingbird). Client: FDOT District Four, Rudi Batz, P.E., (954) 958-7632, 3/2004-5/2006.
- FEMA DERM/DORM, Miami-Dade County, FL – Project Engineer providing contract and construction management for Project E01-DERM-05 E and canal dredging jobs. Responsible for simultaneous contract management along with the coordination between the multiple projects and contractors. Oversaw the inspection services provided by numerous consultants throughout the projects. Client DERM/DORM ,Marina Blanco-Pape, P.E., (305) 372-6450, 2/2003 - 2/2004.
- Commercial Blvd. and University/Pembroke Road Intersection Improvement, Broward County, FL – Quality Control Manager responsible for the preparation and implementation of the Contractor's Quality Control Plan for all earthwork, asphalt, and concrete Construction for Ranger Construction South. Managed and coordinated the QC inspection team and facilitated the resolution of construction related issues between the Contractor and the CEI team. Client: FDOT District Four, Nelson Perez, (305) 216-5112, 12/2002 - 3/2003.
- SR-7 between Glades Road and Atlantic Avenue (Project 93210-3515), Palm Beach County, FL – Quality Control Manager. Responsible for the inspection of all of the 7 Sound Barrier Walls, auger cast in place piles, wall spread footings, new bridge, 10' x 10' Box Culvert segments and cast in place outer walls, directional borings for irrigation, all aspects of roadway construction including the asphalt, striping and signs. Client: FDOT District Four, Scott Burrie, (561) 434-3900, 6/2001 - 2/2003.
- Village of Pinecrest Resurfacing Program, Miami-Dade County, FL - CEI Construction Manager responsible for managing the roadway resurfacing on behalf of the Village of Pinecrest. The project consisted of approximately 30,000 tons of asphalt placed on streets and at signalized intersections along with driveway harmonization. Responsible for providing engineering support to the Director of Public Works. Client: Village of Pinecrest, Nelson Perez, (305) 216-5112, 3/2001 - 5/2001.
- HEFT Auxiliary Lanes from SW 186 Street/Quail Roost Drive to SR-874, Miami-Dade County, FL - Interim Roadway Inspector providing quality control services for. Work performed included density testing, earthwork and drainage construction inspection, limerock base and asphalt pavement. Client: Florida Turnpike Enterprises, Mario Rojas, P.E., (305) 826-2647, 11/2000 - 2/2001.
- S.W. 344 Street from S.W. 172 Avenue to S.W. 137 Avenue, Miami-Dade County, FL - Roadway Inspector/Construction Manager Provided project administration services to Roadway Improvements for. Project consisted of the construction of a 4-lane roadway with painted median, turn lanes, asphalt bike path, curb and gutters, culvert extensions, storm drainage system and pavement markings and signing. Responsible for all levels of inspection and project documentation. Approximate Construction Cost \$2.7 Million. Client: City of Homestead, Mike Shehadeh, P.E., (305) 247-1801/Nelson Perez, (305) 216-5112, 4/2000 - 2/2001.
- S.W. 8 Street (Calle Ocho) from Palmetto Expressway to S.W. 57 Avenue Reconstruction Project, Miami-Dade County, FL – Roadway Inspector performing inspection and testing of roadway and drainage structures, including Density Records for Pipe Estimate and assisting other Inspectors with lighting, landscaping, MOT and asphalt. Assisted in preparation of quantities for Monthly Payments and Performed CQR Entries for Concrete and Asphalt. Client: FDOT District Six, Gus Graupera, P.E., (305) 499-2364, 12/1998 - 3/2000.



FELIX FUENTES, P.E., Senior Project Engineer

7. Langan Engineering & Environmental Services, Miami Lakes, FL

4/1996 – 12/1998: Geotechnical Engineer - Provided designs and inspections on various projects including:

- American Airlines Arena (Miami Heat Arena), Miami, FL – Project consisted of the design and inspection of the parking facility foundations. Client: Miami Heat Management, Cristina Gonzalez, P.E., (305) 362-1166, 1997-1998.
- JC Penney, Aventura, FL - Managed and executed Augercast Pile Load Tests, scheduled tests with subcontractors, inspected equipment installations; implemented ASTM Standards; monitored and inspected production pile installations; calibrated the group pump; calculated the amount of strokes needed to fill the pile with the specifications; checked the steel cage for proper steel and steel cage assembly and checked for proper pile depth and pile tip embedment. Client: Turnberry, Cristina Gonzalez, P.E., (305) 362-1166, 1996-1997.
- Roney Plaza, Miami Beach, FL - Monitored and inspected installation of the augercast piles which anchors framing used in the pile group load test; scheduled, inspected and executed 3 load tests. Client: Private owner, Cristina Gonzalez, P.E., (305) 362-1166, 1997.



SIMON A. GUTIÉRREZ DE PINERES, P.E., Senior Project Engineer

EDUCATION

M.S. Civil Engineering
University of Florida
Gainesville, FL, May 2010

B.S. Civil Engineering
Florida International University
Miami, FL, April 2004

PROFESSIONAL AFFILIATIONS

Professional Engineer
Florida No. 69452, 2009
Colombia No.
25202148895CND

CERTIFICATIONS

- TIN: G36278181
- CTQP QC Manager
Exp. 6/18/18
- CTQP Asphalt Paving Level 1 & 2, Exp. 6/29/17
- CTQP Final Estimates Level 1
Exp. 9/28/16
- CTQP Final Estimates Level 2
Exp. 11/10/16
- FDOT Design, Construction & Maintenance of Rigid Pavements
- FDOT Design, Construction & Inspection of MSE Walls
- FDOT Contract Legal Interpretation
- ATSSA, Advanced Work Zone Traffic Control
- FDOT - Critical Structures Constructions Issues
- FHWA, Federal-Aid Contract Administration
- FEMA, ICS 100
- FEMA, ICS 200
- Troxler, Hazmat
Exp. 11/18/16
- Troxler, Nuclear Safety Officer
- FIU Heavy Construction
- FIU Design of Highway Bridges

YEARS EXPERIENCE

10



TECHNICAL EXPERTISE

Mr. Gutierrez has over 10 years of experience with a specific emphasis on contract administration and management of construction projects. He brings a dual perspective to the management of projects as a former employee of FDOT District Four responsible for overseeing the preparation of progress and final estimates; oversees preparation of supplemental agreements and work orders; work schedule reviews; plan reviews, claim analysis; permit compliance; resolving conflicts during construction; public involvement/public relations; provide contractor quality control oversight; partnering; correspondence and documentation.

RELEVANT EXPERIENCE

1. CSA Central, Inc., Florida

8/2011 - Present: Senior Project Engineer - Responsibilities include the supervision of project personnel and direct job assignments and ensure the necessary equipment, transportation and training is provided; contract administration and supervision of inspection personnel for Construction projects. Oversees preparation of progress and final estimates; oversees preparation of supplemental agreements and work orders; processing of Material Certifications, work schedule reviews; plan reviews, claim analysis; permit compliance; resolve conflicts during construction; public involvement/public relations; provide contractor quality control oversight; partnering; correspondence, and documentation.

- HEFT Auxiliary Lanes from N.W. 74th Street to N.W. 106th Street (F.M. 427685-1-62-01), Miami-Dade County, FL - Senior Project Engineer for CEI services for the widening and reconstruction of northbound and southbound lanes and interchange exit ramps. Client: Florida Turnpike Enterprises, Mario Rojas, P.E., (954) 934-1722, 7/2013 - 12/2014.
- S.R. 112/I-195 from I-95 (N.W. 10th Avenue) to Biscayne Bay, Miami-Dade County, FL - Senior Project Engineer for Construction Engineering and Inspections services for roadway improvements including roadway and bridge widening, new concrete pavement and the existing concrete pavement rehabilitation, retaining walls, barrier walls, guardrails, overhead signs, relocation of ITS signs, drainage, signalization, lighting, etc. (Construction Costs \$19.9 Million) FM No. 405578-1-62-01. Client: FDOT District Six, Ivan Hay, P.E. (305) 650-7114, 12/2012 - 4/2013.
- Tamiami Trail Project (W912EP-09-C-0060), Miami-Dade County, FL - Technical Liaison with the USACOE representing FDOT interests on the project. His duties included the review of regular construction submittals, ensuring construction work was performed meeting FDOT specifications as well as evaluating and coordinating the review of proposed design and construction changes. The scope of the project included Roadway and Drainage reconstruction to allow raising the elevation of 9 miles of roadway along with construction of a brand new 1 mile bridge. By the same token, this project posed an incredible environmental challenge given the fact it is located in the proximity of the everglades national park and the construction had to be performed taking into account endangered species, nearby wetlands and canals. Client: FDOT District Six, Isa Nunez, P.E., (305) 470-5100, 2012 - 2013.
- Sonesta Panama Hotel, Panama City, Panama - Office Engineer overseeing construction for a new luxury hotel and casino hotel with 28 floors, restaurants, parking areas, executive offices, health club and conference rooms. Client: Ritz Plaza Suites, Inc., Jack Dushey, 2012 - 2013.
- S.R. A1A Light Replacement Project from Harbor Drive to Sunrise Boulevard (P-11498), Fort Lauderdale, FL - The Improvements under this contract includes the removal and replacement of light poles and decorative fixtures to meet the requirement for protecting the turtles during the nesting season; retrofitting existing poles; installation of new conduit and establishing new service connection points. Client: City of Fort Lauderdale, Earl Prizlee, P.E., (954) 828-6522, 2011- 2012.

2. AECOM Technical Services, Miami, FL

8/2009 - 7/2011: Construction Support Services Leader - Responsibilities included the coordination of the RFI and Shop Drawing review process, Geotechnical field operations (Inspection of the Pile Driving and Drilled Shaft Operations), resolution of non-conforming work, coordination of re-design efforts, conducting constructability reviews, performing MOT evaluations and reviews and preparation of progress reports.

SIMON A. GUTIÉRREZ DE PINERES, P.E., Senior Project Engineer

- I-595 Express Corridor Improvement Project from I-75/Sawgrass Expressway Interchange to the I-595/I-95 Interchange (FM 420809-1-52-01), Broward County, FL - Construction Support Services Engineer for the reconstruction of the I-595 Expressway and all associated improvements to adjacent crossroads, frontage roads, bridges and ramps for a total project length of 10.5 miles. Client: FDOT District Four, Paul Lampley, P.E., (954) 845-9552, 8/2009–7/2011.

3. Florida Department of Transportation, Broward Operations Center

1/2007 - 8/2009: Construction Project Engineer - Responsible for the overall administration of contracts related to construction projects in Broward County. These responsibilities included but were not limited to review and monitoring of the material sampling and testing processes; Contract interpretation; processing and preparation of supplemental agreements and work orders; review and resolution of claims or disputes; Act as a liaison and coordinator between contractors, utility companies, property owners, local officials or other parties that may have had an interest in the project(s). Supervise project personnel and direct job assignments and ensure the necessary level of inspection was provided; management of the document control of the project; Preparation of final and progress estimates, which included review of complex computations to support contract payments and final estimates submission; and oversee the coordination of all aspects of contract administration relating to Equal Employment Opportunity (EEO), On the Job Training (OJT), and Labor Law Compliance.

- SR 820/Hollywood Boulevard from Young Circle East to West of SR A1A (FM 413835-1-52-01), Broward County, FL - The improvements under this project consisted of widening and resurfacing, rehabilitation and renovation, lighting, drainage improvements, irrigation, landscaping, signalization and median modifications to improve safety and mobility. Client: FDOT District Four, James Jeffers, P.E., (954) 958-7628, 1/2009–8/2009.
- SR 5/US-1 from Young Circle North to South of Sheridan Street (FM 413794-1-52-01), Broward County, FL - The improvement under this project consists of Resurfacing, Rehabilitation and Renovation on State Road 5 / US-1 and includes lighting, drainage improvements, irrigation, landscaping, signalization and median modifications to improve safety and mobility. Client: FDOT District Four, James Jeffers, P.E., (954) 958-7628, 1/2009–8/2009.
- SR-814/Atlantic Boulevard from East of I-95 to West of US-1 (FM 227921-1-52-01), Broward County, FL - The improvements consisted of Resurfacing, Rehabilitation and Renovation on State Road 814/Atlantic Boulevard and included the stabilization of the slope along C-14 Canal, landscaping, signalization and median modifications to improve safety and mobility. Client: FDOT District Four, James Jeffers, P.E., (954) 958-7628, 8/2008–8/2009.
- SR 818/Griffin Road East of SR-7/US-441 to West of US-1 (FM 413832-1-52-01), Broward County, FL - The improvements consisted of Resurfacing, Rehabilitation and Renovation on State Road 818 / Griffin Road. This project also includes the landscaping, signalization and median modifications to improve safety and mobility. Client: FDOT District Four, James Jeffers, P.E., (954) 958-7628, 8/2007–9/2008.
- SR 838 / Sunrise Boulevard from East of SR-7/US-441 to West of NW 34th Avenue (FM 418048-1-52-01), Broward County, FL - The improvements consisted of stabilization of the slope along C-11 Canal on State Road 838/Sunrise Boulevard. This project also included the construction of new sidewalks on the south side of the road to provide safe passage for pedestrians from the west. Client: FDOT District Four, Hassan Abedi, P.E., (954) 776-4300, 8/2007–4/2008.
- SR 817/University Drive (FM 422748-1-52-01), Broward County, FL - The improvement under this project consists of reconstruction of the intersection of State Road 817 / University Drive and State Road 84. This project was intended to provide safer crosswalks across University Drive and SR 84 Westbound. Client: FDOT District Four, Hassan Abedi, P.E., (954) 776-4300, 8/2007–12/2007.

4. Florida Department of Transportation District Four

12/2004 - 6/2005: Professional Engineer Trainee - Responsible for obtaining engineering experience by being actively involved in roadway, drainage and structures design, traffic operations, construction management, bridge inspections PD&E studies, surveying, engineering materials testing and geotechnical studies.



SIMON A. GUTIÉRREZ DE PINERES, P.E., Senior Project Engineer

- SR-862/Atlantic Avenue, Palm Beach County, FL - Access Management Master Plan. Development of a Traffic and Safety Study for implementation of the Access Management Strategic Plan along Atlantic Avenue from Via Flora to East of I-95. 12/2004-6/2005



PAST WORK EXPERIENCE





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



III. PAST WORK EXPERIENCE

Below are references and relevant project experience for each discipline.

Our environmental and engineering staff is experienced in data collection, wetland delineation, listed species surveys, monitoring, mitigation assessments, seagrass mapping and monitoring, mitigation design drawings, drainage calculations, and modeling, among others. We are well known by the permitting agencies and regularly facilitate agency meetings, such as pre-application meetings. Several of our staff is former agency permit reviewers for various water management districts.

Moreover, our team has provided comprehensive Coastal Engineering, full-scale engineering, design, surveying, permit preparation, preparing contract specifications, preparing bid and proposal documents and assisting clients with technical review and ranking of the same to attain qualified contractors for work, environmental assessments, construction administration and owner project representation services relating to operation, new construction, permit modification, construction improvements, rehabilitation and or retrofit of Coastal Facilities including but not limited to docks, marinas, seawalls, bridges, erosion control, beach design and beach re-nourishment.

Our staff is well familiarized with state and local regulations (e.g. FDEP, SFWMD, FFWCC, and Monroe Co. Environmental Protection, among others). Some of the similar projects that our staff and team has conducted include (but not limited to):

Coastal Restoration Project for Smathers Beach Monroe County, Florida

Client:

City of Key West
3140 Flagler Avenue, Key West, FL 33040
Janet Muccino, Project Manager/Engineering
(305) 809-3965

Contract Period: March 2013 – March 2015

Project involves assisting the **City of Key West** in the initial design and permitting of the 3,000-foot long coastal restoration project at Smathers Beach. 36,000 cubic yards of sand were trucked from a mid-state sand mine and placed on the beach. Rocks and muck were removed from the swimming area to reduce hazards to bathers. As part of the project, a multi-phased plan was developed to mitigate for impacted seagrass beds. The mitigation plan involved restoration and enhancement of a wetlands area, previously a WWII Blimp Pad. After receiver site preparation, the Seagrasses were transplanted from Smathers Beach onto the Blimp Pad site. A comprehensive post-construction monitoring showed that the transplanting acceptability exceeded permit requirements. Submerged sand sources in the vicinity of Key West are restricted because of the adjacent Marine Sanctuary. The upland sand sources and specification developed for the Corps of Engineers in 1997 were used as a basis for planning and permitting the Smathers Beach project. As part of the project several existing groins were rehabilitated and landscaping was added along the road to enhance the aesthetics of Key West’s signature beach. **Fees:** \$97,000.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Cleveland Clinic Neurology Institute & Cancer Institute Clinic (NICI), Broward County, Florida



Client:

Skidmore Owings & Merrill, LLP

224 S. Michigan Avenue, Suite 1000, Chicago, IL 60604

Lynn Boeke , (312) 360-4203, Lynn.Boeke@SOM.com

The project consisted of the expansion of an existing medical building to include the addition of a new Neurology Institute & Cancer Institute Clinic (NICI) covering an area of approximately 2.71 acres. CSA performed professional planning services, full site/civil engineering, surveying, plans approval, environmental and building permitting/licensing,

Phase I Environmental Site Assessment and construction services. **Fees:** \$97,000 **Contract Period:** March 2013 – March 2015

Wyndham Rio Mar, Rio Grande, Puerto Rico

Client:

Wyndham Vacation Ownership

Marc Rogers, (407) 626-4514, marc.rogers@wyn.com

Wyndham Vacation Ownership (WVO) is in the processes of renovating their property that was constructed in 1996. The seven story facility consists of 588 guest rooms, a large convention center, spa and outdoor facilities. The renovation will be performed for 400 guest rooms and common areas impacting approximately 500,000 sq. ft.

The remainder of the 188 hotel rooms is being converted to 132 timeshare units. The MEP systems had deteriorated due to a lack of maintenance by the previous owner requiring WVO to reassess their original renovation priorities and find cost effective solutions to repair/upgrade the MEP systems. CSA was vital to this assessment identifying and applying energy conservation measures to the remodeling design. Working in conjunction with the Architect of Record, CSA identified a cost effective solution to rehab the deteriorated HVAC ductwork that included a significant amount of lined ductwork. Through an HVAC audit and subsequent research of new technologies, an HVAC duct cleaning consultants was identified and later contracted to clean the existing system. This eliminated the costly work and operational impact of replacing the existing ductwork with a new system.



CSA services included Environmental and Construction permitting services for, provided all MEP Engineering documents, design, assistance during bidding/ negotiations and services during construction, major mechanical and electrical systems work as well as coordination with Architect of Record and multiple consultants including duct cleaning consultants, landscape, pool designers, lighting, structural, interior designers and geotechnical consultants.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



North Roosevelt Boulevard, Key West, Florida



Client:

Florida Department of Transportation District Six
1000 N.W. 111th Avenue, Miami, Florida 33172
Ali Toghiani, P.E., (305) 470-5343

ali.toghiani@dot.state.fl.us

The improvements consisted of the total reconstruction 2.5 miles of N. Roosevelt Boulevard roadway and seawall in the **City of Key West**. The project also involves installing improved drainage systems and replacing the original City water main installed by the US Navy in the early 1940s. In

addition, FDOT will be replacing sewer lines, making traffic signal improvements, installing new ADA compliant sidewalks and bicycle features, adding additional crosswalks, new landscaping and street lighting enhancements. The proposed typical section will comprise of a five-lane, curb and gutter urban typical section.

Design elements consisted of reconstructing the existing seawall and maintain existing promenade along the north side of the corridor; reconstruct the existing roadway pavement with an urban typical section and maintaining traffic typically in two lanes northbound and two lanes southbound with a center turn-lane; construction of new curb and gutter and sidewalks along the south side of the corridor; new drainage system; signalization upgrades to mast arm designs; upgrade signing and pavement markings; upgrade to a new lighting system; milling and resurfacing from just south of the intersection with US 1 (Overseas Highway) to the Riviera Canal Bridge and from approximately Bertha Street to the east end of Smathers Beach along the South Roosevelt Boulevard segment and upgrade existing outfalls at Cow Key Channel and Riviera Canal. **Fees:** \$3,152,057, **Contract Period:** April 2000 – September 2014

PUMA Bulk Liquid Pier, San Juan Bay, Puerto Rico



Client:

PUMA Energy Caribe, LLC
P.O. Box 11961, San Juan, PR (US) 00922
Rafael Arzuaga, (787) 966-7331, Rafael.Arsuaga@pumaenergy.com

The PUMA Bulk Liquid Pier Improvement Project consist in the construction of a pipe trestle, Chiksan loading platform for five additional Chiksan loading arms and a berthing dolphin at the existing San Juan bulk liquid pier. The new platform is to be attached and positioned as an inline extension northwards of the original Chiksan loading platform. The project area is located within the tidal waters of the San Juan Bay, a Traditional Navigable Waters of the U.S. (TNW). **Fees:** \$60,000. **Contract Period:** 2014.

Project components include:

- Design of new pier components
- Benthic Survey (Seagrass Survey)
- Environmental and Structure Permits (Federal and Local)
- Environmental Monitoring Plan





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Regulatory Compliance & Regulatory Coordination Services, Muniz Air National Guard Base In Support of Federal Prime Contract W912DR-12-D-00, PR

Project consists in Data gap investigation and implementation of corrective measures field activities at the Air National Guard Base due to the presence of contamination. **Fees:** \$40,000. **Contract Period:** 2014.

Project components include:

- Coordination and regulatory meetings support
- Support during data gap investigation and for corrective measures implementation work plans
- Permit application packages preparation

Coconut Grove Waterfront Master Plan

Client:

Sasaki Associates, Inc.
 64 Pleasant Street Watertown, MA. 02472
 Lynn Hoffman, (617) 923-7107
lhoffman@sasaki.com

Contract Period: February 2006 – November 2007

The project consists of the preparation of a Master Plan for the area of Coconut Grove along S. Bayshore Drive, McFarland Road and Main Highway between Bayshore Villas Drive and Commodore Plaza in Miami, Florida. CSA (Consul-Tech) responsibilities include collecting data, data analysis, formulating options and determining a preferred alternative for Transportation Infrastructure improvements to accommodate other master plan improvements within the project area. **Fees:** \$84,200.00

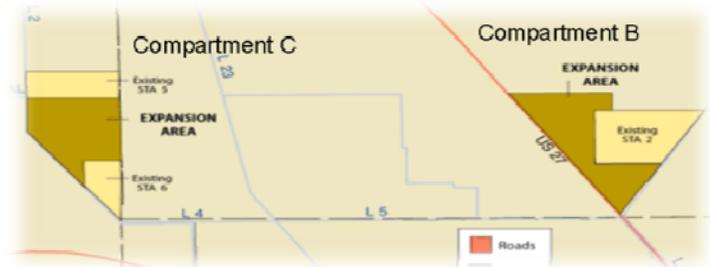


Compartment B & C Buildout of Stormwater Treatment Areas (STAs), Palm Beach/Hendry Counties, FL

Client:

South Florida Water Management District
 3301 Gun Club Road, West Palm Beach, FL 33406
 Jeff Kivett, (561) 682-2680
jkivett@sfwmd.gov

The Compartment B (9,500-acre project area) is located in southern Palm Beach County. The District constructed an additional Stormwater Treatment Area (STA) to improve the quality of water entering the Everglades Protection Area (EPA). This phase of implementation is known as the Compartment B Build-out. The initial expansion, substantially complete (Phase 1) included the construction of one additional flow-way which added a total of 3,372 acres of effective treatment area. The project included the design and





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



construction of three pump stations with a total capacity of 3700 cubic feet per second. Critical component of larger project to improve the quality of water entering the South Florida Everglades Protection Area (EPA) 3 storm water pump stations with a total of 3,700 cfs pumping capacity in Compartment B, EAA.

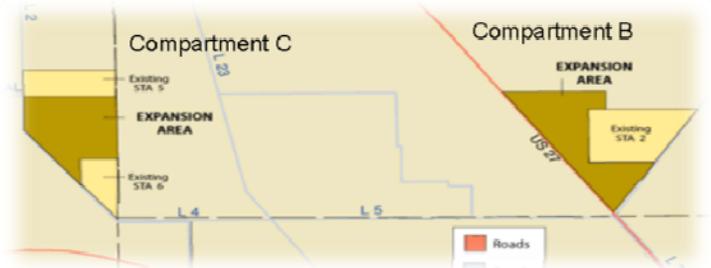
CSA Group (under Consul-Tech, a CSA Company) provided the design management of the restoration project of the Expedited Projects Program of South Florida Water Management District. We were responsible for management of budget and schedule for completion of the project design and management of the design engineering consultant for timely submittal of design documents and adherence to District Standards and specifications. Services also included coordination with SFWMD's Operations & Maintenance, Field Stations and other related departments in order to resolve issues which could have impacted costs, performance and schedule. **Fees:** \$3,314,370, **Contract Period:** April 2009 – February 2011.

Compartment B & C EAA STA Construction Observation Services, Palm Beach/Hendry Counties, FL

Client:

South Florida Water Management District
3301 Gun Club Road, West Palm Beach, FL 33406
Jeff Kivett, (561) 682-2680

jkivett@sfwmd.gov



The District constructed additional Stormwater Treatment Areas (STA) to improve the quality of water entering the Everglades Protection Area (EPA). The

Compartment C (8,800 acre parcel) is located in Hendry County, FL. The Compartment C design included one pump station with a 1,630 cfs pumping capacity and one 100 cfs hydration pump station. The Compartment C design also included 23 miles of canals, 18 miles of levees and 21 gated control structures.

CSA (under Consul-Tech, a CSA Company) provided the design management of the restoration project of the Expedited Projects Program of South Florida Water Management District. We were responsible for management of budget and schedule for completion of the project design and management of the design engineering consultant for timely submittal of design documents and adherence to District Standards and specifications. We were also responsible for the coordination with SFWMD's Operations & Maintenance, Field Stations and other related departments in order to resolve issues which could have impacted costs, performance and schedule. **Fees:** \$953,265,

Jewfish Creek Bridge – U.S. 1 Widening from Florida, City to Key Largo, FL



Client:

Parsons Brinckerhoff Construction Services
5405 W. Cypress Street, Suite 300, Tampa, FL 33607
Pom Chakkaphak, (904) 237-1171, Pomsit@aol.com

Contract Period: December 2004 – December 2009

CSA Group was responsible for construction compliance with the extensive environmental permits and office engineering services for the replacing of the Jewfish Creek

Bridge located between Key Largo and Cross Key in Monroe County, along with the reconstruction of state SR 5 - US 1



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



north to Florida City. The new 1-1/2 mile long bridge consisted of a low level span across Lake Surprise transitioning to a 65 foot high level span over Jewfish Creek. Construction of the bridge over Lake Surprise will allow for the planned removal of a manmade causeway dividing the “lake” in two. The restoration of the historic hydrologic conditions will allow the environmentally sensitive area to revert to its natural state. In addition, replacement of the bascule bridge allows Jewfish Creek Channel to be widened, further increasing tidal flow.

Environmental, Hydrologic and Wetland improvements incorporated into this project included: Installation of stormwater runoff treatment and retention facilities, construction of a new C-111 Canal Bridge as a component of the Everglades Restoration Program, Four bridges between the C-111 Canal and Key Largo, Pipe Culverts between the C-111 Canal and Florida City, Construction of Wildlife Crossings throughout the project to protect Threatened and Endangered Species, and Fencing to exclude animals from the roadway and direct them to crossing points.

CSA Group was responsible for construction compliance with the extensive environmental permits for the project. Due to this projects proximity to highly sensitive areas including Everglades National Park, Florida Keys National Marine Sanctuary, and Crocodile Lake National Wildlife Refuge strict permit compliance is essential. To accomplish this task, CSA Group maintains staff onsite to perform regular inspections and monitoring of site conditions. Monitoring requirements included periodic seagrass/benthic surveys as well as daily erosion control and water quality sampling.

Other compliance issues included endangered species management plans and vegetation protection plans and protective measures, contractor education, and daily coordination with environmental permitting agencies. A cooperative effort with contractors ensures that permit commitments are fulfilled and submittals provided to regulatory agencies as required.

This project included permitting impacts to over 40 acres of mangrove and seagrass habitat, with strict stormwater controls within Outstanding Waters of the State, and multiple extensive Storm Water Pollution Prevention Plans. Other compliance issues included endangered species and vegetation plans and protective measures, contractor education, and coordination with environmental agencies. **Fees:** \$2,121,926.

Oil Spill Boats Shelter Expansion

Client:

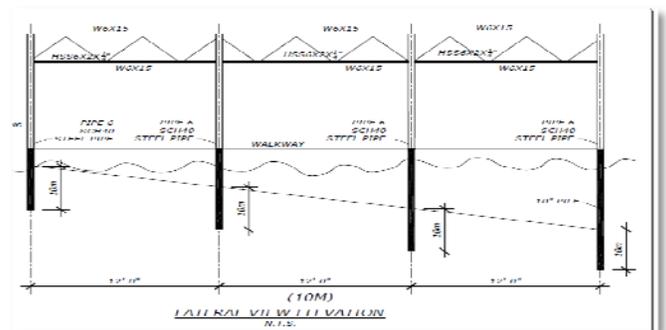
Commonwealth Oil Refining Company (CORCO)

600 Road 127, Penuelas, PR (US) 00624

Rolando Mendez, P.E. (787-836-1550)

Contract Period: 2013

Project consists in the construction of a boat ramp and an expansion of the service area for the boats used for security/inspection and maintenance of the pier area. Project includes the construction of a one lane boat ramp (dimensions 8.50 meters long by 4.5 meters wide) and two sheds for the protection of two larger vessels. Those new facilities and vessels are needed to work in emergency cases, including oil/combustible spills and fires. The construction of the ramp will be on reinforced concrete over a rip-rap and compacted fill material. Two docks will be located (dimensions 11.10 meters long by 9.30 meters wide) and a metal shed will be constructed and anchored to 10 inches (0.25 meter) wide columns. **Fees:** \$30,000.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Project components include:

- Coordination with US Army Corp of Engineers (USACE) and regulatory meetings support.
- Design Support
- Coastal Mitigation Design
- Seagrass Survey
- Permit Permitting

Wyndham St. Thomas Grand Beach Resort

Client:

Wyndham St. Thomas Development Company
6277 Sea Harbor Drive, Orlando, FL 32821

Jose Ortiz, PE

Jose.Ortiz@wyn.com

Contract Period: 2014

The project consists in the redevelopment of the Grand Beach Resort Property located on Smith Bay Road in St. Thomas. **Fees:** \$150,000.



Project components include:

- Wetland delineation for coastal habitat
- Coordination and regulatory meetings support
- Energy Savings Design for HVAC and hot water heating
- Reverse Osmosis Plant Design
- Intake / Outfall design
- Permitting

DERM - Miscellaneous Environmental Services Contract, Miami-Dade County, FL

Client:

Miami-Dade County Department of Environmental Resources Management (DERM)

33 S.W. 2nd Avenue, Miami, Florida 33130

Contract Period: 1995 - 1998

Miscellaneous Environmental Services Contract included all forms of environmental permitting (federal and state), wetland delineation and evaluation, biological assessments, wetland mitigation design, wetland mitigation construction, implementation and inspection, mitigation monitoring. All forms of site civil engineering and surveying on an as-needed project-by-project basis. **Fees:** \$300,000.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Broward Community College Wetlands Creation Broward County, FL



Client:

Broward Community College
3500 S.W. Davie Boulevard, Davie, Florida 33314

Contract Period: 1998

Project included the design and development of an onsite natural wetland to be used as an educational training facility for the Broward County School Board and Broward Community College. Services included planting specifications, construction and planting supervision, permitting, faculty coordination and wetland monitoring and

functional assessments. **Fees:** \$150,000.

Districtwide Environmental Support for Construction & Maintenance Divisions



Client:

Florida Department of Transportation – District One
801 N. Broadway Avenue, Bartow, Florida 33831
T.W. Hunt, (813) 519-2560

Contract Period: 1998

Primary services included monitoring and maintenance inspections for 40 mitigation sites in 12 counties, construction inspections and support, permit modifications, and permit compliance issues. **Fees:** \$300,000.

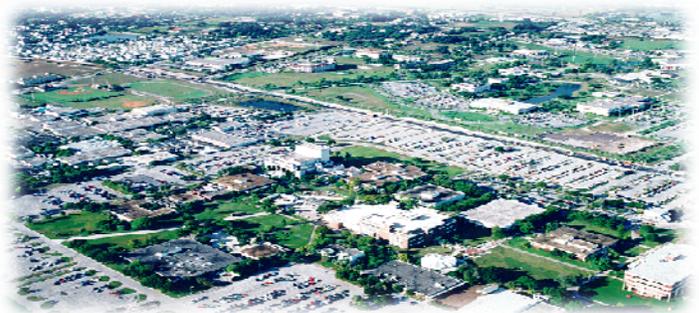
Broward Community College Central Campus Broward County, FL

Client:

Broward Community College
3500 S.W. Davie Boulevard, Davie, Florida 33314
Terry Adsit, (954) 475-6972

Contract Period: 1997

Full master planning and master infrastructure and drainage design for this 175 acre educational complex. Project entailed complete infrastructure design and modification to existing system to accommodate years 2000 and 2010 proposed build-out improvements. Services also entailed full water management study and wetland delineation and establishment of wetland mitigation community in coordination with regulatory community and Broward County School Board. **Fees:** \$100,000,





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



U.S. 1 Upfront Mitigation - Harrison Tract, Key Largo, Monroe County, FL



Client:

Florida Department of Transportation District Six
1000 N.W. 111th Avenue, Miami, Florida 33172
Heather Carmen, (305) 470-5100

Contract Period: 1994 - 1996

Services included tree tagging, preservation and relocation, exotic species removal, GPS surveying, mitigation design, mitigation permit modification, mitigation permit compliance, mitigation construction inspection, water quality monitoring and report

generation, wildlife monitoring reports and time-zero ecological monitoring report at the Key Largo Crocodile Lakes National Wildlife Preserve. **Fees:** \$2,000,000,

Districtwide Implementation & Maintenance of NPDES Permits



Client:

Camp Dresser & McKee
6365 N.W. 6th Way, Suite 320, Ft. Lauderdale, FL 33309
Stewart Magenheimer, P.G., (954) 776-1731

Contract Period: 1999 - 2003

Inventory Category I outfalls and associated facilities (conduits, junctions, control structures, swales) from outfall point to FDOT District Four roadways. Assist in developing a database system for FDOT to maintain the inventory data. Identify outfall system component sizes and construction material. Inspect systems for structural damage, pollutants, blockage, and overall condition. Perform dry weather screenings. Survey location of outfall facilities. **Fees:** \$120,000

FDEP General Contract for Environmental Compliance

Client:

Florida Department of Environmental Protection (FDEP)

FDEP Contract to perform permitting oversight in support of the development of the Florida Keys Overseas Heritage Trail, a 106-mile recreational paved trail leading from **Key Largo to Key West**, utilizing 23 of the historic Flagler Railroad Bridges. This project involves numerous segments designed by different engineering firms. A Permit Plan was developed to provide guidance to all of the various entities to streamline and unify the permitting process. Specific duties on this project included researching and cataloguing records of threatened and endangered species and wetlands along the Trail alignment, coordinating design and permitting activities for multiple engineering firms designing segments of the Trail, creating a guidance plan for the environmental permitting and development of the Trail, website development and Class of Action Determination documentation.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Hazardous Waste Remediation



Client:

PR Power & Electric Authority
PO Box 366147, San Juan, Puerto Rico (US) 00936

CSA conducted a Phase I and II Environmental Site Assessments (ESA) for a 500-acre property, used as petroleum products bulk storage terminal. The scope of work included a sampling and analysis program, designed to identify and delineate contaminated areas in the former refinery. This was part of a due-diligence effort on behalf of the Puerto Rico Electric Power

Authority (PREPA). The areas sampled during the Phase II ESA were extensive and covered:

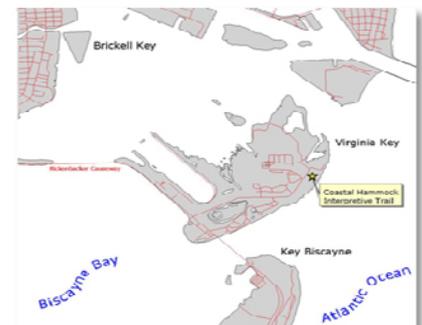
- Refinery and Tank Farm Terminal Area CORCO Effluent Drainage Ditch
- Western Lagoon Complex Area
- Flores Park Peninsula
- OxoChem Facility
- Caribe Isoprene Corporation Facility
- Tallaboa Tank Farm Facility

This Phase II ESA was conducted in accordance with the general requirements of the American Society for Testing Materials (ASTM) Standard Practice. The scope of work included a sampling and analysis program, designed to identify and delineate contaminated areas in the former refinery.

Virginia Key Master – Master Plan, Key Biscayne, Miami-Dade Co., FL

Client:

EDSA
1512 East Broward Blvd, Suite 110, Fort Lauderdale, FL 33301
Paul Kissinger, (954) 524-3330
Pkissinger@edsaplan.com



Contract Period: 2006 - 2007

This is a Master Plan for Virginia Key that recommends policies for the use, development and management of land, the protection and enhancement of natural resources and the development of a support structure of roads, parking, utilities and maintenance to serve the island. CSA (Consul-Tech) provided an evaluation of existing utility infrastructure and capacity projection for proposed improvements. It included surveying of existing conditions and site analysis; community public information workshop and generation of necessary maps; preparation of master plan and implementation strategy, including funding and construction. **Fees:** \$45,000.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



INDUSTRIAL HYGIENE

CB&I performed approximately 1,400 JHAs and PPE assessments for various departments (including the airport) throughout the county. Operations evaluated included carpenter shops, pesticide and herbicide spraying operations, road and bridge repairs, landscaping, electrician shops, plumbing and irrigation operations, motor equipment operators, painting, graphics/print shops, maintenance operations, construction operations, fire fighting and rescue operations, and the operation of water treatment plants and a wastewater treatment plant. Documentation for each JHA/PPE assessment performed, with signature, was provided to Palm Beach County. Accomplishments included meeting the requirements of the OSHA regulation for PPE assessments (29 CFR 1910.132[d][1]) and identifying hazardous jobs that could lead to employee injuries and/or illnesses, and recommending corrective actions to eliminate or minimize the potential hazards. CB&I performed industrial hygiene sampling at the locations identified in the JHA/PPE assessments. Sampling has been performed for the following operations:

- Various solvents at operations such as painting, gluing PVC pipe, applying patching compounds, cleaners, and/or solvents to materials, use of inks and cleaners at print shops, silk screening, and wood gluing
- Welding fumes at welding operations
- Formaldehyde during medical examiner operations
- Isocyanates during painting
- Metal dusts during sanding
- Carbon monoxide and nitrous oxide gases during fleet maintenance
- Nuisance dusts when sanding and performing tasks with potential high levels of nuisance dust
- Wood dust at carpentry operations
- Silica dust at concrete cutting, jack hammering, and filling sand bags for flood control

Comprehensive reports regarding the industrial hygiene sampling were provided. The reports detailed the results of the sampling, compared the results to permissible exposure limits, and provided recommendations on methods to reduce exposures if concentrations were above the permissible limits. Accomplishments achieved included meeting the requirements of the OSHA regulation for exposure to air contaminants (29 CFR 1910.1000) by monitoring chemicals that could lead to employee illnesses at jobs identified in the JHA/PPE assessments and recommending corrective actions to eliminate or minimize the potential hazards if exposures above the permissible limits were found.

CB&I conducted a comprehensive indoor air quality study in an office building where there were several employee complaints with regard to air quality. The study included:

- Inspecting the building for evidence of indoor air concerns, such as mold growth, use of chemicals, and cleanliness
- Inspecting the heating, ventilation, and air-conditioning (HVAC) system, with the use of a borescope, for evidence of mold growth and cleanliness
- Performing ventilation measurements of the HVAC system to determine if the recommendations of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) were being met
- Interviewing employees to determine if there were uniform complaints and concerns
- Monitoring for carbon dioxide, humidity, and temperature to determine if the recommendations of ASHRAE and the OSHA proposed indoor air quality regulation were being met
- Performing atmospheric monitoring for fungi and bacteria to determine if industry guidelines were being met



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



- Performing atmospheric monitoring for volatile organic compounds, using U.S. Environmental Protection Agency analytical method TO-17 to determine if industry guidelines were being met

CB&I provided a comprehensive report to Palm Beach County. The report detailed the results of the study and sampling, compared the monitoring results to recommended guidelines, and provided several recommendations on methods to improve the indoor air quality. There was a significant reduction in employee complaints once the recommendations were implemented. Some results of CB&I's efforts Palm Beach County include the following:

- Developed a Palm Beach County-specific respiratory protection training course and presented the training to Palm Beach County employees numerous times.
- Presented an eight-hour industrial hygiene sampling training course to safety professionals. This meant that Palm Beach County safety professionals could perform industrial hygiene sampling internally, providing costs savings by eliminating the need for consultants to perform the sampling.
- Developed and presented a noise measurement and interpretation of results training course. The result was that Palm Beach County safety professionals could perform noise sampling internally, providing costs savings by eliminating the need for consultants to perform the sampling.
- Performed a tuberculosis hazard assessment and developed an exposure control plan for the prevention of tuberculosis. The led to development of a program to minimize employees' potential exposure to tuberculosis.
- Reviewed existing health and safety policies and procedures and provided recommendations, if necessary, on how to improve the policies/procedures. Policies/procedures reviewed included respiratory protection, PPE, hearing conservation, and hazard communication/right-to-know. CB&I performed heat stress studies and developed a heat stress procedure to be followed by all county employees. This led to development of a program to minimize employees' potential exposure to heat stress.
- Developed a heat stress prevention training course.
- Developed a formaldehyde procedure, in compliance with OSHA regulation 29 CFR 1910.1048, to be followed by laboratory employees in the Medical Examiner's Office.
- Developed a procedure to maintain indoor air quality during renovation and remodeling of buildings. This led to development of procedures that Palm Beach County facilities management personnel could follow to ensure that the indoor air quality was being maintained for occupants in the building during remodeling and renovation.
- Developed an HVAC preventive maintenance program with regard to indoor air quality. Procedures were developed that Palm Beach County facilities management personnel could follow to ensure that the indoor air quality with regards to the HVAC system was being maintained for occupants in the County-owned buildings.
- Wrote a chemical hygiene plan, in compliance with OSHA regulation 29 CFR 1910.1450, to be followed by laboratory employees in the Medical Examiner's Office, in compliance with OSHA regulation 29 CFR 1910.1450.
- The JHA/PPE assessment process used for Palm Beach County was designed specifically for their use.
- A CB&I CIH assisted Palm Beach County personnel in the design of a process to reduce employee exposures to silica dust when using a concrete saw. The employees performing concrete and asphalt cutting no longer had to wear respirators, resulting in cost savings by reducing the number of employees in the respiratory protection program and the number of respirators required.

CB&I designed and developed a Microsoft® Access™ database for the entry of JHA/PPE assessment information. CB&I also entered the JHA/PPE assessment data in the database.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



ENVIRONMENTAL COMPLIANCE

Our team has been involved from planning and design through construction, compliance and monitoring. CSA Team has served as a construction managers and inspectors, and certified SWPPPP inspectors for several projects. Our team possesses vast knowledge in construction activities, Best Management Practices (BMPs) and regulatory requirements. Our team's is familiar with, and keeps abreast of, federal, state, county and municipal ordinances, laws, rules, codes and regulations. We have developed management programs for our clients to assist them in obtaining and maintaining facility compliance, as highlighted below:

- Under contract with FDOT Districts I, III, IV and V to provide permitting and compliance services for NPDES Municipal Separate Storm Sewer System (MS4) and generic construction permits.
- Developed Spill Prevention Control and Countermeasure (SPCC) Plans for the City of Miami Beach for their fire stations, maintenance garages and pump stations.
- Conducted the storage tank closure assessment for the largest UST system in the State of Florida in order for Broward County to be in compliance with the FDEP upgrade requirements.
- Reviewed all aspects of environmental compliance for several Tarmac America, LLC concrete batch and block plants. Regulated facilities include industrial wastewater management systems, stormwater management systems, water supply, and mining operations.
- Performed stormwater compliance inspections for tenants at the Hollywood-Fort Lauderdale International Airport and Miami International Airport.



APPROACH TO THE SERVICES





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



IV. APPROACH TO THE SERVICES

The CSA Team understands the professional services required for the execution of the **City of Key West** Environmental Engineering Services contract; the proposed team aligns highly qualified and experienced group of professionals to provide expertise and proven relevant similar experience in each of the key project features related to the RFQ requirements. Some of our regarded team members are certified small businesses and will play significant roles in the execution of any assigned task orders. CSA, as a medium-sized business and the only National Minority Supplier Diversity Council Corporate (NMSDC) **Corporate Plus**® A/E in the nation, CSA is **extremely committed** to the growth and success of these small businesses.

CSA is a certified NMSDC® Corporate Plus® Member; certificate recognizes companies with the:

- ✓ *Capability to do work on a national level.*
- ✓ *Proven track of record of performance on national contracts.*
- ✓ *Top quality product and services.*

Our team is ready to support the City staff with minimal to no learning curve required. Team members have personal knowledge in the processes required to do business required by the City and extensive experience providing these type of services in a regular basis. They also enjoy a robust track record with other governmental or municipal entities in a variety of similar projects ranging from environmental, design, construction and inspection of water control structures and water conveyance projects; hydraulic and hydrologic data management and modeling for both surface and ground water, and provision of full turnkey services from conceptual plans through design, permitting and construction management.

Following is a narrative on our Project Understanding and our Approach to the Services. Table 2 presents the forecasted availability of personnel proposed for the City’s projects. The information presented incorporates lessons learned based on our Team’s project knowledge and similar experience, project management experience, and our track record of delivering major infrastructure projects. For each project, we performed: Pre-Project Planning, Environmental, Design and Engineering.

Table 2: Forecasted Availability of Personnel proposed for the City’s Projects

Count	First Name	Last Name	Professional Designation	Firm	Discipline	Forecasted Availability over Contract Life
1	Evelio	Chavez	P.E.	CSA	Project Manager	60%
2	Roberto	Leon	P.E.	CSA	Principal in Charge	20%
3	Raymond	Valentin	OSHA Instructor	CSA	Safety Manager	40%
4	Felix	Fuentes	PE	CSA	QA/QC	50%
5	David	Rosa	PADI-DM, Stormwater Inspector, Recon Diver	CSA	Environmental	60%
6	Maria	Coronado	PG	CSA	Environmental	50%
7	David	Levy	PG	Biovation	Environmental	50%
8	Lionel	Vega		CSA	Environmental	50%
9	Cindi	Brunot	PG, FL Contractor	EnviroSpec	Remediation	40%
10	Todd	Nowland	PG, FL Contractor	Biovation	Remediation/ Industrial Hygiene	50%





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Count	First Name	Last Name	Professional Designation	Firm	Discipline	Forecasted Availability over Contract Life
11	John	Krabbe	P.E.	Biovation	Environmental	60%
12	Sandra	Walters		SWC	Environmental	60%
13	Edwin	Rodriguez	PhD, SCUBA Instructor	CSA	Environmental	60%
14	Robert	Stewart		CSA	Environmental	50%
15	Douglas	Mann	P.E., D.CE	CB&I	Coastal Engineering	40%
16	Stephen	Keehn	P.E.,	CB&I	Coastal Engineering	40%
17	Stacy	Buck	SDI Divemaster, BOEM Protected Species Observer	CB&I	Environmental	40%
18	Juan	Villar	P.E.	CSA	Civil /Stormwater	40%
19	Hans	Figuroa	P.E.	CSA	Civil / Stormwater	40%
20	Basem	Dow	P.E.	CSA	Structural (Bridge)	40%
21	Soheila	Sadough	P.E.	BHA	Structural (Bridge)	40%
22	Kumar	Allady	P.E.	Radise	Geotechnical	40%
23	Freddie	Roman	P.E.	CSA	Mechanical	40%
24	Gustavo	Rieckehoff	E.E.	CSA	Electrical	40%
25	Jose	Prats	P.E.	CSA	Electrical	40%
26	Selvin	Bruce	P.S.M.	CSA	Surveying	40%
27	Darryl	Hauser	P.S.M.	CSA	Surveying	20%
28	Jeffrey	Andrews	P.S.M.	CB&I	Bathymetry	40%
29	Rosamil	Cosme		CSA	GIS Analyst	30%
31	Simon	Gutierrez de Pineres	P.E.	CSA	CEI	30%
32	Harry	Pullum	CIH, CSP, CIAQP	CB&I	Industrial Hygiene	30%

Scope of Work

We understand from the solicitation package, that the City of Key West is requesting professional Engineering firms to provide Environmental Engineering Services for various City projects which consist of various sizes and locations. We understand that the services will include but not be limited to:

- **Contaminated Site Investigation and Remediation Services**, including site history reviews, hydrogeological investigations, engineering evaluation and cost assessment of remedial options, engineering design of remedial systems, permitting, remedial system construction oversight, and Resident Project Representative (RPR) services.
- **Industrial Hygiene Services**, including industrial monitoring, health and safety compliance, laboratory compliance, asbestos and lead based paint management services.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



- **Underground Storage Tank Site Services**, including hydrogeological investigations, monitoring well system design and installation oversight, UST removal/replacement oversight and assessments, contamination assessments, remedial system design/installation, remedial system management, permitting, and Spill Prevention, Control, and Countermeasure (SPCC) plans.
- **Real Estate Development Support Services**, covering a broad array of environmental and engineering services, including local permit applications, Completion of Phase I and Phase II Environmental Site Assessments (ESA), contamination assessment, remediation design and management.

Comprehensive Coastal Engineering services will include full-scale engineering, design, surveying, permit preparation, preparing contract specifications, preparing bid and proposal documents and assisting the City with technical review and ranking of the same to attain qualified contractors for work, environmental assessments, construction administration and owner project representation services relating to operation, new construction, permit modification, construction improvements, rehabilitation and or retrofit of Coastal Facilities including but not limited to docks, marinas, seawalls, bridges, erosion control, beach design and beach re-nourishment.

The CSA Group Team is highly experienced in providing comprehensive Environmental and Coastal Engineering services to various public entities. It is important to note that we have been providing these exact services under key agreements that include City of Fort Lauderdale, City of Miami Gardens, City of Key West and Miami-Dade, among others. These services included engineering and drainage design, construction engineering, inspection, and management, surveying and mapping, Local Agency Program (LAP) coordination, remediation of vertical construction of miscellaneous project, as well as other work in support of the construction and maintenance programs involving multiple road resurfacing and reconstruction projects, speed abatement, drainage improvements, to name a few.

Our Approach to the Services

CSA, as the Prime Contractor, will assure the following regarding our Team:

- CSA is responsible for all project activities, including the adequate selection of sub-consultants to work on individual tasks and the timely delivery of services.
- As a full service provider, CSA has in-house staff fully versed in all required services that will allow an efficient management of Team sub-consultants and their constant performance evaluation to assure that the City receives quality services.
- CSA is directly responsible for all project management services, including the management and reporting of budgets, schedules, deliverables and quality to the City.
- CSA will always maintain an open line of communication with the City regarding all project activities.
- CSA will always promote the use of Small Business Enterprise (SBE).
- Through the network of offices of our Team, the Team has direct access to the City of Key West, including the **local** presence of Sandra Walters (SWC, Inc.).
- CSA team members have experience working together in the past, thus facilitating communication between team members.
- Strong environmental support in our SBE team members, including an environmental laboratory.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



- Can hit the ground running.....no learning curve.

The CSA Group Team approach is founded on the understanding that to be successful, our members must work as one with the **City**, fully understanding each of the tasks to deliver a successful project. That includes not only maintaining a scientific and engineering understanding, but also having in place the necessary tools and logistics, such as project cost and schedule tracking, to ensure the appropriate services are available as needs arise through different stages of the project.

Moving on to our processes for the administration of continuing services contracts, it is important to note that our approach in executing the management of our services to the City. We understand this program to be an “on demand” contract, where the City will request services as projects are released and scheduled. We also understand that adherence to cost effectiveness of these services is a very important consideration for the City, a fact that we’ve already begun to reflect in the scheduling of our resources and allocation of manpower for this contract. Having worked extensively on multiple projects, we are well versed in the practice of cross utilization of personnel when appropriate, all without losing quality or oversight of design activities. This simple practice directly results in significant cost savings to our clients, and we commit to providing the City of Key West with the same cost savings techniques at every appropriate interval.

Additionally, and in the interest of providing the best possible service to the **City of Key West**, we have committed only the best in terms of personnel, equipment systems and other vital resources. This commitment allows us to make a 100% guarantee that we have, and will continue to, assign our most qualified personnel available to service the community in the multiple number of simultaneous projects the City commissions to our trust.

Quality Assurance / Quality Control

CSA’s Quality Management System, as deployed and as stated in its policy, serves the purpose of providing a means to assure, verify, and document conformance to regulations, contract, and customer requirements. CSA is committed to continuously improve the services we provide, optimize our processes, and to provide an environment for an ever improving and learning organization. Moreover, the organization has deployed a Lessons Learned program in which best practices, ideas, and experiences are made available and transferred to the organization as part of that Continuous Improvement mentality.

In summary, specific measures include:

- A five step (tiers) internal team review process.
 - 1) Document and plan preparation and review by the individual(s) responsible for the task.
 - 2) Independent technical review by one of our team members.
 - 3) Independent review by senior management (e.g. Env. Civil, Safety, Construction, Estimator, etc.).
 - 4) Final Team review and discussion of previous comments.
 - 5) After all comments are addressed, the environmental document or design and any other supporting document(s) will be submitted to the City for final approval.

As an example of CSA’s commitment to quality, CSA Group Panama is an ISO 9001 certified company.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004

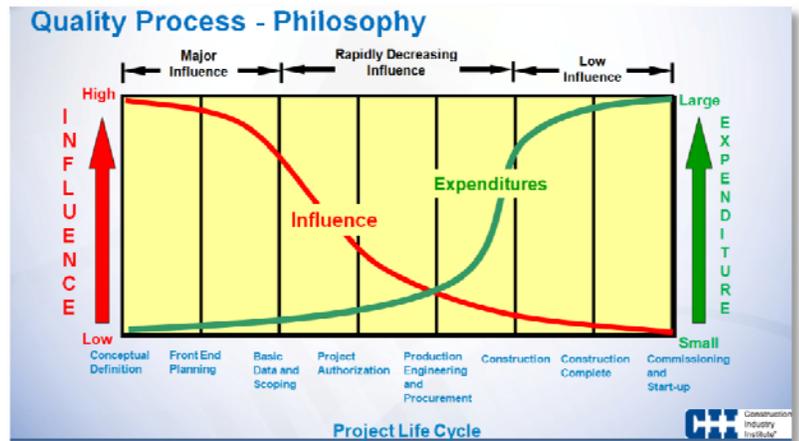


CSA has been an active member of the Construction Industry Institute (CII) for several years. CII is an organization that helps attain business effectiveness and sustainability of the capital facility projects and helps built a competitive advantage by effectively using CII Research findings to develop Best Practices for the Construction Industry.

Quality is no longer what you deliver, but how you think and how you act; it will inevitably improve what you deliver

Not only do we in CSA implement the tools and proven best practices published by CII, our leadership supports CII by actively participating in different implementation forums and research teams. A valuable member of the CSA family was co-Chair of the Research Team that prepared the Project Definition Rating Index (PDRI) for Infrastructure Projects. Through use of the PDRI and collaboration of the planning team, the PDRI can help reduce the total project cost, improve schedule performance, provide a communication and alignment tool, support decision making, reliably predict project performance and is flexible enough to accommodate a variety of infrastructure facility types.

Specific to the City Projects, CSA will develop a Project Quality Plan that incorporate the standard CSA Quality Assurance/ Quality Control (QA/QC) processes as well as incorporating City’s quality processes (such the Design Review). The Project Quality Plan forms an integral part of the Company’s project delivery core process. The Quality Plan includes sections during the environmental, design, engineering during construction and construction management phases.



Project Quality Plans will be developed during the Planning Phase as part of the Project Execution Plan (PEP). The Quality Plans include a matrix of responsibilities (for interdisciplinary and peer reviews) as well as checklists and preliminary milestones by when these “checks” must take place. As design progresses, discipline leaders use existing procedures and checklists to verify conformance to specific requirements. Furthermore, as part of the Quality Plan, Coordination reviews, specific to the project, are scheduled and executed to assess project coordination and compliance with project objectives.

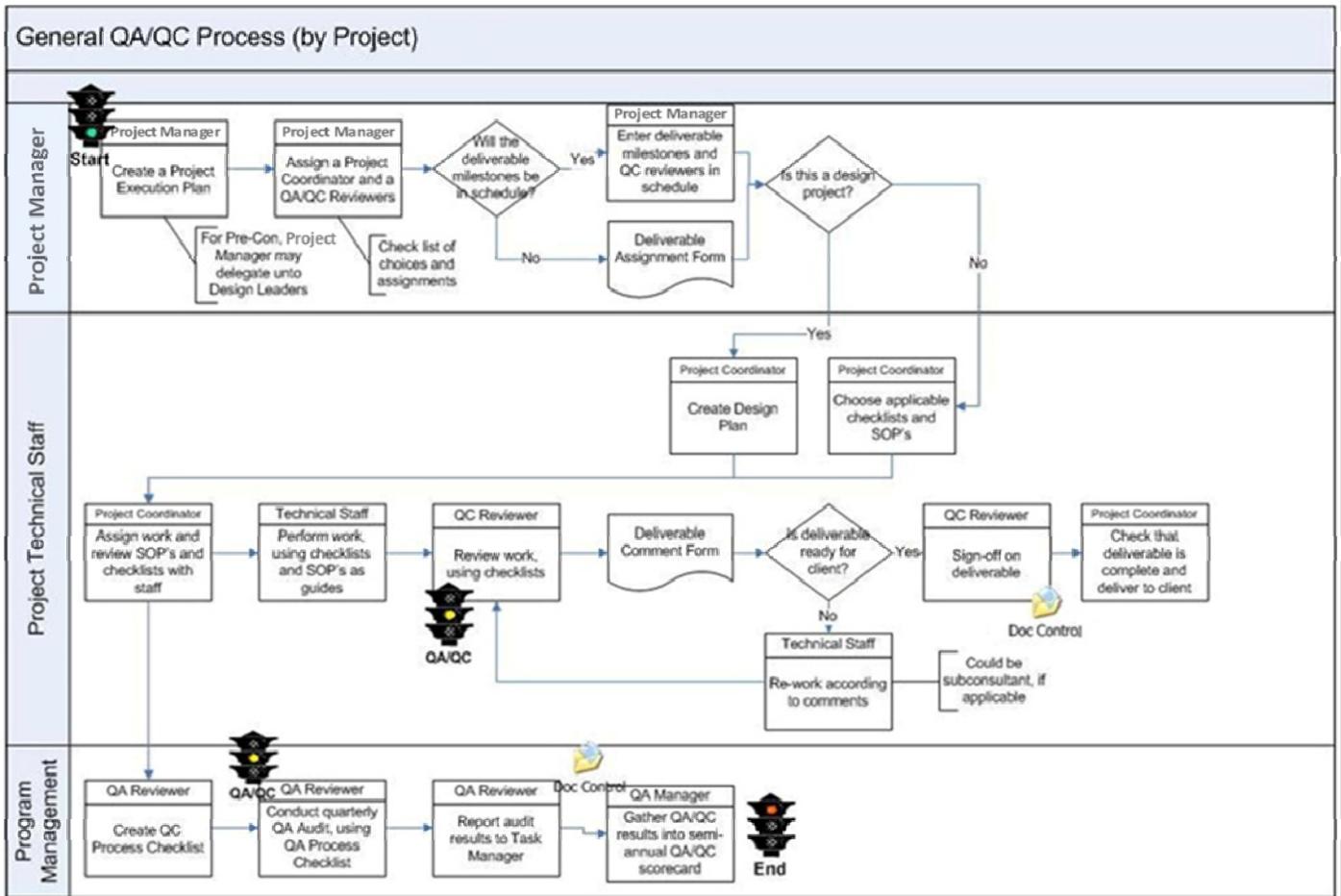
The quality of design translates directly into satisfactory services, durability, and low maintenance costs. Our engineers and technicians have the necessary skills and direct hands on knowledge that will allow the application of quality standards on all projects associated with this program. Our track record reflects consistent enforcement and the achievement of an exceptional level of quality in the design and construction projects we have delivered.

Depicted below is the general flowchart for QA/QC Gates.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Strategy-To-Minimize Risks

At CSA, we bring to the projects work many years of experience, including a wealth of **lessons learned** from other projects. In evaluating "Risk Management," it is important to identify project goals, determine possible risks or threats to achieving these goals, and then explore ways to manage or mitigate the risk. CSA primary goals for this Project are to:

- * Complete the job safely and on time.
- * Perform field studies and data gathering accurately and on time.
- * Coordinate all work with **the City** and others related stakeholders.
- * Support community outreach and coordination efforts, as required.
- * Meet requirements from Local and Federal Agencies for expedited reviews.
- * Deliver a product that meets or exceeds **the City** quality and schedule expectations.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



All projects awarded to CSA are taken through an organizational structure that provides defined management responsibilities, multidisciplinary technical feedback, technical and managerial revision, and a quality control system that contributes to achieving a successful project. CSA assigns its highly qualified professionals to assure the best representation and the successful development of all projects. In addition, we effectively communicate with regulatory agencies.

SAFETY to the COMMUNITY: The safety of anybody entering the construction area is and always will be the team's top priority. All personnel proposed for this program have proved mastery of all work zone traffic and construction safety procedures. This expertise is vital, and will promote a proactive role in avoiding risks to the public, as well as to all workers involved in the program.

MINIMAL IMPACT to the PUBLIC: The public demands efficient solutions with minimal inconvenience and impact to their daily lives. Whether it's our sensitivity to the elderly population, our ability to help minimize disruption to the flow of traffic, or our strict adherence to all security and safety regulations, we know that the improvements to the community must take place with the most minimal impact and inconvenience to the public. Balancing the economy and quality of any public construction project, maintaining safety and security, and minimizing disruptions to public life is a challenge that should not be left to just any A/E/C team to tackle. We are confident that our personnel have the training and experience necessary to achieve this balance, and the track record of providing effective solutions under exactly this type of program.

We know that the proper way to address these key elements is through effective Team Work and clear communications... and we've already put into practice this knowledge on past projects throughout South Florida. Our experience tells us that the success of any project cannot rely on the individual actions of the designer, CEI Consultant, City's Representative or Contractor alone, but on the effective teamwork approach to the project and in the advance problem solving capabilities that come from an experienced team of professionals. Only through this joint effort, are we able to ensure safety, quality and the timely completion of all projects. The decision making process must be sound and swift, and CSA Group will build on the already existing working relationship between our firm, the City, and any additional contractors through open lines of communication, prompt and candid discussion of challenges, and clear leadership for conflict resolution.

QUALITY of DESIGN: The quality of design translates directly into satisfactory services, durability, and low maintenance costs. Our engineers and technicians have the necessary skills and direct hands on knowledge that will allow the application of quality standards on all projects associated with this program. Our track record reflects consistent enforcement and the achievement of an exceptional level of quality in the design and construction projects we have delivered.

Project Management & Coordination

An important consideration include having a **Project Manager** and **support team** with a **clear set of roles and responsibilities**, to support the City with their projects. CSA Group utilizes a strong management approach on all of its projects. Our project managers are not just involved in management, but also in the technical issues of the project. This approach provides our clients with the best possible service. CSA Group will take a proactive approach to the management of this contract to assure proper coordination of activities from all parties involved to accomplish the successful completion of the contract. This contract may require that multiple work orders or authorizations be





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



performed simultaneously and by different team members and discipline compositions. Therefore, a well-defined management plan that monitors progress and coordination is of paramount importance. The main components of the management approach consist of the following issues:

- **Project Manager:** The overall contract will be controlled by the Project Manager. He will be responsible for the overall management of the project, all internal and external coordination of project issues, and the direct line of contact with the City.
- **Quality Assurance Officer:** A Senior Level Project Manager will oversee the QA/QC effort, and will assign the independent reviewers for this project. The main components of the QC Review are: 1) Engineering design criteria review, including decisions and commitment made 2) Plans preparation/cross reference review, and 3) Constructability and biddability review. Quality review of the construction plans will ensure that plans and bid documents are free from errors, omissions, and misinterpretations.
- **Task Managers (if required):** Task Managers consist of a group of seasoned project managers that will be responsible for managing and coordinating the individual task assignments. The Task Managers are responsible for the day-to-day coordination of each task. The need of Task Managers will depend on the number of simultaneous task work orders given. If only a couple of task work orders are issued at a time, Mr. Villar will serve as the project manager and task manager to save resources and cost to the City.
- **Support Services:** Support Services consists of a group of professionals well respected in their fields of expertise. This group will assist the Task Managers in performing their duties. This group will review plans, perform design and make recommendations in their field of expertise.

COORDINATION: This contract requires extensive coordination with various agencies, subconsultants, utility companies, internal support services and the City. We take a proactive approach to assure proper coordination of all activities to successfully complete assigned projects. This contract may require simultaneous administration of multiple work orders or authorizations, therefore; the Team will use proven methods to monitor progress and coordination.

- Clear Organizational Structure
- Proactive Monitoring of Project Schedules
- Built-in Coordinating of Activities
- Document Control and Reporting

This contract requires extensive coordination with various agencies, subconsultants, utility companies, internal support services, and the City. Continuous personalized coordination is paramount on this type of project. CSA Group is well aware of the coordination efforts required and is committed to excel. Our reputation is that we are a client service oriented firm and “always available.”

DATA MANAGEMENT AND WORKFLOW PROCESS BETWEEN TEAM: Based on the significant Program Management experience that CSA has amassed during the last two decades, our work processes and staff members are accustomed to leading/coordinating work among multiple firms in a program or individual projects. In previous successful Program Management roles, CSA has coordinated the work of up to 1,000 field personnel, coordinating the work of over 160 different firms at one time. Based on this experience, CSA has learned that an effective communication process designed and implemented at the beginning of the project with organization’s key stakeholders identified are a key factor in assuring an effective workflow between team members.



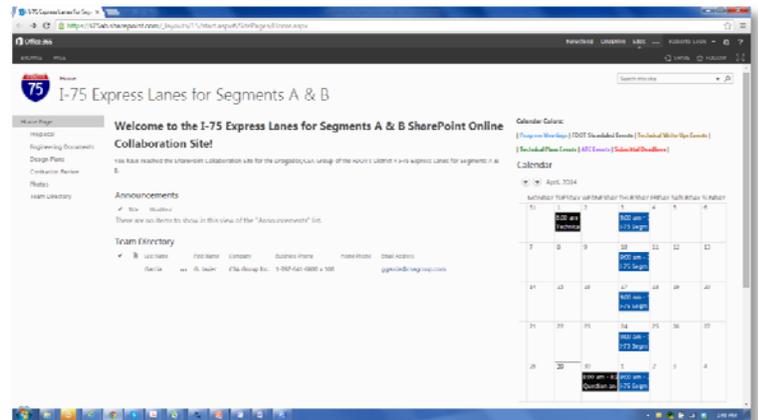


REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



One of the main tools that CSA employs to properly maintain the Project Team aligned is the utilizations of a **Share Point** site. In this site, for which all Team Members will have individual log-in information, would include as a minimum a Project calendar with key milestones, Team contacts, project documentation repository, and electronic file transfer area, among others. This site is customizable to the particular needs of the projects and would also serve as repository for all project information. Below are some images of the latest share point site that CSA developed for a \$180MM construction cost project that has 8 different firms collaborating on the project.



Applicable to the Ckity Projects, and CSA's role as the Prime Contractor, we will develop a **SharePoint** site among the team members that will serve as the main tool of collaboration between the firms. CSA's Principal in Charge and Project Managers would be the ones directly responsible for assuring that communication and workflows among the team members proceed in a smooth fashion and that this effective communication is shared with the City. All projects would have a Project Execution Plan detailing a communication plan and any applicable processes to assure a successful execution of the assigned tasks. At the end, nothing replaces personal communication, and thus CSA will maintain direct contact with team members throughout the execution of the projects. Regular meetings, with a frequency to be determined based on the assigned projects, would be held among all team members where all issues would be discussed openly and action items defined.

Cost & Schedule Control

CSA has a Project Controls Unit which includes schedule specialists and cost estimators that can assist **the City** and its Project Manager, during the life of this contract. This Unit offers greater focus on keeping projects on time and within the contracted budget. Cost control activities include:

- * Constant communication between the multidisciplinary team and **the City**, including monthly progress reports, planning documents, schedule and budget controls, as well as, written notifications to **the City** about the conditions that may impact schedules and established costs.
- * Deliveries, schedules and budget monitoring, while the work of the CSA Project Team is executed.
- * Meetings with Project Stakeholders to coordinate efforts during the project.

Change Management: Notification to **the City** about revisions or changes required; providing documentation on the impact to budget and schedule; and obtaining authorization from **the City** before proceeding.

We will design the project to ensure that it meets the expectations and needs of the City, that it stays within the prescribed budget from both a design and construction





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



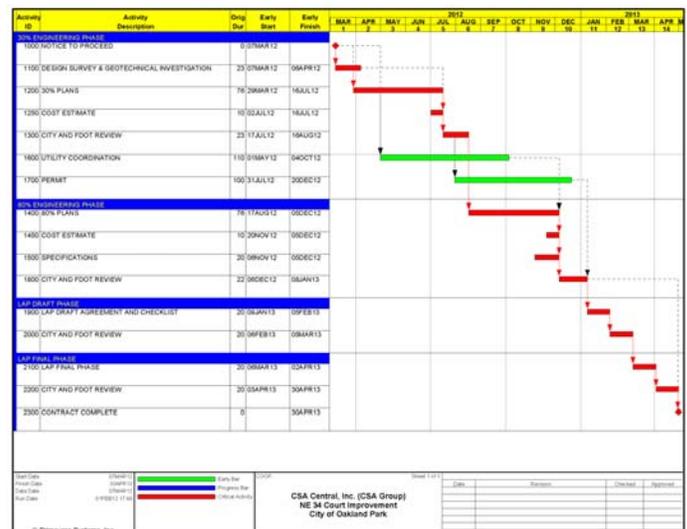
parameter, and that it does not involve unforeseen circumstances at the end of the project causing either schedule delays or modifications to reduce unexpected costs. If scope changes are required, the changes will be assessed to determine if they are feasible within budget or are better suited for future work, this will be discussed with the City's Project Manager.

Control of the budget by the Project Manager is further accomplished by monthly meetings with the City's Project Manager. The purpose of the meeting will be to make sure the project's original scope and intents are on track. Elements will be identified that may cause scope modifications and subsequently increase in construction costs. The City's Project Manager will be able to track critical events that impact the construction costs and with the help of the CSA Group Team, can proactively react to the impacts of such elements and address the possible solutions without impacting the original budget. Control of budget from a construction point of view, will be accomplished by designing improvements with constructability issues closely tied to the design.

- * Eliminate designs that require specialized construction techniques
- * Minimize number of phases on traffic control plans
- * Minimize restrictions on the traffic control plans
- * Provide designs that are compatible with local materials and practices such that excessive transportation of materials not readily available locally is minimized.

Continuous monitoring of the various task schedules will be performed. The Team is keenly familiar with the process and requirements of each type of proposed project and the timeframes required to accomplish each task. The Team is well aware of activities that may not be under the direct control of the City that may cause potential delays. Some of these activities consist of utility issues, permitting, and City approval. The Team will monitor these activities closely to minimize unexpected events that could lead to possible delays. The responsibility for control of the project schedule progress will be monitored by the Project Manager. This schedule control will be accomplished as follows:

- Weekly contact by Task Managers with Support Service staff and subconsultants to determine project progress and to identify areas of potential delays or conflicts.
- Bi-weekly meetings of Task Managers with the Project Manager to review each project schedule and define corrective action, if required. If needed, this meeting will also include the subconsultants involved in the project.
- Monthly meetings will be held with the City to inform and discuss the project status and schedule. Also, this meeting will serve as an avenue to obtain feedback and direction from the City.





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



II. TECHNICAL APPROACH

Environmental Considerations:

- **Protected and Endangered species in the Florida Keys and Key West**

Threatened species include:

- American alligator (*Alligator mississippiensis*)
- Green sea turtle (*Chelonia mydas*)
- Loggerhead sea turtle (*Caretta caretta*)

Endangered species include:

- American crocodile (*Crocodylus acutus*)
- Hawksbill sea turtle (*Eretmochelys imbricata*)
- Atlantic ridley sea turtle (*Lepidochelys kempii*)
- Eastern indigo snake (*Drymarchon corais*)
- Atlantic saltmarsh snake (*Nerodia clarkii taeniata*)
- Southern bald eagle (*Haliaeetus leucocephalus leucocephalus*)
- Peregrine falcon (*Falco columbarius*)
- Brown pelican (*Pelicanus occidentalis*)
- Barbados yellow warbler (*Dendroica petechia petechia*)
- Key deer (*Odocoileus virginianus clavium*)
- West Indian manatee (*Trichechus manatus*)

These species utilize mangrove systems during at least some portion of their life histories, while others reside their entire life spans, feeding and nesting within the mangroves.

Sea Turtles

Marine and estuarine habitats surrounding the Keys provide habitat for threatened and endangered species. The Florida population of green sea turtles (*Chelonia mydas*) has been considered endangered since 1978. The declining population has been victim to commercial harvesting for eggs and food as well as incidental by-catch in the shrimp fishery. Hawksbill sea turtle (*Eretmochelys imbricata*), Atlantic Ridley sea turtle (*Lepidochelys kempii*), and leatherback sea turtle (*Dermochelys coriacea*) are all listed as endangered species while the loggerhead sea turtle (*Caretta caretta*) is considered threatened under the protection of the ESA. Recovery plans have been established for all listed sea turtle species. The manatee (*Trichechus manatus*) is another endangered aquatic animal observed from time to time in the waters surrounding the Keys.

Other Protected Species

There are many other protected species in the Florida Keys include seagrasses, the Stock Island tree snail (*Orthalicus rees*), southern bald eagle (*Haliaeetus leucocephalus*), and roseate tern (*Sterna dougalli*).

- **Contamination Sites: Presences of Asbestos, Lead Base Paint, Arsenic, etc.**
- **Sea Level Rising**





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



ENVIRONMENTAL ENGINEERING

CSA Team conducted an evaluation of the RFQ, and has a very good understanding of the project. CSA Team will provide, perform and complete in the manner described and specified in this RFQ all necessary work, labor, services, transportation, equipment, materials, apparatus, information, data and other items necessary to accomplish the project as defined below, in accordance with the Scope of Work (SOW).



Our approach to service is to provide the City with proactive solutions that avoid and minimize impacts to our natural resources as well as achieve the goals and objectives of each project, in a cost effective manner. We are committed to providing the City and their projects with high quality service, on time and within budget.

The CSA Group Team understands the critical nature of providing multidisciplinary environmental engineering services and takes into consideration an early coordination with the City and regulatory agencies (Federal, State and Locals). Our team understands the scope of services and requirements that must be taken into consideration to efficiently and effectively coordinate, collaborate, and execute the commitments of the different tasks.

The CSA team will provide, perform and complete all of the Services in a proper and workmanlike manner, consistent with the highest standards of professional practice. It is imperative that the team selected is up-to-date and very



familiarized with the Contamination and Remediation Programs to assist the City and stakeholders in responding to challenges and potentially affected infrastructure connected by infrastructure. CSA brings together one of the most capable and multidisciplinary professional teams, and is confident our capacity to be a value-added partner to the City of Key West. In addition, the Team is highly knowledgeable in the **Core Elements of Brownfield's Wide Area Planning**, which involves:

1. Collecting information and identifying community priorities related to brownfields cleanup and near- and long-term revitalization.
2. Evaluating existing environmental conditions, local market potential, and needed infrastructure improvements.
3. Developing strategies for brownfields site cleanup and reuse.
4. Identifying resources or leveraging opportunities to help implement the plans, including specific strategies for public and private sector investments and improvements necessary to help with cleanup and area revitalization.

Following is presented our general approach that effectively addresses the objectives and the challenges presented by the Project while at the same time maintaining the quality level required for compliance with all applicable environmental regulations. We are confident that our expertise in guiding our clients through past performance





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



experience and the sensitive environmental permitting processes (e.g. ESA¹¹ Section 7 and NHPA¹² Section 106) will allow for this project to be a success. CSA has developed proven processes and techniques for the successful delivery of projects. Some keys to our success include:

- * Complete understanding of our customer, the end user, and their mission;
- * Leverage our expertise in state, local and federal regulation and site assessment and remediation programs;
- * Data & Document Management
- * Use of over the shoulder reviews and task groups to involve all stakeholders;
- * Quality control processes sustained throughout all phases of the project;
- * High level of commitment to our projects.
- * An established one-to-one partnership with City.

As applicable to this RFQ and City requirements, contaminated sites should be investigated and managed in a staged manner. A staged approach to contaminated site assessments is the progressive investigation of a site based on the level of information required. This method builds up a picture of the contamination status of a site over time so that contaminated areas can be identified and managed, while excessive resources are not dedicated to sites or areas that are less likely to be contaminated. All stages of site assessment should include the relevant stage of risk assessment, which also includes a comprehensive knowledge of the source, pathway and receptor in each case.

Stages of Environmental Site Assessments	APPROACH DESCRIPTION
Phase 1 ESA (Preliminary Site Investigation):	<p>Involves collecting background knowledge, such as historical and geographical information to determine if past or present land uses have the potential to cause contamination. A Phase 1 does not normally include soil or water testing. The regulatory agencies may classify a site as <i>uncontaminated</i>, and no further investigations are necessary if the available data determines that contamination is not likely. If it is determined that contamination may exist, then the site is likely to be classified as <i>possibly contaminated – investigation required</i>, and a detailed site investigation may then be required. Some visible signs of potential contamination may include:</p> <ul style="list-style-type: none"> • Presence of chemical storage containers or fuel tanks, particularly where losses or spills have occurred, or storage is substandard. • Surface chemicals or wastes noted in the soil during site works. • Abnormal odors, discoloration or staining of soil (on surface soils or when conducting earthworks). • Oily or discolored surface waters on or near the site. • Vegetation death or impact, or ground where plants will not grow. • High numbers of animal deaths (e.g. birds, fish). • Evidence of a former landfill or historical, illegal or uncontrolled areas of waste disposal e.g. rubbish emerging from the ground. • Continued health complaints from members of the local community e.g. headaches, nausea, skin problems.

¹¹ Endangered Species Act

¹² National Historic Preservation Act





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Stages of Environmental Site Assessments	APPROACH DESCRIPTION
Phase II ESA (Detailed Site Investigation):	Involves soil and/or groundwater testing to determine if contaminants are present on the site. A DSI can also identify substance types, concentrations and location. Further DSIs may be required to accurately delineate the extent of contamination, particularly in groundwater.
Remediation:	If contamination is causing, or may cause an adverse effect on human health or the environment, it must be remediated (cleaned up). This may involve treating it on site, treating it at an offsite specialized treatment centre or excavating contaminated soil and disposing of it to landfill. The method of remediation may vary depending on: <ol style="list-style-type: none"> 1. The type and extent of contamination; 2. Where the contamination is (soil, sediments or ground/surface water) 3. The risk that the material poses.
Validation:	Following remediation, it must be proven that all contamination has been removed or successfully treated. This includes sampling treated soil or, where soil material has been excavated, sampling the walls and floor of the excavation pit. Validation of groundwater requires ongoing groundwater monitoring over a pre-determined period of time.
Monitoring:	Where in-situ (on site) remediation methods are used, ongoing monitoring of the remediation process is required to ensure contamination levels are dropping (i.e. the remediation is working). This is generally in the form of regular soil or groundwater monitoring. A contingency plan is often required (i.e. a change in remedial method or further remediation) if the chemical levels identified during monitoring exceed a pre-determined trigger level.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



COASTAL ENGINEERING / FULL SCALE ENGINEERING

These are very dynamic projects that vary on a project and location basis. The design and supporting documents (e.g. studies, specs) will be prepared according to the scope of work, and in a manner to facilitate agency’s review to obtain timely approvals (according to schedule). All design related will be prepared in accordance with federal and state-specific regulations.

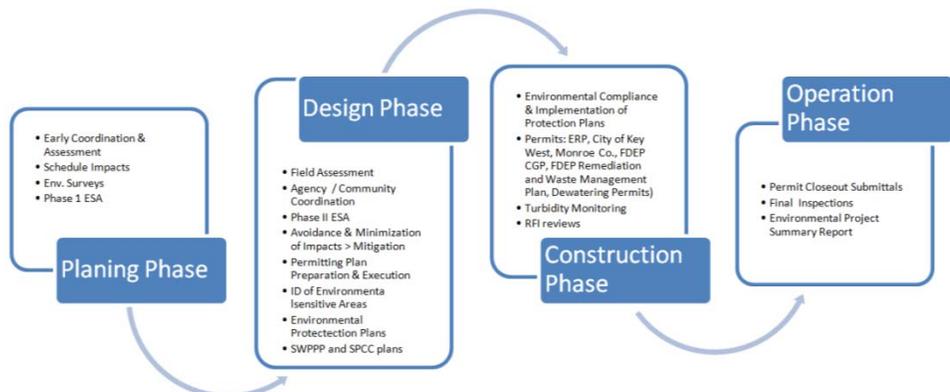
Based on the general principles presented in our QA/QC process (Project Life Cycle diagram) our engineering process will be as-followed:

PRE-PROJECT PLANNING: It is a well documented fact that the **greatest influence on the total cost of a project occurs at the Planning and Development Stage.** CSA’s core processes and procedures will ensure a proactive stance in the planning of projects, never forgetting that there is a continuously evolving process of including stakeholders, using the right resources to identify the best implementation strategy to meet the City’s needs. Therefore, as an initial step in assigned tasks or engineering projects, the CSA team will complete an in-depth review of all available documentation, environmental surveys, design and as-built drawings, including geotechnical investigations, H&H modeling, Phase I / II ESAs, water resources modeling, and water quality modeling, among others. In addition, we will perform an Initial Inspection Report / Condition Assessment of the facility or site to a level of detail dependent on the available information reviewed prior to the visit. **Focus would be on identifying potential Risk or Project Delay Factors** at an early stage that could impact negatively the plans of the City. This report would be submitted to the City for discussion and would form the basis for the Design Documentation Report (DDR), which once approved, would represent the authorization to proceed with design efforts. The format of the DDR will be as per the City’s standards. The CSA team is capable of performing all these project activities and is also cognizant that some of these activities may have already been performed or contracted with other consultants.

Initial Inspection Report / Condition Assessment

- Architectural/Structural review
- Existing permits compliance and requirements
- Visual inspection of any environmental issues of concern (contamination, endangered species, among others)
- Perform testing to collect data.
- Review hurricane protection
- Electrical systems (crane, hoist, power) review for redundancy, equipment age, safety, code requirements.
- Piping assessment – If there is a lot corrosion present, measure the remaining thickness to determine if the pipe can be blasted and repainted versus complete replacement.
- Evaluation of need for diving inspections
- Need for additional field work: surveying, geotech and environmental.
- Evaluation of need for in-water-work activities

ENVIRONMENTAL: A special emphasis will be placed on environmental considerations, with the major issues to be considered summarized below:





REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004

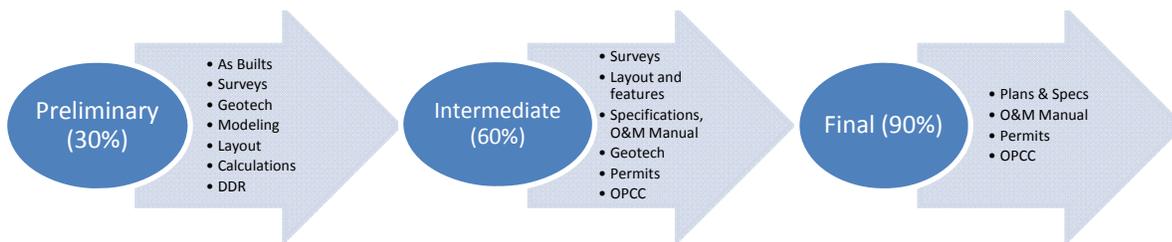


DESIGN: Once the DDR is approved, the CSA Team will proceed with the required / recommended design. Design efforts will go through a review process, usually at 30%, 60% and 90% design completion) for soundness of design, constructability and biddability reviews and cost estimating purposes. A Corrected Final/Ready-to-Advertise package would be submitted after all technical reviews by the City. Our design efforts also include coordination with the construction and start-up phases, to integrate the project delivery of these services. All design stages will be subject to a review by the City Design Review Team (CRT) that may consist of representatives from the City, regulatory agencies and independent consultants that supplement the City staff. Our Team will review and respond to all comments made by the CRT, all comments must be accepted by the CRT prior to being authorized to proceed to the next Design stage.

Clear, concise and comprehensive materials definition and documentation at the DDR becomes a QA tool for use during the construction, testing, and commissioning phases of the project.

The Project Manager and Principal in Charge will be responsible for assuring that timely deliveries are made with the specified quality level. In addition, they would be responsible for implementing the QA/QC Plan (refer to **Section 4 – Tab IV**).

Below a general concept of information to be included in each submittal:



These items will be coordinated with the City PM to be consistent with other City projects. **Opinion of Probable Construction Cost (OPCC) would be developed in each submittal in order to maintain an accurate control over the available funds.** Also, the CSA team will focus on sustainability components in its design efforts to provide a more efficient project.

Finally, during the design stage, special considerations will be taken into account to facilitate construction activities. As designers, we would consider the following items as a minimum:

- Develop a plan to minimize construction disturbance.
- Require exploratory digging by the contractor to confirm locations, size, and materials of existing utilities before preparing shop drawings.
- Advanced coordination of shut downs with stakeholders.
- Advanced valve exercising and dry runs of shut downs
- Coordinating the construction schedule with high demand periods, restricting contractor activities during certain periods of time
- Housekeeping/Noise/Dust Control

Following is a summary of key success factors for our design projects.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



Focused Initial Assessment

Early Identification of Risk/Delay Factors

Robust DDR

Comprehensive Environmental Permit Plan

Project Execution Plan

Key Stakeholder Input Throughout Process

CONSTRUCTABILITY AND BIDDABILITY REVIEWS: CSA Group considers Constructability and Biddability Reviews as a key element in the project to reduce construction time, additional services requests and claims, while reducing construction cost. As such, we are both honored and challenged by the opportunity to provide these services to the City.

CSA Group believes a full review of the project requires an interdisciplinary approach that will bring together a group of professionals with diverse background and experience. CSA Group will study the construction sequence with emphasis in the construction methods that may be employed by the contractor. The purpose of this study is to detect the need for special equipment or construction methods that may incur additional costs or delays not originally considered. Consideration will be given to special methods such as dewatering, underwater work, off hour work, special rigging for heavy loads, access for heavy equipment, etc. On the other hand, the construction specialist will look for innovative means and solutions available that may provide more expedient construction, with reduced inconvenience to the public.

Another important aspect of the constructability review is the verification of contract time. CSA Group uses state of the art techniques to analyze the sequences of construction and eventually establishing of contract time. Activities are broken down to their minimum tasks, and production rates are used from our extensive database of construction productivity rates.

SUSTAINABILITY: We are an advocate of sustainability and try to incorporate this approach in our projects. As active member of the United States Green Building Council (USGBC) our job is to look at sustainable approaches to the projects we are involved with. Recently the U.S. Conference of Mayors announced they would be implementing Sustainable Initiatives within U.S. Cities such as the City of Homestead. We would like to be part of the team that makes a difference in making the City a better place to live, work, commute and play. Our approach is guided by the nationally accepted benchmark for the design, construction, and operation of high performance buildings. This process gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance. We promote a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

PERMITTING: Our services will involve assisting in the environmental permitting effort including preparation of permit applications; support environmental surveys and documentation; coordination with agencies and submittal and tracking of all applications during design and construction according to the assigned task. For state permit applications, these are prepared in accordance (but not limited to) with Chapter 373 and 403, Florida Statutes, Chapters 40 and 62, Florida Administrative Code. For federal permit applications, these are prepared Permit applications will be prepared in accordance with Section 404 of the Clean Water Act, and parts 114 and 115, Title 33, Code of Federal Regulations; and Section 10 of the Rivers and Harbors Act, among others.

Our multidisciplinary team specializes in: environmental permitting through local, state and federal agencies; environmental site assessment; air quality; soil evaluation & geology; wetlands analysis; archaeology and cultural resource studies (Section 4(f)); endangered and threatened species studies; monitoring, forestry and land management; mitigation and restoration; mapping using GIS and landsurvey instruments, aquatic engineering, and building and zoning, among others.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



ENGINEERING DURING CONSTRUCTION (EDC). CSA's Design team is capable and proficient in providing EDC. Our professional project managers, supervisors, and design team staff act as the owner's representative paying close and **continuous attention to all details of the project in order to accomplish the City's expectations.** An EDC coordinator would be assigned as the primary Point of Contact (POC) for this phase of the project. The POC would have been directly involved in the design phase. CSA has internal database driven tools to manage the inflow and outflow of project RFI, submittals, etc to assure a timely response is continually provided.

Any Request for Information (**RFI**) associated to our design will be attended with special priority ("Priority #1"). The Project Manager will assist and attend Construction Kick-off meeting, Initial Contractor Site Visit and will become available during the life of the project. Following is outlined our RFI process.

- Before even we receive an RFI on a construction job, we will provide some sort of order for how a contractor or subcontractor can submit their RFI's. It is generally best to have each Contract submit an RFI beginning with #1 on a page that states their company name, address, and phone number, the key contact person, the job site name, what specifications section or drawings they are referencing and the question.
- We will assign it a number in our tracking system. Our numbering system will encompass all RFI's. Additionally we will track when we received the RFI and when it is responded to (via **SharePoint**).
- Once we receive an RFI in the proper format and assign it a number, it needs to be reviewed. Often times we would be able to answer the question by checking the specifications, contract drawings, addendums, or memorandums. If not, the RFI will be distributed through all disciplines (e.g. Safety, Environmental, Civil, Mechanical, Electrical, CCI, etc.).
- Once the RFI is responded to by CSA technical staff or Subconsultants, we will be sure to review the response and see if the response is a potential change order. Oftentimes RFI's are asked because the Contractor notices a change of work and will use the RFI to request additional compensation. By reviewing the response we can know and advise the City if there is a add/deduct change order to go along with it.

Furthermore, the Project Manager will discuss any potential omission and error raised with the City before any communication with the Contractor. Others strategies to be implemented include:

- Perform a site visit to validate issue raised.
- Always will try to resolve or clarify any issue during the progress construction meeting to prevent any potential delay claims by the contractor, and then follow up with written technical communication (RFI response to SFWMD).
- Frequently attend and assist the City in Construction Meetings and technical reviews.



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



CONSTRUCTION MANAGEMENT SERVICES (CMS): CSA’s Construction Management Unit’s core mission is to **achieve the successful execution of major capital projects and programs**. **Safety** is a priority for all our projects and will be a focus on our CM services. The services to be provided include: on-site representatives; construction status reporting including **anticipating and documenting construction problems and delays**; review of RFIs, RFCs, RFPs, CO, FO and VE proposals; assisting the City in the review and reconciliation of construction schedules, schedule updates, and Contractor payment applications; Quality control materials testing, analysis and reporting; and assisting in project completion evaluations for contract closeout/commissioning.

A separate Detailed Construction Schedule for each project will be developed as part of the constructability review process. The computer-based Critical Path Schedule will be the base schedule in the MS once the construction contract is issued and notice to proceed is given. This schedule will serve the CSA Team, the City and other stakeholders as the basis for Construction Contract Administration.

Our unit is supplemented by inspector technicians in such fields as soils, concrete, certified welding, and piping installation inspections. Our services will be augmented, when necessary, by qualified inspection firms and laboratories. The inspection services will also provide the oversight of the approved Safety Program Compliance, as required by the City. This service provides the City with safety supervision to assure that the Contractors comply with all pertinent Federal, State and local laws and regulations. Our expert personnel will approve and assure contractor safety program is in place and will train the inspectors on this matter.

Through the experience gained from numerous projects, **CSA has learned to manage these challenges.**

III. LOCATION AND AVAILABILITY OF STAFF

With a full cadre of professionals dedicated to Florida’s unique environmental issues, supported by proven management methodologies and extensive equipment resources, our highly experienced staff brings a wealth of technical expertise. We are able to provide not only quality personnel but the necessary quantity of personnel within the required disciplines to effectively execute multiple, concurrent tasks. We estimate 20% of our personnel and equipment resources are available for your project needs.

The CB&I Florida offices are fully equipped with the staff and equipment essential to performing all services described in the RFQ. The Boca Raton office, identified as the program office for this contract, is equipped with all the necessary tools to conduct coastal engineering consulting services. Additional equipment, as necessary, is available from CB&I’s national equipment group.

CMS Major Challenges

- Early assessment and risk based contingency planning for extreme hydrological events.
- Close monitoring of purchase orders, fabrication status, shipping activities, and transportation.
- Task pre-planning including task definition, identification of key equipment, labor force, materials and schedule.
- Detailed testing and commissioning process for SCADA system.
- Early integration in design process and effective collaboration with designer and O&M staff during the construction phase.
- Manage an adequate process of knowledge transfer among all stakeholders
- Manage environmental monitoring requirements
- Water quality monitoring

OTHER CERTIFICATIONS



REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL ENGINEERING SERVICES

RFQ #14-004



V. OTHER CERTIFICATIONS

		CERTIFICATE OF LIABILITY INSURANCE		CSAHO-1	OP ID: RSAN	
				DATE (MM/DD/YYYY) 01/28/14		
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 HUB International CLC 1590 Sawgrass Corporate Parkway Suite 402, Sunrise, FL 33323 Manuel Ruiz		954-626-5100 954-626-5119	CONTACT NAME: Rosemary Sanchez PHONE (Ext): 954-846-5009 FAX (Ext. No): 954-626-5119 E-MAIL ADDRESS: rosemary.sanchez@hubinternational.com			
INSURED CSA Central, Inc. 6100 Blue Lagoon Dr. Suite 300 Miami, FL 33126		INSURER(S) AFFORDING COVERAGE INSURER A: Travelers Prop & Casualty NAIC # 25674 INSURER B: St. Paul Fire & Marine INSURER C: ACE Insurance Company 30953 INSURER D: INSURER E:		NAIC #		
COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:						
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.						
INSR	TYPE OF INSURANCE	ADDL SUBR	POLICY NUMBER	POLICY EFF	POLICY EXP	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> Contractual Lib. <input checked="" type="checkbox"/> Valuable Papers GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PER <input type="checkbox"/> LOC		630-2366C03A	12/31/13	12/31/14	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMPROP AGG \$ 2,000,000 Emp. Ben. \$ 2,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS		810-2366C03A	12/31/13	12/31/14	UNBODIED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	UMBRELLA LIAB EXCESS LIAB DED. <input checked="" type="checkbox"/> RETENTIONS \$ 10,000	<input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE	ZUP-12900191-13-NF	12/31/13	12/31/14	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICERS/EMERGENCY EXCLUDED? (Handwritten in N/A) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	JUB-2366C03A-13	12/31/13	12/31/14	<input checked="" type="checkbox"/> WS-STAFF <input type="checkbox"/> OTHER <input type="checkbox"/> LOSS LIMITS <input type="checkbox"/> PER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	Professional Liab.		EO2177	07/21/13	07/21/14	Per Claim \$ 5,000,000 Aggregate \$ 5,000,000
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required) CSA Central Inc is also a Named Insured under all policies listed above.						
CERTIFICATE HOLDER SPECCE1 Specimen Certificate for Insured's Information Only			CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 			

ACORD 25 (2010/05)

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FORMS



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

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

1. This sworn statement is submitted with Bid, Bid or Contract No. RFQ No. 14-004 for _____

2. This sworn statement is submitted by CSA Central, Inc.
(Name of entity submitting sworn statement)

whose business address is 6100 Blue Lagoon Drive, Suite 300, Miami, Florida 33126
_____ and (if applicable) its Federal
Employer Identification Number (FEIN) is 31-1446286 (If the entity has no FEIN,
include the Social Security Number of the individual signing this sworn statement.)

3. My name is Roberto Leon and my relationship to
(Please print name of individual signing)

the entity named above is Senior Vice President.

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

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

6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means
 1. A predecessor or successor of a person convicted of a public entity crime: or
 2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

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

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

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

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

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

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

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

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

Roberto Leon
(Signature)
June 16, 2014
(Date)

STATE OF FLORIDA

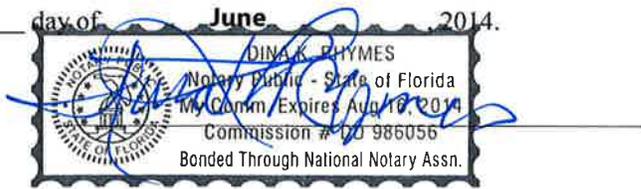
COUNTY OF MIAMI-DADE

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

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

space provided above on this 16th day of June, 2014.

My commission expires:
NOTARY PUBLIC



City Ordinance Sec. 2-799
Requirements for City Contractors to Provide Equal Benefits for Domestic Partners

- (a) Definitions. For purposes of this section only, the following definitions shall apply:
- (1) **Benefits** means the following plan, program or policy provided or offered by a contractor to its employees as part of the employer's total compensation package: sick leave, bereavement leave, family medical leave, and health benefits.
 - (2) **Bid** shall mean a competitive bid procedure established by the city through the issuance of an invitation to bid, request for proposals, request for qualifications, or request for letters of interest.
 - (3) **Cash equivalent** means the amount of money paid to an employee with a domestic partner in lieu of providing benefits to the employee's domestic partner. The cash equivalent is equal to the employer's direct expense of providing benefits to an employee for his or her spouse.

The cash equivalents of the following benefits apply:

- a. For bereavement leave, cash payment for the number of days that would be allowed as paid time off for the death of a spouse. Cash payment would be in the form of the wages of the domestic partner employee for the number of days allowed.
 - b. For health benefits, the cost to the contractor of the contractor's share of the single monthly premiums that are being paid for the domestic partner employee, to be paid on a regular basis while the domestic partner employee maintains such insurance in force for himself or herself.
 - c. For family medical leave, cash payment for the number of days that would be allowed as time off for an employee to care for a spouse who has a serious health condition. Cash payment would be in the form of the wages of the domestic partner employee for the number of days allowed.
- (4) **Contract** means any written agreement, purchase order, standing order or similar instrument entered into pursuant to the award of a bid whereby the city is committed to expend or does expend funds in return for work, labor, professional services, consulting services, supplies, equipment, materials, construction, construction related services or any combination of the foregoing.
 - (5) **Contractor** means any person or persons, sole proprietorship, partnership, joint venture, corporation, or other form of doing business, that is awarded a bid and enters into a covered contract with the city, and which maintains five (5) or more full-time employees.
 - (6) **Covered contract** means a contract between the city and a contractor awarded subsequent to the date when this section becomes effective valued at over twenty thousand dollars (\$20,000).
 - (7) **Domestic partner** shall mean any two adults of the same or different sex, who have registered as domestic partners with a governmental body pursuant to state

or local law authorizing such registration, or with an internal registry maintained by the employer of at least one of the domestic partners. A contractor may institute an internal registry to allow for the provision of equal benefits to employees with domestic partner who do not register their partnerships pursuant to a governmental body authorizing such registration, or who are located in a jurisdiction where no such governmental domestic partnership registry exists. A contractor that institutes such registry shall not impose criteria for registration that are more stringent than those required for domestic partnership registration by the City of Key West pursuant to Chapter 38, Article V of the Key West Code of Ordinances.

- (8) ***Equal benefits*** mean the equality of benefits between employees with spouses and employees with domestic partners, and/or between spouses of employees and domestic partners of employees.

(b) Equal benefits requirements.

- (1) Except where otherwise exempt or prohibited by law, a Contractor awarded a covered contract pursuant to a bid process shall provide benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses.
- (2) All bid requests for covered contracts which are issued on or after the effective date of this section shall include the requirement to provide equal benefits in the procurement specifications in accordance with this section.
- (3) The city shall not enter into any covered contract unless the contractor certifies that such contractor does not discriminate in the provision of benefits between employees with domestic partners and employees with spouses and/or between the domestic partners and spouses of such employees.
- (4) Such certification shall be in writing and shall be signed by an authorized officer of the contractor and delivered, along with a description of the contractor's employee benefits plan, to the city's procurement director prior to entering into such covered contract.
- (5) The city manager or his/her designee shall reject a contractor's certification of compliance if he/she determines that such contractor discriminates in the provision of benefits or if the city manager or designee determines that the certification was created, or is being used for the purpose of evading the requirements of this section.
- (6) The contractor shall provide the city manager or his/her designee, access to its records for the purpose of audits and/or investigations to ascertain compliance with the provisions of this section, and upon request shall provide evidence that the contractor is in compliance with the provisions of this section upon each new bid, contract renewal, or when the city manager has received a complaint or has reason to believe the contractor may not be in compliance with the provisions of this section. This shall include but not be limited to providing the city manager or

his/her designee with certified copies of all of the contractor's records pertaining to its benefits policies and its employment policies and practices.

- (7) The contractor may not set up or use its contracting entity for the purpose of evading the requirements imposed by this section.
- (c) Mandatory contract provisions pertaining to equal benefits. Unless otherwise exempt, every covered contract shall contain language that obligates the contractor to comply with the applicable provisions of this section. The language shall include provisions for the following:
- (1) During the performance of the covered contract, the contractor certifies and represents that it will comply with this section.
 - (2) The failure of the contractor to comply with this section will be deemed to be a material breach of the covered contract.
 - (3) If the contractor fails to comply with this section, the city may terminate the covered contract and all monies due or to become due under the covered contract may be retained by the city. The city may also pursue any and all other remedies at law or in equity for any breach.
 - (4) If the city manager or his designee determines that a contractor has set up or used its contracting entity for the purpose of evading the requirements of this section, the city may terminate the covered contract.
- (d) Enforcement. If the contractor fails to comply with the provisions of this section:
- (1) The failure to comply may be deemed to be a material breach of the covered contract; or
 - (2) The city may terminate the covered contract; or
 - (3) Monies due or to become due under the covered contract may be retained by the city until compliance is achieved; or
 - (4) The city may also pursue any and all other remedies at law or in equity for any breach;
 - (5) Failure to comply with this section may also subject contractor to the procedures set forth in Division 5 of this article, entitled "Debarment of contractors from city work."
- (e) Exceptions and waivers.

The provisions of this section shall not apply where:

- (1) The contractor does not provide benefits to employees' spouses.
- (2) The contractor is a religious organization, association, society or any non-profit charitable or educational institution or organization operated, supervised or controlled by or in conjunction with a religious organization, association or society.
- (3) The contractor is a governmental entity.

- (4) The sale or lease of city property.
- (5) The provision of this section would violate grant requirement, the laws, rules or regulations of federal or state law (for example, The acquisition services procured pursuant to Chapter 287.055, Florida Statutes known as the "Consultants' Competitive Negotiation Act").
- (6) Provided that the contractor does not discriminate in the provision of benefits, a contractor may also comply with this section by providing an employee with the cash equivalent of such benefits, if the city manager or his/her designee determines that either:
 - a. The contractor has made a reasonable yet unsuccessful effort to provide equal benefits. The contractor shall provide the city manager or his/her designee with sufficient proof of such inability to provide such benefit or benefits which shall include the measures taken to provide such benefits or benefits and the cash equivalent proposed, along with its certificate of compliance, as is required under this section.
- (7) The city commission waives compliance of this section in the best interest of the city, including but not limited to the following circumstances:
 - a. The covered contract is necessary to respond to an emergency.
 - b. Where only one bid response is received.
 - c. Where more than one bid response is received, but the bids demonstrate that none of the bidders can comply with the requirements of this section.
- (f) City's authority to cancel contract. Nothing in this section shall be construed to limit the city's authority to cancel or terminate a contract, deny or withdraw approval to perform a subcontract or provide supplies, issue a non-responsibility finding, issue a non-responsiveness finding, deny a person or entity prequalification, or otherwise deny a person or entity city business.
- (g) Timing of application. This section shall be applicable only to covered contracts awarded pursuant to bids which are after the date when this section becomes effective.



**CITY OF KEY WEST
3126 Flagler Avenue
Key West, FL 33040**

ADDENDUM NO. 1 – RFQ Environmental Engineering/ ITB 14-004

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

RFI Questions Submitted:

1.) Does the bid require that respondents be a licensed PE?

Yes, you should include a Licensed PE on your team.

2.) Can a Prime submit as a sub to another firm? Also, can a sub-contractor submit with more than one firm?

Yes.

3.) Please confirm the attached (46 pages) is the complete PDF for the subject submittal. Page 1 of the PDF states that the document is 47 pages in length. It also states that the "Request for Qualifications" section is 10 pages in length. However, per the attached, the section is 8 pages. I just want to be sure there are no missing pages.

Yes there are 46 pages and there are only 8 pages in the RFQ section.

4.) Under the "Scope of Work" section on page 7 of the RFQ, services from a Resident Project Representative would be required. Would a RPR differ from the Engineer of Record in this instance?

Yes, the RPR is the on-site staff providing daily (or other agreed on frequency) oversight (e.g., inspection)

5.) May firms only submit for one discipline or would a sub-consultant be needed to satisfy all service requirements per submission?

Must submit for all, using a sub-consultant as necessary.

6.) Will there be any page number limitations for any part of the qualification package?

Unless otherwise so stated in the RFQ, no limit

7.) Is there an incumbent? If so, can you provide the company name?

There is not an "incumbent" relative to an Environmental-specific General Services RFQ.

8.) Just to clarify the RFQ instructions, please advise: Put COPY Response and CD-ROM in envelope, seal it, mark it COPY and place inside of Envelope with ORIGINAL Response and CD-ROM, then seal that envelope? One envelope inside of another, correct?

Correct.

9.) Signed certifications are required by prime and subs, or just prime?

Just prime

10.) Please confirm that the required forms (Anti-Kickback Affidavit, Public Entity Crimes Certification, Equal Benefits for Domestic Partners Affidavit, and Cone of Silence Affidavit) are to be completed by the prime consultant only.

Correct.

11.) Are insurance certificates required to be provided at the time qualifications packages are submitted?

Yes

12.) Is a "description of the contractor's employee benefits plan" (page 17 of the RFQ) required to be included with the executed Equal Benefits for Domestic Partners Affidavit?

No

13.) Please confirm that electronic signatures are acceptable as originals.

Electronic signatures are acceptable

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



Signature

CSA Central, Inc.

Name of Business



CSA Group
Supports All Green Initiatives.
Please Recycle.