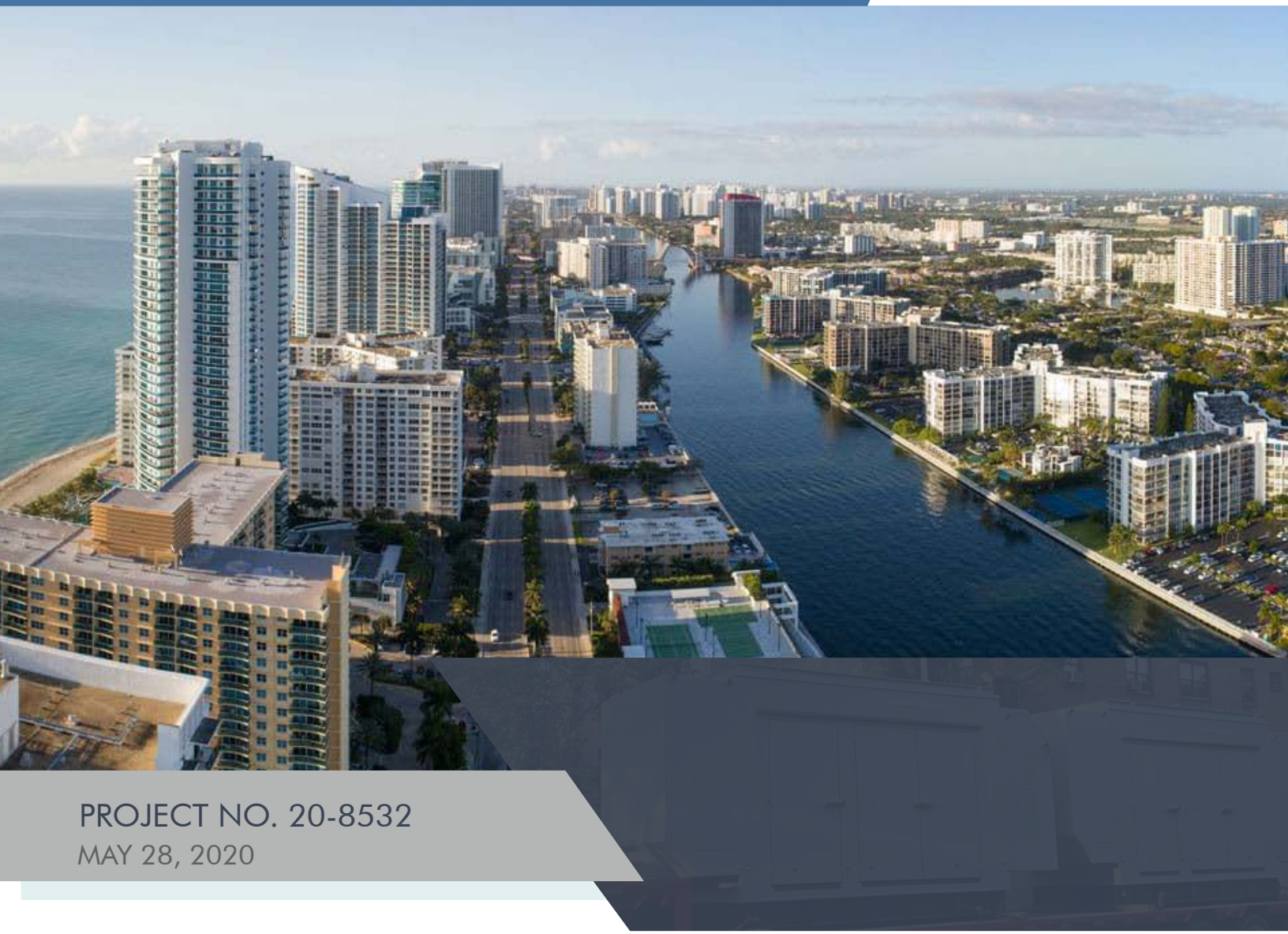
DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES

FOR BACKUP ELECTRICAL POWER GENERATORS FOR SEWER LIFT STATIONS;
E-01, E-03, E-06, W-14, W-15 & STORMWATER PUMP STATION SW-08

AT CITY OF HOLLYWOOD



PROJECT NO. 20-8532
MAY 28, 2020

CSA GROUP
EST • 1956

SUBMITTED TO:
CITY OF HOLLYWOOD
OFFICE OF THE CITY CLERK
2600 HOLLYWOOD BLVD., ROOM 221
HOLLYWOOD, FLORIDA 33020

SUBMITTED BY:
ROBERTO LEON, PE.
CSA CENTRAL, INC
8200 N.W. 41ST STREET, SUITE 305
DORAL, FL 33166
(305) 461-5484
RLEON@CSAGROUP.COM

THIS SHEET MUST BE SIGNED

RESPONDENT CHECK LIST

I M P O R T A N T: Please read carefully, sign in the spaces indicated and return with your Submittal.

Respondent should check off each of the following items as the necessary action is completed:

1. The Submittal has been signed.
2. Any required descriptive literature, etc. have been included.
3. Any information required is included.
4. Any addenda have been signed and included.
5. The mailing envelope has been addressed to:
   Office of the City Clerk
   City of Hollywood
   P.O. Box 229045.
   Hollywood, FL 33022-9045
6. The mailing envelope must be sealed and marked with Submittal Number, Submittal Title and Due date.
7. The Submittal will be mailed or delivered in time to be received no later than the specified due date and time. Otherwise Submittal cannot be considered.)
8. Submittal includes:
   a) Statement of current and projected workload
   b) List of sub-consultants
   c) Auditor's letter
   d) Organizational chart
   e) Litigation
   f) Project schedule

ALL COURIER-DELIVERED STATEMENTS OF QUALIFICATIONS MUST HAVE THE RFQ NUMBER AND TITLE ON THE OUTSIDE OF THE COURIER PACKET

Company Name:

CSA Central, Inc.

Signature and Title:

Roberto Leon, Sr. Vicepresident

Date:

5/26/2020

PROJECT SUBMITTAL

FROM: CSA Central, Inc
8200 NW 41st St, Suite 305,
Doral, FL. 33166

DATE: 5/26/2020

CITY OF HOLLYWOOD
Department of Public Utilities
c/o City Clerk
2600 Hollywood Blvd.
Hollywood, FL 33022-9045

RE: RFQ NO. 20-8532

To Whom It May Concern:

The undersigned, as Respondent, hereby declares that we have examined the Scope of Services and informed ourselves fully in regard to all conditions pertaining to the work to be done for the City of Hollywood's Consulting Services Contract – Wastewater Master Plan Update. The Respondent further declares that the only persons, company or parties interested in this Submittal or the Contract to be entered into as principals are named herein; that this Submittal is made without connection with any other person, company or companies making a Submittal; and it is in all respects fair and in good faith, without collusion or fraud.

The service to be furnished by us is hereby declared and guaranteed to be in conformance with the specifications of the City.

The undersigned agrees that should this Submittal be accepted, to execute the contract and present the same to the City for approval within twenty (20) days after being notified of the awarding of the contract.

The undersigned further agrees that failure to execute and deliver said forms of contract within twenty (20) days, will result in damages to the City.

IN WITNESS WHEREOF, I have hereunto subscribed my name on this 26 day of May, 2020, in the County of Miami-Dade, in the state of Florida.

CSA Central, Inc.
Respondent's Firm or Trade Name

Corporation Sole Proprietorship, Partnership (Circle One)

Phone No.: 305-461-5484

Address 8200 NW 41st St. Suite 305

City and State Zip Doral, FL 33166

BY: Roberto Leon
Typed and Written Signature

Sr. Vicepresident
Title

NOTARY PUBLIC STATE OF FLORIDA
MELISSA CHRISTINE EDER
Notary Public - State of Florida
Commission # GG 283415
My Comm. Expires Dec 11, 2022
Bonded through National Notary Assn.

TAB 1

CITY OF Hollywood FLORIDA

PROJECT NO. 20-8532

TITLE PAGE

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TITLE PAGE

RFQ NUMBER AND NAME

DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES

FOR BACKUP ELECTRICAL POWER GENERATORS FOR SEWER LIFT STATIONS; E-01, E-03, E-06, W-14, W-15 & STORMWATER PUMP STATION SW-08 AT CITY OF HOLLYWOOD

PROJECT NO. 20-8532

DATE MAY 28, 2020

FIRM **CSA CENTRAL, INC**

CONTACT ROBERTO LEON, P.E.

ADDRESS 8200 N.W. 41ST STREET, SUITE 305
DORAL, FL 33166

PHONE (305) 461-5484

EMAIL RLEON@CSAGROUP.COM

TAB 2

CITY OF Hollywood FLORIDA

PROJECT NO. 20-8532

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CSAGROUP EST • 1956

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TAB 3

CITY OF Hollywood FLORIDA

PROJECT NO. 20-8532

LETTER OF TRANSMITTAL

CSAGROUP EST • 1956

May 28, 2020

LETTER OF TRANSMITTAL

City of Hollywood
Office of the City Clerk
2600 Hollywood Blvd., Room 221
Hollywood, Florida 33020

RE: DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR BACKUP ELECTRICAL POWER GENERATORS FOR SEWER LIFT STATIONS; E-01, E-03, E-06, W-14, W-15 & STORWATER PUMP STATION SW-08

Dear Evaluation Committee:

In response to your Request for Statement of Qualifications, CSA Central, Inc. (CSA or CSA Group) is pleased to submit this qualification package to provide *DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR BACKUP ELECTRICAL POWER GENERATORS FOR SEWER LIFT STATIONS; E-01, E-03, E-06, W-14, W-15 & STORMWATER PUMP STATION SW-08* to the City of Hollywood (City).

The City has received a grant from the Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program (HMGP) program to install backup electrical power generators on five (5) sewer lift stations and one (1) stormwater pump station. The work consists of replacing and/or upgrading the existing emergency generators, main service equipment including switchboards and ATSs to provide 100% backup power. Some of these sites are located next to the intracoastal waterway and/or residential areas, requiring intricate siting considerations. Special considerations are noise reduction for generator operation, close coordination with Electric and Gas Utilities, additional coordination with project related disciplines, and interface with 30 to 40 year existing systems, including design and construction administration.

As will be presented in this document, CSA has a unique balance of capabilities with strong engineering services in the water/wastewater and power industry along with proven experience with emergency generators as well as deep experience working with FEMA funding programs and resiliency projects (100 Resilient City Platform Partner). A summary is presented below:

- **Staff Expertise**. CSA provides a full-service firm with all engineering and architecture services provided with in-house, Florida based professional. Our staff of licensed professional engineers are also trained in FEMA processes (Public

Assistance, Temporary Power, Cost Estimating, Benefit/Cost Analyses, among others). Further, our engineering professionals also have experience in resiliency projects, including assessments and design for Treatment Plants and Pump Stations compliant Hazard Mitigation Funding under Section 406. Our professionals also have extensive experience in zoning and permitting services that will be critical in the execution of these projects.

- **Related Projects**. CSA is currently working on the assessment and design of nine emergency generators for public housing facilities in Miami Dade County. In addition, CSA managed the deployment and compliance of temporary emergency generators for over 700 pump stations after Hurricane Maria impacts in Puerto Rico. In addition, CSA is currently a subcontractor for the FEMA Region II Technical Assistance Contract (TAC), which demonstrates our expertise related to FEMA processes.
- **Workload**. CSA currently does not have an active project with the City and is fully committed to dedicate all the resources necessary to provide the required services in an expedited manner. Our key staff is currently available to start working on this project immediately once the Notice to Proceed is received.
- **Principal Location**. All work will be performed from 8200 NW 41st Street, Suite 305, Doral, FL 33178. Our office is located less than 30 minutes from the City. CSA's authorized representative is Roberto León, PE, Senior VP, rleon@csagroup.com, 305-461-5484.
- **Ability to Complete Project on Time**. CSA commits its staff to grant full attention and workload priority to this City Project.
- **Ability to Complete Project on Budget**. CSA is fully committed to complete the project within the approved budget.
- **Experience working with FEMA and State Granting process**. CSA has previous experience managing the compliance of over $6B of federal funds as well as over $4B of FEMA funds. Combined with our engineering experience, this experience provides a significant value added to the City.

CSA would greatly appreciate the opportunity to establish a long-term relationship with the City of Hollywood. We eagerly look forward to meeting this challenge.

Respectfully Submitted,

Roberto León, PE, PMP, LEED AP, Env SP, BCEE
Senior Vice President

TAB 4

CITY OF Hollywood FLORIDA

PROJECT NO. 20-8532

SUBMITTAL QUESTIONNAIRE

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Tab 4: Submittal Questionnaire (Attachment A)

Inclusive of:

- Organizational Chart
- Financial Statement
- Organizational Chart
- Corporate Brochure
- Staff Resumes
- Certificate of Insurance
- Project Summaries

Attachment A

PROFESSIONAL ENGINEERING SERVICES
FOR
DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR BACKUP ELECTRICAL POWER GENERATORS FOR SEWER LIFT STATIONS; E-01, E-03, E-06, W-14, W-15 & STORMWATER PUMP STATION SW-08

SUBMITTAL QUESTIONNAIRE

ENGINEERING SERVICES QUALIFICATION STATEMENT
AND SUBMITTAL QUESTIONNAIRE

PROJECT NAME: **PROFESSIONAL ENGINEERING SERVICES DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR BACKUP ELECTRICAL POWER GENERATORS FOR SEWER LIFT STATIONS; E-01, E-03, E-06, W-14, W-15 & STORMWATER PUMP STATION SW-08**

PROJECT NO.: **20-8532**

1. FIRM NAME & OFFICE LOCATION (Mailing Address and Street Address)

Name: CSA Central, Inc.

Mailing Address:
Street/PO Box: 8200 NW 41st St. Suite 305
City: Doral **State:** FL **Zip:** 33166

Physical Address (if different from above):
Street: 8200 NW 41st St. Suite 305
City: Doral State: FL Zip: 33166

Phone: (305) 461-5484 Ext Fax: ( ) -

Primary E-Mail Address: RLeon@CSAgroup.com

Web Site Address: www.csagroup.com

Contacts:
1. Name: Gino Valderrama Title: VP of Operations
2. Name: Juan Melgarejo Title: VP of Business Development

2. TYPE OF ORGANIZATION

A. Check One:

- ☑ Corporation (complete Section B and G)
- ☐ Sole Proprietorship (complete Section D)
- ☐ Other (complete Section F and G
- ☐ Partnership (complete Section C and G)
- ☐ Joint Venture (complete Section E and G

B. If a Corporation, State incorporated:

Date of Incorporation: 9/29/1995

State in which Incorporated: Ohio

If an out-of-state corporation that is currently authorized to do business in the State of Florida, give the date of such authorization: February 23, 2006.

Name and Titles of Principal Officers	Date Elected
Jesus J. Suárez,	02/23/06
Frederik Riefkohl,	02/23/06
Roberto Leon,	02/23/06

C. If a Partnership, State formed:

Date of Partnership: _____

Type of Partnership (General or Limited): _____

Names and Addresses of Partners:

_____

_____

D. If Joint Venture, State formed:

Date of Joint Ventureship: _____

Names and Addresses of Joint Venturers:

_____

_____

_____

E. If a Sole Proprietorship, State created:

Name and Address of Sole Proprietor:

F. **If other than above, please describe:**

G. **a. Related Parent Company, Divisions, and Subsidiaries:**
(Attach additional information on other office locations, if appropriate)

Please attach the following:

b. Corporate Organization Chart
c. Resumes of Principal Staff
d. Corporate Family Tree
e. Company Brochure/Annual Report

3. EMPLOYEES AND PERSONNEL Provide a separate listing for personnel at the corporate (national) level, with the state (Florida) level and for the local office.

Permanent Office Staff	Number		Avg. Years With Firm		
	Corporate	Local	1-5	5-10	10+
Administrative	48	2			✓
Project Management	38	4			✓
Engineers	115	7			✓
Design/Drafting	20	2			✓
Computer Services	10	1			✓

Permanent Office Staff	Number		Avg. Years With Firm		
	Corporate	Local	1-5	5-10	10+
Clerical /Technicians					
Procurement	4	1			✓
Project Control and Estimating	25	1			✓
Construction Management	24	3			✓
Research and Development					

Local Office Location:
8200 NW 41st St, Suite 305, Doral, FL. 33166

Personnel in Organization by Discipline.

Discipline	Engineers		Designers
	Reg	Total	Total
Civil	62	62	20
Sanitary			
Structural	14	14	4
Mechanical	11	11	5
HVAC	10	10	3
Process			
Electrical	16	16	5
Instrumentation	2	2	
Industrial			

Discipline (*Procurement*)	**Personnel**
Capital Equipment Buyers	
Subcontract Administrators	
Bulk Material Buyers	
Inspection/Expediting	10
Clerical/Technical Support	

Discipline (*Construction Management*)	**Personnel**
Field Superintendents	
Home Office Management	
Planners (Site, City, Community)	
Architects	65
Other	

Maximum Man-Hours Available Per Year:	626,080
Current Estimated Man-Hours Per Year:	375,648

4. FINANCIAL INFORMATION

A. Attach a copy of current audited income statement and balance sheet.

5. WORK EXPERIENCE:

A. Types of Services Provided (Check Yes or No)

	Yes	No		Yes	No
Feasibility Studies	☑	☐	Stress Analysis*	☐	☑
Drawings					
Preparation of Specifications	☑	☐	Pipeline	☑	☐
Construction Mgmt. Services	☑	☐	Surveying	☐	☑
Process Problem Analysis	☑	☐	Direct Hire Field Construction	☑	☐
Energy Conservation Studies	☑	☐	Detailed Instrumentation & Control	☑	☐
Soil and Foundation Studies	☑	☐	Process Design	☐	☑
Foundation Design	☑	☐	Equipment Design	☐	☑
Structural Design	☑	☐	Detailed Electrical	☑	☐
Testing Capability	☐	☑	Detailed Piping Design	☑	☐
Detailed Mechanical	☑	☐	Construction Management	☑	☐

Procurement ☑ ☐ Inspection/Expediting ☑ ☐

B. Drafting Method Utilized:

*Manual ☐ Computer ☑ If Computer, What Program: CADD/ BIM

C. Please attach summaries for projects, related to the type of work to be awarded as a result of this submittal, completed by your firms including:

1) Location of project and client
2) Description of project
3) Your scope of involvement in project
4) Contract type (e.g. reimbursable/fixed fee/fixed price)
5) Approximate value of contract
6) Duration of work
7) Project Manager Utilized

6. EXPERIENCE WITH THE CITY OF HOLLYWOOD

A. Most Recent City of Hollywood Work Experience: (Date/Location/Description)

Design Professional Services Hollywood Park Elementary School - Ongoing - Hollywood, FL

Districtwide Architectural Services for the FDOT District 4 - 08/2018 - Parcel 178, 2201 N. SR 7 (US 441), Hollywood, FL

Fort Lauderdale/Hollywood International Airport Roof Replacement - 2010

B. Current City of Hollywood Engineering services agreement, if any: (Agreement Number/Expiration Date/Location/Description)

No current contracts with the City of Hollywood.

7. SUBCONTRACTED SERVICES:

List Subcontractor/ Sub-consultant firms expected to be utilized, and their portion of the work below:

Name of Firm	Area of work to be Performed under this agreement
Langan Engineering	Geotechnical Services
Avirom and Associates, Inc.	Surveying and Mapping

Also, provide resumes of individuals from these firms whom the Subcontractors shall utilize for completion of the construction.

Identify those subcontractors that are Minority/Women's Business Enterprises and repeat required information in "Minority/Woman Business Participation", below for said Subcontractors. (THIS REQUIREMENT FOR M/WBE INFORMATION IS VOLUNTARY)

8. BUSINESS SIZE AND CLASSIFICATION

A. Size (check one)

☑ Small
A domestic concern that normally employs less than 500 persons, or as defined by section 3 of the Small Business Act.

☐ Large
A domestic concern which, including domestic and foreign divisions and affiliates, normally employs 500 or more persons, is independently or publicly owned or controlled and operated and

which may be a division of another domestic or foreign concern.

f. B. Classification (check where applicable; may be more than one)

☐ Foreign:
A concern which is not incorporated in the United States or an unincorporated concern having its principal place of business outside the United States.

☑ Minority:
A business, at least 50% of which is owned by minority group members, or, in case of publicly owned businesses, at least 51% of the stock of which is owned by minority group members. For the purpose of this definition, minority group members are Black-Americans, Hispanic-Americans, American-Orientals, American-Indians, American-Eskimos, and American-Aleuts.
(THE REQUIREMENT FOR M/WBE INFORMATION IS VOLUNTARY)

☐ Women:
A business that is at least 51% owned and controlled by a woman or women.
(THE REQUIREMENT FOR M/WBE INFORMATION IS VOLUNTARY)

☐ Nonprofit:
A business or organization that has received nonprofit status under IRS Regulation 501C3.

☐ Sheltered:
A sheltered workshop or other equivalent business basically employing the handicapped.

Please indicate in the space below how your firm complies with the definitions selected above.

CSA Central, Inc is certified by the National Minority Supploer Diversity Council (NMSDC) as a Minority, Small Business in the State of Florida.

9. PROFESSIONAL ENGINEER'S LICENSE:

Respondent must hold a valid State of Florida Professional Engineer's License to be considered a qualified bidder.

State of Florida Professional Engineer's License No.: 28096

Date: expires 02/23/2021

Primary Classification: _____

10. QUALIFICATION FORM PREPARED BY:

Name (print or type): Roberto Leon

Title: Sr. Vicepresident

Signature:

Address: 8200 NW 41st St. Suite 305. Doral, FL 33166

Telephone Number: 305-461-5484

KEY TEAM ORGANIZATIONAL CHART

CITY OF Hollywood FLORIDA

QA/QC
JUAN MELGAREJO, PE

PRINCIPAL-IN-CHARGE
ROBERTO LEON, PE

PROJECT MANAGER
ERNESTO MARIN

MECHANICAL ENGINEER
GINO VALDERRAMA, PE

STRUCTURAL ENGINEER
RODERICK HOSANG, PE
VICTOR FIGUEROA, PE

LEAD ELECTRICAL ENGINEER
JOSE PRATS, PE

ELECTRICAL DESIGNER
JUAN LUIS RIOS, PE
JOSE CANO, E.I.T.

CIVIL SITE / PERMITTING
JUAN VILLAR, PE
GILBERT CRUZ, E.I.T.

GIS
ELENA VAZQUEZ

BID/CONSTRUCTION SUPPORT
LUIS OSELLA

WATER RESOURCES / RESILENCY
HANS FIGUEROA, PE
WILSON ORTIZ, PE

SURVEYING
JOHN DOOGAN, P.L.S.
(AVIROM AND ASSOCIATES)

ARCHITECTURE
RAFAEL TORRENS, RA

GEOTECHNICAL
CARLOS ORTIZ, P.E.
(LANGAN ENGINEERING)

ROBERTO LEÓN, P.E., LEED® AP, PMP

Senior Vice President

Education

M.S. Engineering
Environmental & Water Quality,
Massachusetts Institute Technology, Cambridge, Massachusetts, 1997

B.S. Environmental Engineering
Cornell University, Ithaca, NY, 1996

Professional Licenses and Registrations

Professional Engineer:
FL No. 73680
MD No. 42480
DC No. 906731
PR No. 16949
NY No. 094761

Project Management Professional (PMP):
No. 1495575

LEED®AP-BD+C (10274020)

Board Certified Environmental Engineer (BCEE)

American Academy of Environmental Engineers (AAEE)

Training & Certifications

- Construction Industry Institute University of Texas at Austin Executive Leadership Course, 2006
- FEMA Certifications: 100.b, 200.b, 632.a, 633, 634, 700.a, 800.b, IS-00546, IS-00276.a, IS-0077.a, IS-276.a-B-C, IS-277a-B-C
- Asphalt Paving Level I
- Advanced MOT (44081)

Mr. León has spent over 19 years working in the engineering, architectural, program management, environmental and construction industry in the private and public sector. His experience includes institutional, water and wastewater, energy, environmental, transportation and buildings sector projects in the United States, Puerto Rico and Latin America. Currently serving as the Senior Vice President of Operations of CSA Group, Mr. Leon is fully versed in construction techniques, industry standards, and applicable local and national building codes. He has participated as Principal in Charge in multiple construction supervision and inspection services projects; making sure that construction is performed in strict compliance with the contract documents (drawings and specifications) and within the allocated construction period.

PROFESSIONAL EXPERIENCE

Architectural and Engineering Professional Contract for Emergency Power Generator Assessments and Buildings Retrofit - Miami-Dade County, FL
CSA is working with the Miami-Dade Public Housing Community Development to conduct assessments in 12 of their multi-story Assisted Living Facilities (ALFs) buildings and retrofit them with new 100% capacity generators. CSA conducted the required assessments to define electrical, architectural, structural, mechanical, and environmental considerations that would entail the retrofit so that an accurate cost estimate can be developed. Mr. León is the Principal-in-Charge for this project, overseeing negotiations, change orders and communication with the Client. Client: Miami-Dade County Public Housing Development, Francisco Trujillo (305) 888-9744, francisco.trujillo2@miamidade.gov. (2018 – 05/2020)

Continuing Services for Civil Engineering - City Ft. Lauderdale, FL
CSA Group was contracted by the City of Fort Lauderdale to provide civil engineering consulting services to include design, permitting, preparation of construction documents and participation in the implementation of various City projects. CSA Group was directly responsible for all services as it relates to roadway and site design, neighborhood improvements and beautification, underground utility design, site grading and stormwater runoff modeling and design, erosion and sediment control design, pavement marking and signage design, maintenance of traffic (MOT), engineering analysis, cost estimation and reporting, permitting, construction observation and inspection, shop drawing review, preparation of project rendering and presentation materials, specialized training to City staff, and coordination with City staff, consultants, utility owners and contractors. Mr. Leon was the Principal for this 5-year contract, handled negotiations and served as main point of contact. (2011 - 2016)

Architectural and Engineering Construction Services for New Building Construction: Hialeah Housing Authority - Hialeah, FL
CSA was contracted by the Hialeah Housing Authority (HHA) to provide design services, which incorporates site design, site layout and site revitalization services. Services included support of demolition, and renovation of existing sites and new constructions, both interior and exterior. Mr. León is the Principal-in-Charge for this contract. Client: Hialeah Housing Authority (HHA), Miguel A. Hernandez (305) 888-9744, miguel.hernandez@hialeahhousing.org. (2019 – Ongoing)

City of Miami Beach Architectural and Engineering Services for Capital Renewal & Replacement Projects
CSA Group was contracted by the City of Miami Beach to provide Architectural, Environmental Engineering, and Civil Engineering services for the Capital Renewal and Replacement Program ("CRR Program"). The intent of the CRR Program is to provide funding a proactive renewal and replacement of the City's facilities and the systems within those facilities (e.g., HVAC, roofs, fire safety systems) CSA has been

commissioned to perform services for the following tasks: Architecture and Engineering Design for improvement of restroom facility at City's Parking Garage (400 West 42 St), Architecture and Engineering Design for improvement of restroom facility at City's Property Management Facility (1800 Bay Road). Mr. León is the Principal-in-Charge for this contract. Client: City of Miami Beach, Jorge Guanchez (786) 390-2040, jorgeGuanchez@miamibeachfl.gov. (2018 – 2021)

Architectural & Engineering Services: Broward Community College, College-Wide – Broward County, FL
Principal-in-Charge overseeing indefinite quantity contract on an on-call basis. Current projects include the design of improvements to the Fleet Building (approximately 5,000 sq. ft.) in the Davie Campus as well as civil engineering services within the campus. Client: Broward County, FL, Robert Bellot (954) 830-1007, rbellot@broward.edu. (2012 – 2019)

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. Mr. León was the Principal in Charge for this Program and Senior Environmental Engineer.

Water Control Structures S-151 Replacement and Automatization: South Florida Water Management District (SFWMD) - Broward County, FL.
The CSA design team was requested to design a cast-in-place box culvert that would maintain the existing water discharge capacity and, to allow complete access to the gates for maintenance purposes following the requirements of the district. CSA is providing services related to the Design Process including, Design calculations, studies, plans, specifications, opinions of probable construction costs, construction schedule and operations plan of the design for replacement of the S-151 structure in accordance with Everglades Restoration & Capital Projects Engineering Submittal Requirements. Mr. Leon was in charge of reviewing final design for Quality Control/ Assurance. (04/2020)

Cleveland Clinic Weston Campus - Weston, FL
The approved master plan for expansion organizes the facility along a linear central spine with inpatient and outpatient functions on either side. The expansion will occur on both sides of the existing facility to enhance the architectural presence of the building on the site. Mr. Leon performed as Principal in Charge/Senior Project Manager for the civil engineering scope of the project as a subconsultant to SOM including East Parking Design, Neurology/Cancer Clinic Expansion SD/CD Services, and North Parking expansion.

NYC DDC "Build it Back" Hurricane Sandy Affected Community Recovery CM/Design/Build
New York City Build it Back is the City's program to assist homeowners, landlords and tenants in the five boroughs whose primary homes were damaged by Hurricane Sandy. Funded by the Federal Community Development Block Grant – Disaster Recovery (CDBG-DR) Bill passed by Congress, the goal of NYC Build it Back is to help affected residents return to safe, sustainable housing by addressing unmet housing needs. CSA is responsible for design, permitting and project management. Mr. Leon works as the Principal in Charge of this project overseeing the architecture and design of the project.

Central Park Elementary School – School Board of Broward County, FL
The highest priority for this project is the replacement of the fire sprinkler system for the entire campus. CSA Group is required to plan the work around the center's schedule to allow normal school activities to continue without interruptions and to focus on safety and prompt completion of construction. Mr. Leon is Principal In charge for this project. Client: The School Board of Broward County, FL, Divine Amoah, divine.amoah@browardschools.com, (754) 321-1546. (2016 - 2019)

JUAN A. MELGAREJO, Ph.D., P.E.

QA/QC

Education

Ph. D. in Civil Engineering
University of Michigan
1987

MS in Civil Engineering - Highways and Materials
University of Michigan
1986

MS in Civil Engineering- Construction Engineering and Management
University of Michigan
1983

BS in Civil Engineering
Universidad Iberoamericana.
México 1980

Professional Licenses and Registrations

Professional Engineer

FL No. 0044059

TX No. 96946

MX No. 697912

Teaching Experience

University of Miami, Adjunct Professor, College of Architecture and Engineering - Construction Management Course. 2011 - Present

University of Michigan, Adjunct Professor, Department of Civil Engineering, Construction Management Graduate School - Construction Management Course. 1987

Honors and Awards

Tau Beta Pi, Engineering Honor Society, USA – Member

Chi Epsilon, Civil Engineering Honor Society, USA - Member

Dr. Melgarejo has over 35 years of experience in planning, project and program management, contract negotiations, financing and start-up for turnkey infrastructure projects, with a cumulative value of more than $8.8 billion USD, in the U.S.A. and Latin America. Responsible for Bidding strategy, contract negotiations, project financing, planning and overall management for the following projects of major Highway Infrastructure projects. Most recently he performs final QA/QC and Peer Review for projects and major bids. His main responsibility is leading the companies Business Development efforts across CSA's offices.

PROJECT EXPERIENCE

Hercilio Luz Suspension Bridge Rehabilitation Project - Florianopolis, Santa Catarina, Brazil

CSA Group was selected to lead a global consortium of A/E/C firms, undertaking the major structural rehabilitation of the Hercilio Luz Suspension Bridge. The Hercilio Luz Bridge is the first bridge constructed to link the Island of Santa Catarina to the mainland and is the longest suspension bridge in Brazil. The central span was considered quite long at the time of its opening and is still one of the 100 largest suspension bridges of the world. The primary objective of this project was to restore traffic services to the community of Florianopolis. The team established an aggressive work plan to successfully meet the fast track schedule demands of this assignment with a target construction schedule of 940 days. One of the key challenges was to maintain the historical value of the bridge which is a touristic emblem for the city and the state. The project had to adhere to Brazil's strict environmental protection policies. Total project estimated cost of $190 million USD.

Tocumen Airport, North Terminal Expansion - Panama City, Panama.

Project Management Services for the Government of Panama. $1.5 BUSD investment. Port of Manzanillo, Construction of Container Port, Manzanillo, Mexico. Contract with ICTSI in cooperation with CHEC China. Estimated cost $300 million USD.

Rehabilitiation of the Puente de las Americas - Panama City, Panama

Responsibilities included traffic control plans, signing and pavement markings, and plans preparation. The rehabilitation of Puente de las Americas consists mainly of conducting studies, research, design and preliminary calculations needed to carry out the replacement of the concrete slab and floor beams, the relocation of public utilities that look involved in this process, the rehabilitation of the metal structure of the arch and the rest of the superstructure and substructure, and painting of the bridge. Total Project estimated cost of $80 million USD.Client: Minister of Public Works, Roberto R. Forero, P.E., (507) 507-9525. (2011 - 2014)

Cancún - Tulúm Highway. 30-mile long road expanded to four lanes, with a project cost of $25 million USD.

Puebla – Teziutlán Highway. 65-mile long, two-lane highway, with a project cost of $170 million USD.

Ciudad Victoria, Tamaulipas. San Luís Potosí Highway, Juan Capitán-Río Chihue segment. A 28 -mile long, four-lane highway with a

Colón Interoceanic Highway (parallel to the Panama Canal) and the City of Panama Northern Corridor, in the Republic of Panama.

Total project value of $526 million USD. This 43-mile long transportation project was partially financed ($131 MUSD) by a private bond offering in the U.S.A. This financing replaced other bridge loans contracted with the Mexican export-import bank, Banco Nacional de Comercio Exterior (Bancomext) and Banco DISA, a Panamanian bank.

Chicoasen II, Hidroelectric Plant, Comision Federal de Electricidad (CFE), Chiapas, Mexico.

Project Director of a 280 MWH hydroelectric plant. Design-Build-Finance effort by a consortium of Mexican and Chinese Contractors. This project will have the largest Bulb-Turbine installation in Latin America. $386MUSD.

Design Engineering for Panama Metro Line 3, HPH JV Consortium

QA/QC Officer, in charge of overseeing the plans, design and drawings of the entire alignment of the project. CSA provided Design Engineering Services that included construction of the civil works, auxiliary facilities of line and stations, and the supply and installation of the integral railway system of the Panama Metro Line 3. The project consisted of carrying out the Technical Cadastre Survey and relocation design of all public utilities along the 25 kms of Line 3 of the Metro de Panama, which contains 14 stations starting from Albrook Terminal Station (Line 1) to Ciudad del Futuro. (2018 – 2020)

Miami Dade County Public Schools Capital Improvement and Facility Reconditioning Program, Florida, USA.

Program Management, Coordination of all capital improvement activities. Estimated cost $400 million USD. project cost of $100 million USD.

Multi-purpose Sports Facility sponsored by the International Olympic Committee (IOC), Port Au Prince, Haiti.

Project Executive, responsible for feasibility Study, Pre-Project Alignment Assessment, Project Definition Rating Index, and Opinion of Probable Cost, Design and Construction. Project completed in 2014. Cost $19 MUSD.

Everglades Restoration 5-Year Program, South Florida Water Management District (SFWMD) - FL

Construction Management, Chief Consulting Engineering Services, Engineering support and hydraulic analysis. Estimated project cost $7.8 Billion USD.

Panama Canal Expansion

Dr. Melgarejo was the CSA representative for the team assembled to provide Program Management services to the Panama Canal Authority for the $5.2 Billion USD expansion of the transoceanic transportation waterway.

Convention Center District - Panama City, Panama

Preparation and delivery of monthly reports of Quality Control of the work and preparation of daily reports indicating any possible interruptions found during inspections, corrective measures and recommendations. Elaboration of Feasibility Studies, market analysis, strategic planning, financial projections including a short and long-term business plan. $140 million USD.

ERNESTO J. MARIN

Project Manager/Construction Management

Education

M.S. Business Administration
University of Miami
Miami, FL 1998

Continuing Studies, Construction Management
University of Miami
Miami, FL 1984

Computer Science
ITESM
Monterrey, Mexico 1983

Training & Certifications

- TIN# M650210603910
- CTQP Final Estimates, Level 1
- CTQP Asphalt Paving Technician, Level 1
- CTQP Asphalt Paving Technician, Level 2
- FEMA - IS-00100.a, Introduction to Incident Command System, ICS-100
- FEMA - IS-00200.b, ICS for Single Resources and Initial Action Incident, ICS-200
- FEMA – IS-634, Introduction to FEMA's Public Assistance Program

FEMA Disasters

- Hurricane Irma
- Hurricane Wilma
- Hurricane Rita
- Haiti Earthquake
- Hurricane Katrina
- Miami-Dade County flooding

Affiliations

- Former President and Board of Director, Juvenile Diabetes Research Foundation South Florida Chapter
- Former President and now Director of the Nicaraguan American Golf Association (NAGA)

Mr. Marin has over 35 years of vast experience in Project Management, Project Engineering, Construction Management, Bidding, Contract Management and Administration, Inspection, Estimating and Scheduling. Most recently he was the Project Manager for a 7-year contract with the South Florida Water Management District (SFWMD), consisting of over 5 task orders totaling over $5 Million. Among those task orders is included the replacement of 5 Pump Stations Monitoring Panels acrss the District's Field Stations located in South Florida. His experience includes working on international projects as well as a variety of locations in the United States.

PROFESSIONAL EXPERIENCE

Structure S-151 Culvert Replacement: South Florida Water Management District (SFWMD) - Ft. Lauderdale, Florida

The structure allows release of water from WCA 3A to meet water needs for South Miami- Dade County and to discharge excess water to tide from WCA 3A and 3B, when capacity is available in the Miami Canal. Routine inspections over the years have determined that the structure can no longer be considered reliable. The scope of work includes design calculations, studies, plans, specifications, opinions of probable construction costs, construction schedule, operations plan, and continued development of the design for replacement of the S-151 structure. Mr. Marin is the Project Manager for this Contract. Client: South Florida Water Management District (SFWMD), Jennifer McKim (561) 682-2621, jmckim@sfwmd.gov. (2015 – 08/2020)

S2 S3, S4, S7 & S8 Pump Stations Monitoring Panels Replacement: South Florida Water Management District (SFWMD)

Project Manager and Contract Administrator. The scope of work consists of replacing the existing engine monitoring panels with new PLC based monitoring panels. This includes installation of new sensors, instrumentation, conduit and wiring to provide emergency shutdown of the engine. Once installed these sensors, instruments, conduit and wiring will automate the engine blower bypass valve. Client: South Florida Water Management District (SFWMD), Greg Coffelt, (561) 682-6853. (2016 – 04/2020)

Big Cypress Basin (BCB) Electrification of Cork 1, Cork 2, Cr951-1(S), Cr951-2(N) And FU-5 Generator Addition: South Florida Water Management District (SFWMD) – Collier County, FL

Construct the new building including equipment and electrical systems, followed by complete performance and operational testing, startup and commissioning so the building is fully functional. Any existing control buildings shall be decommissioned, demolished and removed. Identify the location for the new control building such that the building access door faces the water control structure and provides line of sight access to gate operations from inside the building. Mr. Marin serves as Project Manager for this project. Client: South Florida Water Management District (SFWMD), Jeffrey LeBlanc (561) 682-2614. (2017 – 04/2020)

Continuing Services for Civil Engineering - City Ft. Lauderdale, FL

Mr. Marin oversaw the Construction and Project Management of this contract for the City of Fort Lauderdale to provide civil engineering consulting services to include design, permitting, preparation of construction documents and participation in the implementation of various City projects. CSA Group was directly responsible for all services as it relates to roadway and site design, neighborhood improvements and beautification, underground utility design, site grading and stormwater runoff modeling and design, erosion and sediment control design, pavement marking and signage design, maintenance of traffic (MOT), engineering analysis, cost estimation and reporting, permitting, construction observation and

inspection, shop drawing review, preparation of project rendering and presentation materials, specialized training to City staff, and coordination with City staff, consultants, utility owners and contractors. Client: City of Fort Lauderdale, Elkin Diaz, P.E. (954) 828-6539, ediaz@fortlaiderdale.gov. (2015-2016)

Communication Towers Inspections (13 Towers): South Florida Water Management District (SFWMD)
Identified towers are inspected and a detailed Tower Description and Inspection Summary prepared to identify completion of identified repairs from pervious assessments and additional deficiencies to be addressed. CSA is responsible for gathering information from the team of multiple contractors and assembling into an overall report to provide to the owner. Key elements inspected include Structure Condition, Finish, Lightning, Grounding and Lightning Protection, Antennas and Lines, Appurtenances, Insulator Condition, Guy Lines, Tower Concrete Foundation, Guyed Mast Anchors and Tower Alignment. Client: South Florida Water Management District (SFWMD), Robin Deaton, P.E. (561) 682-2517, rdeaton@sfwmd.gov. (2018)

Stormwater Treatment Area 2, South Built Out, Construction Management: South Florida Water Management District (SFWMD) – Palm Beach & Hendry Counties, FL
The intent of the District was to design and construct an additional Stormwater Treatment Area (STA) on Compartment B land to further assist the existing STAs in improving the quality of water entering the Everglades Protection Area (EPA). The long-term Everglades water quality goal is for all discharges to the EPA to achieve and maintain compliance with water quality standards, including phosphorus, as established in Rule 62-302.540 of the Florida Administrative Code. The Project was a component of the Long-Term Plan (LTP) and permitted the State of Florida and the District to proceed to fulfill their obligations under the Everglades Forever Act (EFA, F.S. 373.4592), and is intended to help achieve compliance with the phosphorous limits and levels established under Florida Law, Rule 62-302.540, F.A.C. (the Phosphorous Rule), and the Consent Decree entered in United States v. SFWMD, et al., Case No. 88-1886-CIV-Moreno (S.D. Fla.) Mr. Marin is the Senior Project Manager for this contract. Client: TY Lin International / HJ Ross, Kevin Snell (561) 682-2588, ksnell@sfwmd.gov. (2005 - 2009)

Local Agency Program | FDOT District 6 - Miami-Dade County, FL
Construction Contract Administrator. Services include coordinating with local LAP certified government agencies to develop, design, and acquire right-of-way and construction transportation facilities. The Local Agency Program is administered and funded by the Federal Highway Administration (FHWA) and the Department enters into Local Agency Program agreements with Certified Local Agencies to receive reimbursement for approved improvements. Mr. Marín was responsible for the coordination, contract administration and monitoring of construction contracts. Client: Florida Department of Transportation. (2012)

Hurricane Irma Debris Monitoring - Miami-Dade County Public Schools, FL
CSA provided Debris Monitoring Services for the Hurricane Irma Debris Removal Program of Miami Dade County Public Schools. As a result of the passage of Hurricane Irma, over 400 schools had negative impacts in their properties. CSA provided monitoring services initially for contractor's working a force account basis and later monitored hangers and leaners cutting operations as well as debris hauling. Mr. Marin is the Debris Monitoring / Logistics Officer and is working on validating information in database and ensuring FEMA compliance. Client: Mr. William Wever, Property Loss Control Director, MDCPS, bwever@dadeschools.net, 305-995-7812. FEMA Disaster #4337. (09/2017 – 08/2018)

FEMA-funded Reconstruction Program – FEMA Disaster #1345 - Miami Dade County, FL
Mr. Marin was the Construction Manager for engineering and construction of over 3,000 sites damaged by flooding in Miami-Dade County. This $350 Million Program included assisting with contracting and oversight of over 150 consultant and contractors that participated in the program. Client: Miami-Dade County Department of Environmental Resources Management (DERM), Eduardo Vega, P.E. (786) 552-8571 (2001 – 2006). Client: Target Engineering, Inc., Ramzi Asfour, P.E. (305) 436-8877, ramzi@targetengineering.com. (2006)

JOSÉ I. PRATS, P.E.

Lead Electrical Engineer

Education

BS in Electrical Engineering, University of Puerto Rico 1991

Professional Licenses and Registrations

Professional Engineer:

Puerto Rico License No. 12739

Florida License No. 68962

Professional Affiliations

Puerto Rico College of Engineers and Land Surveyors

Association of Energy Engineers

Technical Courses

Photovoltaic's Training for Installation and Certification

Photovoltaic Systems and Certification Seminar

Underground Cable Systems Principles and Practices

Availability

40%

Mr. Prats has over 25 years of experience in electrical consulting services, including electrical power, lighting and communications design. He has performed the role of Project Manager for electrical system projects, Technical Leader of MEP Disciplines and Engineering Manager.

PROFESSIONAL EXPERIENCE

A/E Professional Contract for Emergency Power Generator Assessments and Buildings Retrofit - Miami-Dade County, FL

CSA is working with the Miami-Dade Public Housing Community Development to conduct assessments in 12 of their multi-story Assisted Living Facilities (ALFs) buildings and retrofit them with new 100% capacity generators. Mr. Prats is the Electrical Engineer for this project. He has been tasked with conducting field visits to determine existing loads, prepare one-line diagrams for the existing and proposed conditions, performing existing demand load calculations to determine size for the 100% Capacity Generator following NFPA 70 and other applicable codes. Client: Miami-Dade County Public Housing Development, Francisco Trujillo, (305) 888-9744, francisco.trujillo2@miamidade.gov. (10/2019 – 06/2020)

Chlorine Building: WASD South District Wastewater Treatment Plant – Cutler Bay, FL

The Miami-Dade Water and Sewer Department (WASD) existing Chlorine Building is a reinforced concrete structure designed in 1981 for the purpose of storing and the application of gaseous chlorine to the effluent for disinfection purposes. Due to the age and conditions facility is in need of upgrades consisting of repairs, rehabilitation, replacement. CSA was contracted by WASD to develop Construction Documents for the Scope of Work developed by CD PMCM. CSA is tasked with providing the Technical Memorandum to specifically perform evaluations, confirm project Scope of Work, and identify the design criteria. Mr. Prats is the Electrical Engineer of Record, responsible for reviewing electrical drawings, coordinating with the manufacturer and verifying calculations. Client: Miami-Dade Water and Sewer Department (WASD), Tiffany Harrison, (443) 810-6172, tiffany.harrison@miamidade.gov. (2018 – 05/2020)

Ponce Health Science University (PHSU)

PHSU is a private university that will construct a 130,000 sq. ft. 5-story building to expand their facilities and increase their number of students. The facilities will include classrooms, cafeteria, administration offices, an auditorium, and a parking garage. CSA is providing electrical, mechanical, civil, and structural engineering design. José Prats is in charge of the electrical part of the project. (2019 - present)

Orlando International Airport Automated People Mover (APM) Guideway, Orlando, F

This project was the completion of the APM guideway structure to the South Airport Complex Station of approximately 450 meters. CSA provided surveying and electrical engineering services. Mr. Prats prepared the electrical drawings for the grounding system for the sub-structure of the APM guideway. (2014 - 2015)

Engineering Services for a Solar Collector Substation (ORIANA I)

GE Digital Energy (GE) has contracted CSA to provide professional engineering and design services for the electrical, protection and control, communications, and structural design for the construction of a collector substation (Oriana I) located in Puerto Rico. The solar facility was constructed on a property that is approximately 100 "cuerdas", located approximately 1 kilometer north of road PR-2. The approximate dimensions of the solar collector substation is 160' by 100'. The outdoor electrical substations is 50 MVA – 115KV to 34.5 KV. Mr. Prats was responsible for the project management and the electrical design of the electrical substation. (2015 - 2016)

Orange County Public Schools NW Bus Depot – Orlando, FL
This project entailed the construction of a new fueling facility on site with the 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 distribution system, portable installation coordination, dumpster enclosure, fencing, wastewater systems, electrical light pole relocation, landscape/irrigation relocation and an electrical sub-panel at a minimum of twenty feet (20') from the diesel tank. Mr. Prats was responsible for the design of the parking lot lighting, power design for the diesel dispensing facility and offices. (2012 - 2013)

QCells Carolina Solar Farm, Hanwha QCells America
Hanwha QCells America has plans to develop solar energy generation facilities in Carolina, Puerto Rico. The Carolina facility will generate 40 MW. CSA was working on the preparation of the design and construction documents for the electrical substation that will step up from the 34.5 KV electrical lines on 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 was responsible for the electrical design of the substation and 115 KV line, and coordination with the Power Company for the interconnection. (2013 - 2014)

Coamo Bicycle and Pedestrian Trail
This project consists of the design for the construction of a combined bicycle and pedestrian and route of approximately 1.6 Km along PR-546, between PR-153 and Coamo Thermal Springs Complex. Mr. Prats prepared the lighting drawings for the route and the relocation of electrical and communication utilities for the project development. (2015 - 2016)

115KV Underground Cable Loop, Puerto Rico Electric Power Authority (PREPA)
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 six phases of this $130 million project. He prepared design up to the 50% level prior to contract bidding, and participated on the evaluation committee for the selection of the Design Build Construction contractor for the different project phases. (2000 - 2004)

Electrical Distribution Upgrade at VA Hospital, Department of Veterans Affairs Administration (DOVA)
This project required to upgrade the 4.16 KV and 480 volt system in the main building at the Health Care Facility. The Veterans Affairs (VA) hospital housed the main electrical distribution equipment systems in rooms C-37 and C-38 of Building #1. 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, the VA wanted to renovate and relocate the main electrical distribution equipment to Building #1. The new equipment is located in a new utility building being constructed on the south side of Building #1, near the parking area. The hospital must maintain normal operations during the construction of this project. Mr. Prats is the Project Manager. (2006 - Present)

Dynamic Toll Lane/Bus Rapid Transit
The project is a new concept for an express lane with a changing tolling structure in which the toll fares change according to the traffic conditions to keep the lane operating at a specific speed. The lane is shared with a Bus Rapid Transit system. The implementation required 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 and obtained the Power Company endorsement. (2012)

Highway PR-66, Puerto Rico Highway and Transportation Authority (PRHTA)
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. (2008 - 2009)

PR-181 and PR-17 intersection
Mr. Prats prepared the construction drawings and specifications for the utilities relocation, lighting system and communication infrastructure for the intersection improvements. (2010 - 2011)

JOSE A. CANO, E.I.T.

Electrical Designer

Education

B.S. Electrical Engineering, Florida International University, 2017

Certifications and Trainings

IMSA Traffic Signal Level (MOT certification pending)

AGI-32 Software

Roadway Visual Tools

MicroStation

AutoCAD MEP

Revit MEP

Electrical Engineer in Training with over three years of experience working in a variety of Transportation, Municipal and Educational projects. Mr. Cano's experience includes performing photometric calculations with AGI-32 Software and Roadway Visual Tools. Additionally, he is proficient in other engineering softwares such as MicroStation, AutoCAD MEP and Revit MEP. He brings assitance to the MEP team by preparing CADD plans, generating reports, attending field visits and performing electrical calculations and assisting the Project Manager in various projects simultaneaously.

PROFESSIONAL EXPERIENCE

A/E Professional Contract for Emergency Power Generator Assessments and Buildings Retrofit - Miami-Dade County, FL

CSA is working with the Miami-Dade Public Housing Community Development to conduct assessments in 12 of their multi-story Assisted Living Facilities (ALFs) buildings and retrofit them with new 100% capacity generators. CSA conducted the required assessments to define electrical, architectural, structural, mechanical and environmental considerations that would entail the retrofit so that an accurate cost estimate can be developed. Mr. Cano is the Electrical Designer for this project. He has been tasked with conducting field visits to determine existing loads, prepare one-line diagrams for the existing and proposed conditions, performing existing demand load calculations to determine size for the 100% Capacity Generator following NFPA 70 and other applicable codes. Additionally, he is preparing floor plans detailing the location of the proposed equipment and connections. Client: Miami-Dade County Public Housing Development, Francisco Trujillo, (305) 888-9744, francisco.trujillo2@miamidade.gov. (10/2019 – 06/2020)

Retrofitting of Fire Station 20 to Comply with FEMA 361 Standards "Safe Room" – Islamorada, Village of Islands, FL

Electrical designer for the design of a FEMA 361 safe room at Fire Station 20, located at 81850 Overseas Highway in Islamorada, Florida. CSA's services include Professional Design, Engineering, and Surveying Services. Mr. Cano is responsible for all electrical design of the infrastructure, under the supervision of a Professional Engineer. The safe room must be designed to withstand a wind speed of 250mph and to comply with Florida's Division of Emergency Management (FDEM). Client: Islamorada, Village of Islands. Terry L. Abel, Fire Chief, terry.abel@islamorada.fl.us, 305-664-6490. (03/2020 - Ongoing)

Operations & Maintenance Performance Monitoring Consultant to the Port of Miami Tunnel - Miami, FL

Mr. Cano is in charge of reviewing the Photometric Calculations report to the illumination plans and electrical drawings of the Tunnel and Operations Building to verify compliance with applicable codes such as FBC 2017 and NFPA 101. CSA has been contracted for the Operations and Maintenance Performance for the Port of Miami Tunnel for the past 4 years. Client: FDOT District Six, FM No. 251156-3-62-01, Elisabet Rivera P.E., (305) 470-5100, elisabet.rivera@dot.state.fl.us. (02/2020)

Chlorine Building: WASD South District Wastewater Treatment Plant – Cutler Bay, FL

The Miami-Dade Water and Sewer Department (WASD) existing Chlorine Building is a reinforced concrete structure designed in 1981 for the purpose of storing and the application of gaseous chlorine to the effluent for disinfection purposes. Due to the age and conditions facility needed upgrades consisting of repairs, rehabilitation, replacement. CSA was contracted by WASD to develop Construction Documents for the Scope of Work developed by CD PMCM. CSA is tasked with providing the Technical Memorandum to specifically perform evaluations, confirm

project Scope of Work and identify the design criteria. Mr. Cano is responsible for reviewing electrical drawings, coordinating with the manufacturer and verifying calculations. Client: Miami-Dade Water and Sewer Department (WASD), Tiffany Harrison, (443) 810-6172, tiffany.harrison@miamidade.gov. (2018 – 05/2020)

Design / Build Services for New Alexander Orr Water Treatment Plant: Miami-Dade Water & Sewage Department (WASD) – Miami, FL
CSA is the lead designer for the new water laboratory, providing: Architecture, Landscape Architecture, Civil Engineering, Structural Engineering, Mechanical, Electrical, and Plumbing Engineering, Environmental, and Permitting services. The new building is being designed as a Risk Category, IV Essential Facility, per ASCE 7-10. The project entails 11,500SF and accommodations for: 20 staff, 12 visitors, 32 vehicles with charging stations. The project is planned and designed to achieve LEED Silver Certification. Mr. Cano is responsible for all electrical design of the infrastructure, under the supervision of a Professional Engineer. Client: Miami-Dade Water and Sewer Department (WASD), Rosangelina Castro, (786) 552-8894, Rosangelina.Castro-Hernandez@miamidade.gov. (10/2020)

A/E Services for Capital Renewal and Replacement Projects - City of Miami Beach, FL
CSA was contracted by the City of Miami Beach to provide Architectural Services, Environmental Engineering, and Civil Engineering services through the Capital Renewal and Replacement Program (the "CRR Program"). CSA has been commissioned to perform services for the following tasks: Architecture and Engineering Design for improvement of restroom facility at City's Parking Garage (400 West 42 St), and at City's Property Management Facility (1800 Bay Road). Mr. Cano serves as the Electrical Designer for all T.O.'s. assigned to date. Client: City of Miami Beach, Jorge Guanchez, (786) 390-2040, jorgeGuanchez@miamibeachfl.gov. (2018 - Ongoing)

Districtwide Miscellaneous PE Design Consultant (Pedestrian Lighting Retrofits) - Miami-Dade County, FL
Electrical Design Engineer responsible for the plans preparation and lighting design support for multiple task work orders/projects. Corridors include SR 5/US 1, Normandy Drive, and Collins Avenue in Miami Beach (over 50 signalized intersections). Client Reference: Patrick Marchant, P.E., (305) 470-5214. FM No. 440184-1-52-01, 440178-2-52-01 & 440169-1-52-01. (01/2018 – 10/2019)

Districtwide Miscellaneous PE Design Consultant (Pedestrian Lighting Retrofits) - Miami-Dade County, FL
Electrical Design Engineer responsible for the plans preparation and lighting design support for multiple task work orders/projects. Corridors include SR 5/US 1, NW 12th Ave, and NW 27th Ave (over 70 signalized intersections). Client Reference: Patrick Marchant, PE, (305) 470-5214. FM No. 440186-2-52-01, 440191-2-52-01, 440173-1-52-01 & 440174-1-52-01. (01/2018– 10/2019)

General Engineering Consultant (GEC) Contract - Miami-Dade Expressway Authority (MDX), Miami, FL
Electrical /Roadway Lighting Reviewer who supports in electrical, lighting, and signalization plan reviews of the MDX facility improvement projects for the following major corridors in Miami-Dade County: SR 112, SR 836, SR 874, SR 878, and SR 924. Services include providing comments to all the electrical projects, shop drawing reviews, post design services, consultant comments resolution and feedback. Services also include authoring RFP language. Some key projects are Dolphin Park and Ride, MDX 83634, and in-house lighting design on MDX 30041 and MDX 30042. Client Reference: Rick Johnson, (305) 637-3277 ext. 2142. (01/2018 – 10/2019)

Henry Kinney Tunnel Intelligent Transportation System (ITS) Improvements, SR-5 from SR-862 to North of SR-842: FDOT D4 - Broward County, FL
Electrical Engineer responsible for plans preparation and electrical design support. Other responsibilities include voltage drop calculations, allowing future expansion for ITS Infrastructure, service point detail creation, and short circuit calculations. Client Reference: Fausto Gomez, P.E. (954) 777-4466. FM No. 439714-1-32-01 & 439714-1-32-02. (01/2018 – 10/2019)

JUAN LUIS RÍOS, P.E.

Electrical Engineer

Education

BS in Electrical Engineering, University of Puerto Rico Mayagüez, Puerto Rico, 2002

Professional Licenses and Registrations

Professional Engineer, Puerto Rico, License No. 20503

Professional Affiliations

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

FEMA Certifications

IS-01013 - Costing-Estimates and the Cost Estimating Format

Technical Courses

National Electrical Code Photovoltaic System Design and Installation, Grid-Tie Systems with Battery, Residential Photovoltaic Systems Design, and Cummins Power Generation. Electrical Requirements at 1997 Uniform Building Code

Construction Engineering and Management, Effective Management, Professional Services at the Engineering.

30-hour Occupational Safety and Health Training Course in Construction Safety and Health Training

Mr. Ríos has over 17 years of experience in the design of underground distribution lines, aerial distribution lines, substations for low and medium voltage lines, photovoltaic, fire alarm, lighting, power and lightning protection systems design. His expertise includes the ability to evaluate change orders, submittals, requests for information, conduct construction observation for compliance with drawings and specifications, preparation of electrical cost estimates and feasibility studies, clear communication and preparation of progress reports. Coordinate and assign works to junior electrical engineers. Provide technical assistance to junior and senior electrical engineers. Mr. Ríos has over three years of experience performing construction inspections for underground electrical systems, aerial distribution systems and substations on low, medium and high voltage lines. His years of working in construction are reflected in his ability to facilitate agreements among contractors, inspectors and supervisors on change orders and development of standard operating procedures.

PROFESSIONAL EXPERIENCE

Philadelphia International Airport On-Call Security & Special Systems Engineering, USO Relocation, Philadelphia, PA
Electrical Engineer for the renovation of the former 4,500 sq. ft. Northwest Airlines World Club to serve as space for the United Services Organization (USO). Mr. Ríos has worked in the design of the electrical, telecommunication, fire alarm and lighting systems for Shimas and Marbella Restaurant and Tiki Bar. (May 2017)

Miami International Airport, Electrical Rooms Concourse E-45 Rooms, Miami, FL
CSA was contracted to review and assess the existing conditions of forty-eight mechanical and electrical rooms in Concourse E and fourteen (14) electrical rooms in Satellite E. Concourse E houses nine (9) gates and Satellite E has nine (9) gates. Mr. Rios worked as an Electrical Engineer for assessment reports indicating areas, rooms, and equipment that to be replaced or upgraded to comply with Florida Building Codes. (December 2016 - March 2017)

LMMIA HVAC Emergency Power System Recommendations
Aerostar contracted CSA Group to evaluate the requirements to provide minimum ventilation and cooling during the periods when they are operating in emergency power. CSA's scope of services includes: Assess Existing Conditions and Needs and Conduct Analysis, Modelling and Optimization. Mr. Miranda worked as Electrical Designer/Engineer on the project. (June 2019)

Puerto Rico Army National Guard (PRARNG) Damage Assessment Services

CSA provided services related to the assessment of damages incurred as a direct result of Hurricane Maria for facilities located in San Juan, Camp Santiago in Salinas and Fort Allen in Juana Diaz. The scope of work was to identify storm related damages and quantifying the elements into units of measurements in order to provide a cost estimate for the materials, labor and soft costs to perform the repairs/replacements. CSA was also tasked to identify possible measures to mitigate repairs in order to minimize future damages. Our reports were used to validate FEMA's findings of the same facilities. Furthermore, CSA identified pre-existing conditions of the buildings in order to allow PRARNG to request additional funding through FEMA's 404 Hazard Mitigation Grants Program. CSA developed a customized data platform to identify, quantify, photograph and describe the specific damages found at these sites. This platform allowed us to compile specific data and produce reports tailored for the needs of the client. Mr. Rios worked in the assessments and cost estimates of damage in electrical equipment caused by Hurricane Maria as well as in Hazard Mitigation Proposals to obtain funds from the FEMA in order to improve electrical systems to reduce the impact of a Hurricane. (March 2019 – August 2019)

GINO VALDERRAMA, P.E., J.D.

Mechanical Engineer

Education

Juris Doctor
University of Miami, 1997

B.S. in Mechanical Engineering Florida International University, Miami, FL, 1991

Professional Licenses and Registrations

Mechanical Engineer: FL No. 58792

Plumbing Plan Reviewer SBCCI, 1996

Plumbing Inspector SBCCI, 1996

Certificate of HVAC Design, 1991

Mr. Valderrama is an experienced Engineer with over 27 years in all aspects of engineering and construction dealing with Civil, Structural, MEP, and Fire Protection. His experience includes design of complex building facilities, business development, project management and general office operations, overseeing of the firm's contracts and project negotiations. Currently Mr. Valderrama is responsible for daily operations, overseeing several contracts and projects throughout South Florida, coordinating with clients, and assisting with marketing and business development practices.

PROFESSIONAL EXPERIENCE

Chlorine Building: WASD South District Wastewater Treatment Plan – Cutler Bay, FL
The Miami-Dade Water and Sewer Department (WASD) existing Chlorine Building due to the age and conditions, is in need of upgrades consisting of repairs, rehabilitation, and replacement. CSA was contracted by WASD to develop Construction Documents for the Scope of Work developed by CD PM/CM. CSA is tasked with providing the Technical Memorandum to specifically perform evaluations, confirm project Scope of Work, and identify the design criteria. Mr. Valderrama evaluated condition of existing ventilation system. He developed the ventilation requirements for the new electrical heat loads, as well as a revised ventilation system using the existing components to meet new demand loads. (2019 – 05/2020)

Architecture and Engineering Services for the Upper Keys Center at the Florida Keys Community College – Key Largo, FL
CSA Central, Inc has recently started working on the A/E design services for the new Upper Keys Center at the Florida Keys Community College. The scope of work includes providing Architectural, Engineering and Professional Services for the design and construction of the facility. Facility Programing, Civil Engineering, Site Permitting at the County and College, Drainage and Stormwater Management, Life Cycle Cost and DOE Energy Analysis, Architectural Design, MEP Design, LEED or FGB Consultation/ Certification, and Renderings/ Models. Mr. Valderrama is the CSA Principal in charge of overseeing the activities of the project and specially the coordination with the Client and other firms involved. (04/2019 - Ongoing)

A/E Services for Capital Renewal and Replacement Projects: City of Miami Beach - FL
CSA was contracted to provide Architectural, Environmental Engineering, and Civil Engineering services through the Capital Renewal and Replacement Program (the "CRR Program"). The scope of work includes renewal and replacement of the City's facilities and the systems within those facilities (e.g., HVAC, roofs, fire safety systems). CSA has been commissioned to perform services for the following tasks: Architecture and Engineering Design for improvement of restroom facility at City's Parking Garage (400 West 42 St), and at City's Property Management Facility (1800 Bay Road). Mr. Valderrama serves as Mechanical Engineer for all T.O.'s completed. (02/2019 - Ongoing)

Consolidated Rental Car Facility: Miami Intermodal Center – FL
Project Manager, Chief Mechanical Engineer and Engineer of Record responsible for HVAC, plumbing and fire protection for the development of engineering drawings for a 4,000,000-sf parking facility intended to consolidate the location of various rental car providers serving Miami International Airport. Estimated construction cost of $230 million. First facility in the world with 120 multilevel fueling stations. Building also housed car washing stations, office spaces, as well as general parking. The work included the design of HVAC, fire protection,

plumbing, electrical, lighting and fire alarm systems, as well as fueling systems for fuel islands. (08/2003 – 07/2010)

Pump Stations Hardening: South Florida Water Management District (SFWMD)
Lead Mechanical Engineer responsible for mechanical designs associated with the reinforcing of the air intakes and encasing in steel and concrete the exterior conduits and pipes for the hurricane "hardening" of the pump stations. The pump stations were designed by the USACE and are of 1961 to 1995 vintage. (06/2010 – 03/2011)

Air/Seaport: Tactical Response Training (TRT) Center Fire Station: Broward County, FL
Provided the mechanical design and construction phase services for the HVAC systems of the proposed Air/Seaport Fire Station including Training Tower. The work included apparatus rooms (ventilation), as well as Fire Fighters' residential area with kitchen, storage, special training and decontamination areas. (04/2011 – 0/2011)

Port of Miami: Gangway Relocation Terminals B-C POM – FL
Florida Senior Mechanical Engineer responsible for the structural and MEP Team for the relocation of the gangways at Terminals B-C for connection to new Cruise Ship. (07/2011 – 09/2011)

Port of Miami: Gangway Doors Terminals G-F POM – FL
Senior Mechanical Engineer responsible for the structural and MEP Team for the relocation of the gangway's doors at Terminals G-F as part of preparations for new Cruise Ships at POM. (08/2011 – 01/2012)

Port of Miami: Bascule Bridge Inspection POM – FL
Senior Mechanical Engineer for the inspection of existing bascule bridge at POM for FDOT Report. (07/2010)

Abu Dhabi International Airport (AUH) - United Arab Emirates (UAE)
Project Manager for MEP design of the remodeling and upgrades of the existing terminal built in 1970. (2010)

Terminal D, E, F, G & H Wraps and Renovations Miami International Airport - Miami, FL
Field verification of existing areas to be remodeled, the design of plumbing and fire protection systems as well as coordination and implementation of Life Safety Master Plan. Relocation of Compressed Natural Gas (CNG) lines on roof. Design and coordination of utilities (water, sewer and storm) for a 3-story building addition at the airport. Coordination of utilities with civil engineering package at airport apron level. (09/2000 – 10/2001)

South Terminal Expansion: Fire Protection and Plumbing Miami International Airport - Miami, FL
Project Manager responsible for the fire protection and plumbing associated with the expansion of this 900,000-sf airport terminal; estimated cost of construction $380 million. Complete plumbing and fire protection for a multi-level terminal facility. Services included the design of a complex roofing structure, roof drainage piping system with overflow drainage, and sanitary collection systems of the terminal building. (06/2002 – 07/2003)

Concourse D Extension: North Terminal Development Miami International Airport - Miami, FL
Responsible for plumbing and HVAC system designs for Concourse D Extension. Estimated construction cost $1.4 billion. (04/2000 – 07/2003)

North Runway: Miami International Airport – Miami, FL
Responsible for the design of the replacement of the fire protection utilities, including coordination with existing hangars such as Sonic Aviation and Commercial Jet. This included changes to existing systems and adding new fire protection pumps to existing system. Design and coordination of demolition and replacement work of fire pumps and water and sewer. (04/2000 – 10/2002)

RODERICK K. HOSANG, P.E.

Sr Structural Engineer

Education

BS - Civil Engineering (Structural and Geotechnical), Howard University - 1985

Professional Licenses and Registrations

Florida PE #88224

District of Columbia PE #9378

Maryland PE #44568

Virginia PE #0402052933

New York PE #093586-1

Georgia PE #019525

South Carolina PE #23404

Kentucky P.E. #23336

Boca Certification, Building General

Affiliations

Adjunct Professor, Howard University 2005 - Current

Mentor, Architects, Construction Managers and Engineers (ACE) 2000 – 2002

Member, A.S.C.E./National Capital Section, 1992-1994 Structural Engineering Committee Chairman

Member, A.C.I./National Capital Section 1993 - 1995

Volunteer in the Students Engaged in Engineering (S.E.E.) Program

Member, Tech World Toastmasters, 1992, Treasurer

Availability

60%

Mr. Hosang is a management and engineering professional with over 30 years in the consulting engineering industry. His background is comprised of engineering, program and construction management experience on a variety of facility types including airport, building, highway, roadway, water/wastewater and bridge projects. He is dedicated to building a highly motivated team cognizant of their role in improving productivity, quality, growth and profitability. Throughout his career, he has been responsible for the overall technical direction, management and profitability of various engineering services to include program/construction management; business development and quality control procedures to assure professional performance and technical excellence of project assignments, formulated and administered policies, and developed long-range goals and objectives.

PROFESSIONAL EXPERIENCE

Retrofitting of Fire Station 20 to Comply with FEMA 361 Standards "Safe Room" – Islamorada, Village of Islands, FL

Electrical designer for the design of a FEMA 361 safe room at Fire Station 20, located at 81850 Overseas Highway in Islamorada, Florida. CSA's services include Professional Design, Engineering, and Surveying Services. Mr. Hosang is the Structural Engineer of this project. The safe room must be designed to withstand a wind speed of 250mph and to comply with Florida's Division of Emergency Management (FDEM). Client: Islamorada, Village of Islands. Terry L. Abel, Fire Chief, terry.abel@islamorada.fl.us, 305-664-6490. (03/2020 - Ongoing)

Chlorine Building: WASD South District Wastewater Treatment Plant – Cutler Bay, FL

The Miami-Dade Water and Sewer Department (WASD) existing Chlorine Building is a reinforced concrete structure designed in 1981 for the purpose of storing and the application of gaseous chlorine to the effluent for disinfection purposes. Due to the age and conditions facility needed upgrades consisting of repairs, rehabilitation, replacement. CSA was contracted by WASD to develop Construction Documents for the Scope of Work developed by CD PMCM. CSA is tasked with providing the Technical Memorandum to specifically perform evaluations, confirm project Scope of Work and identify the design criteria. Mr. Hosang is the Structural Engineer of Record and was responsible for the structural design of new concrete pad for new electrical equipment and existing structure evaluation. Client: Miami-Dade Water and Sewer Department (WASD), Tiffany Harrison, (443) 810-6172, tiffany.harrison@miamidade.gov. (2018 – 05/2020)

Structure S-151 Culvert Replacement: South Florida Water Management District (SFWMD) - Ft. Lauderdale, FL

The CSA design team was requested to design a cast-in-place box culvert that would maintain the existing water discharge capacity and, to allow complete access to the gates for maintenance purposes following the requirements of the district. CSA is providing services related to the Design Process including, Design calculations, studies, plans, specifications, opinions of probable construction costs, construction schedule and operations plan of the design for replacement of the S-151 structure in accordance with Everglades Restoration & Capital Projects Engineering Submittal Requirements. Mr. Hosang is the Senior Structural Engineer and performed structural calculations review, submittal evaluations, RFI responses and field inspections. Client: South Florida Water Management District (SFWMD), Jennifer McKim (561) 682-2621, jmckim@sfwmd.gov. (2015 – 04/2020)

Architectural and Engineering Construction Services for New Building Construction: Hialeah Housing Authority - Hialeah, FL
CSA was contracted by the Hialeah Housing Authority (HHA) to provide design services, which incorporates site design, site layout and site revitalization services. Services included support of demolition, and renovation of existing sites and new constructions, both interior and exterior. Mr. Hosang is the Engineer of Record and was responsible for the analysis and design of various concrete and steel canopies for an existing multifamily facility in a high velocity hurricane zone. Client: Hialeah Housing Authority (HHA), Miguel A. Hernandez (305) 888-9744, miguel.hernandez@hialeahhousing.org. (01/2019 – Ongoing)

A/E Professional Contract for Emergency Power Generator Assessments and Buildings Retrofit, Miami-Dade County, FL
CSA is working with the PHCD to conduct assessments in 12 of their multi-story Assisted Living Facilities (ALFs) buildings and retrofit them with new 100% capacity generators. CSA will conduct the required assessments to define electrical, architectural, structural, mechanical and environmental considerations that would entail the retrofit so that an accurate cost estimate can be developed. Also, our BAT would analyze environmental aspects related to the proposed action (e.g., fuel tank, flooding vulnerability, air emissions, spill prevention and control requirements, noise and vibration, among others). Mr. Hosang is the Senior Sturctuctural Engineer and will be assisting with demolition needs, flooding vulnerability, spill prevention, and control requirements. Client: Miami-Dade County Public Housing Development, Francisco Trujillo (305) 888-9744, francisco.trujillo2@miamidade.gov. (2018 – 11/2019)

800 MHz RF Sitework at lAD. Dulles International Airport Capital Improvement Project – Dulles, VA
Senior Contracting Officer's Technical Representative for Construction Management support to the Airport Authority decision making during the construction phases of the Capital Development Program (CDP) at Dulles International Airport. This $1.1 Million Project includes design, procurement an installation of a solid steel radio antenna tower and associated site work, grounding, fencing, ice-cable bridge, and utilities for two separate radio facilities on the Airport. The project also includes the construction of the concrete foundation for pre-fabricated support facility (by others).

WSSC Potomac Submerged Channel Intake Feasibility Study Montgomery County, Potomac, MD –
CSA prepared a study for an alternative location for a submerged channel intake at WSSC's Potomac Water Filtration Plant (WFP) located in Montgomery County, Potomac, MD. During storm events, sediments, debris, and runoff contaminants, particularly from the Watts Branch, cause source water quality to change dramatically, and affects the plant operation. A recent survey confirmed that the water quality (pH, alkalinity and turbidity), particularly during storm events, is significantly better, and remains much more stable, in the middle of the Potomac River than at the location of the existing intake. Mr. Hosang is the Principal in Charge and responsible for any Structural Engineering requirements on the project. (2013)

Chlorination/Dechlorination Building, Blue Plains Wastewater Treatment Plant, District of Columbia Department of Public Works, Washington, DC.
Field Supervisor/Geotechnical Engineer. Supervised field crews for subsurface investigation programs. Conducted soil classification rests and assisted in preparing geotechnical report.

NYC DEP Hunts Point, Bronx, NY
Lead Structural Engineer for the design modifications to the facility buildings and tunnels to resist Wave, Impact, Hydrodynamic and Hydrostatic forces, that occur during storm events of similar magnitude to Superstorm Sandy. (2018 - 2019)

VÍCTOR FIGUEROA, MSCE, P.E.

Structural Engineer

Education

M.S. Structural Engineering. University of Puerto Rico, Mayagüez, 1996

B.S. Civil Engineering. University of Puerto Rico, Mayagüez, 1993

Professional Licenses and Registrations

Professional Engineer, Puerto Rico, License Number: 14263

Professional Affiliations

Engineers and Land Surveyors Association of Puerto Rico

ACI, Puerto Rico Chapter

Certifications

Safety Inspection of In-Service Bridges FWWA-NHI Co. 130056

Construction Quality Management for Contractors

US Army Corps of Engineers (June 2019)

OSHA 30 hrs

Mr. Figueroa has over 23 years of experience as a Structural Engineer in the design and analysis of structures associated with Highways, Wastewater infrastructure, structural design of commercial, pharmaceutical and residential buildings, wall fractures, box culverts and retaining walls. His expertise also includes the analysis and design of bridge structures, noise barriers and other highway related structures..

PROFESSIONAL EXPERIENCE

Port of Miami Tunnel (POMT) FHWA Bi-Annual Inspection – Florida Department of Transportation (FDOT)

The Florida Department of Transportation requires the Port of Miami to perform a Tunnel and building facilities inspection including but not limited to the structural elements but also the electrical, mechanical and communication features that serves the Tunnel operation. Mr. Figueroa performed the structural inspection of the West Bound Bore (Tunnel) as well as the Building facilities structures at Dodge and Watson Islands. Report presenting the Condition State and description of findings were prepared and delivered to the Ports of Miami Tunnel as per FDOT requirements. (June -July 2019)

PR-27 Pedestrian Bridges

Puerto Rico Highway and Transportation Authority PRHTA – The PRHTA is replacing two steel truss pedestrian bridges with two new steel Pedestrian Bridges over PR-26 (Expreso Manuel Baldorioty de Castro). The existing bridges were suffering of advance steel corrosion and during the hurricane Maria event one of them was severely damaged resulting on the closure of the bridge. The new pedestrian bridges will provide a safe pedestrian crossing over the PR-26 while improving highway capacity through the elimination of intermediate supports. Mr. Figueroa is the Structural Manager. He is involved in the QA/QC process and participates in meetings and conference calls with the client. Both bridges have been already demolished due to the safety hazards of falling objects to the highway and bid of the project is expected by September of 2019.

Landslide Evaluation/Assessment Program

Puerto Rico Highway and Transportation Authority – The Agency created a program to evaluate, propose and design retrofit alternatives for landslide that occurred through the island. As Program Managers Mr. Figueroa was in charge of the evaluation of Preliminary Engineering Reports, design Plans and Construction Cost estimates by other Consultants and served as quality and Value Engineering Support for the PRHTA. (January 2019 – Present)

Bridge Inspection Assessment after Hurricane Maria

Performed assessment for over 100 bridges for the PRHTA after the aftermath of hurricane Maria after September 20, 2017. The bridge inspection consisted on the site visit, data gathering and evaluation of existing bridge conditions including foundation scouring. A report for each bridge as well as a bridge rating as per National Bridge Inventory (NBI) was prepared.

Philadelphia International Airport - Capacity Enhancement Program, CONRAC Ground Transportation Center

This CONRAC project is a comprised of the proposed 7-story parking garage structure that includes the CONRAC building, site utilities, building utilities and systems, site development, building structural, ground transportation planning, roads conceptual engineering, and APM Coordination. The parking structure will fill most of a 33.4-acre site immediately adjacent to the existing toll plaza. As a Structural Engineer Mr. Figueroa is supporting the area of civil site drainage and foundations for the proposed structures.

Luis Muñoz Marin International Airport, San Juan Puerto Rico (LMMIA) –
Capital program comprised of airfield, landside and terminal projects that enhance the safety, security and capacity of the airport. As part of the Use Agreement between the signatory airlines at SJU and Aerostar, a Capacity Enhancement Program ("CEP") will be executed by Aerostar in the terminal areas. The estimated value of the CEP at this time is approximately $100M. Mr. Figueroa was the Structural Engineer for the design and reorganization and redistribution of spaces for Terminal A, B, C and D. Also his role was to be on site during construction since this is an existing and on operating installations that requires the less impact on passenger traffic and were solutions to specific details requires and expedites intervention to continue with proposed construction. (2013-2014)

WSSC Design Services for Septage & FOG Discharge Facilities
The project involves the review and evaluation of the conceptual level designs and recommendations presented in Septage Discharge Facility Study for Montgomery County. Mr. Figueroa worked as a Structural Engineer in the design of the facilities which includes all associated piping and appurtenances, pretreatment, odor control, hydraulic analyses, surveying, geotechnical evaluation, environmental permitting, electrical design, mechanical design, architectural design, and structural design. As a Structural Engineer Mr. Figueroa worked on the process of designing the concrete foundation for four buildings located at the Rock Creek and Anacostia sites. He is part of weekly conference calls with the client and provides the mechanical team with support related to structural issues. He has also been coordinating the precast and pre-engineered parts of the buildings with local manufacturers that can provide support to the proposed construction activities (2014-present)

PRASA Puerto Nuevo Wastewater Treatment Plant
Honeywell is negotiating with the Puerto Rico Aqueducts and Sewer Authority (PRASA) on an Energy Savings Performance Contract (ESPC) for a Buildings Guaranteed Energy Savings Project at the Puerto Nuevo Wastewater Treatment Plant. CSA Services included: data collection and site visits, preparation of drawings and specifications, permitting, services during construction and value engineering (allowance). Mr. Figueroa is the Structural Designer/Manager. He is involved in meetings with a Geotechnical and Structural assessment crew to investigate building existing conditions related to material properties and capacities. (2015-present)

Build It Back – New York
NYC Build it Back is the City program to assist homeowners, landlords and tenants in the five boroughs whose primary homes were damaged by Hurricane Sandy. Funded by the Federal Community Development Block Grant – Disaster Recovery (CDBG-DR) Bill passed by Congress, the goal of NYC Build it Back is to help affected residents return to safe, sustainable housing by addressing unmet housing recovery needs. Mr. Figueroa has been involved in the data gathering and structural design of the foundation supports for those houses that are to be elevated and the complete structural wood and concrete design of those houses that are been selected for complete reconstruction. (2015 - 2019)

USAID – Site Development, Haiti
At north and south of Port Principe three different sites were completely designed to provide the required infrastructure for future construction building of single family units. Water wells and solar power system were incorporated to the design due to the lack of utility infrastructure at the vicinity and surrounding area. Grading and drainage systems as well as access roads and parcel lots were designed for the future construction of housing units. Services during construction were provided as well as field visits to provide fast solutions to construction issues. (2012-2014)

Bella Vista Hospital, Mayaguez, PR
Bella Vista Hospital is a non-profit corporation located in Mayaguez, Puerto Rico. Bella vista contracted CSA to provide the technical assistance needed in order to prepare the requested forms and documents for the participation of the facility in the request for fund based on the 2018 Bipartisan Budget Act Section 20601, Section 428 Public Assistance Alternatives Procedures, Guide for Permanent Work FEMA-4339-DR-PR. The healthcare facility Humacao is about 350,000 square feet and the healthcare facility in Mayaguez is about 150,000 square feet. The scope of work included: Identify the infrastructure of damages incurred by Ryder as a direct result from the path of Hurricane Maria; Identify the pre-existing damage of the infrastructure found at Ryder; Identify components of the facility or system not damaged by Hurricane Maria to fully effectuate the replacement or restoration of disaster-damaged components to restore function to industry standards; Identify components of the facility to make it more efficient and if possible self-sustaining. As a structural Engineer Mr. Figueroa participated in the Structural Asessment visits. (2018)

JUAN M. VILLAR, P.E.

Sr. Civil Engineer / Permitting

Education

BS in Civil Engineering, Florida International University, Miami, 1975

Professional Licenses and Registrations

Professional Civil Engineer

FL No. 32710

Professional Affiliations

American Society of Civil Engineers (ASCE)

Mr. Villar holds extensive experience in all aspects of project management and the civil engineering field. As the Director of the Civil Department, 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 Commercial, Educational, Institutional and large-scale Residential Developments. He prepares technical proposals, negotiates contracts, maintains client relationships and directs and coordinates project development activities and tasks throughout the completion of project design, permitting and construction administrative/management tasks associated with the development of projects within the South Florida Region. Other responsibilities he holds are overseeing project scheduling, professional staff/resources, Quality Assurance and Control reviews and contract administration and invoicing.

PROFESSIONAL EXPERIENCE

Water Control Structure S-151 Replacement and Automatization: South Florida Water Management District (SFWMD) - Broward County, FL

The CSA design team was requested to design a cast-in-place box culvert that would maintain the existing water discharge capacity and, to allow complete access to the gates for maintenance purposes following the requirements of the district. CSA is providing services related to the Design Process including: Design calculations, studies, plans, specifications, opinions of probable construction costs, construction schedule and operations plan of the design for replacement of the S-151 structure. Mr. Villar is the Civil Engineer of Record responsible for all the Civil components and the re-construction of the earth levies on either side of the new structure. Client: South Florida Water Management District; Jennifer McKim (561) 682-2621, jmckim@sfwmd.gov. (2015 – 04/2020)

Miami International Airport (MIA) Central & South Terminal Upgrades to FOG Control Devices

CSA was contracted to provide a complete survey of the FOG system, identify tenant connection, prepare flow calculations, provide as-built drawings, make upgrade recommendations, and prepare an all including final report to the Client, Miami-Dade County RER-DERM. In total, CSA was assigned to inspect fifteen (15) locations with nineteen (19) In-ground Gravity Interceptors (IGT). Mr. Villar was the Project Manager, primarily responsible for the Final Report to the Client with the overall conditions of the Devices. Additionally, he oversaw the inspections performed, reviewed final calculations and managed the overall contract. Client: Miami-Dade Aviation Department (MDAD), Victor Mendez, VMendez@Miami-airport.com. (06/2019 – 04/2020)

Architecture and Engineering Services for the Upper Keys Center at the College of the Florida Keys – Key Largo, FL

CSA is currently providing A/E design services for the new Upper Keys Center at the College of the Florida Keys (CFK). The design is for a two-story building housing multiple STEM programs, where the College plans to expand its Nursing/ Allied Health, Apprenticeships, Business Administration, Engineering Technology and Public Safety academic programs. Scope of work includes providing Architectural, Engineering and Professional Services for the design and construction of the facility. Facility Programing, Civil Engineering, Site Permitting at the County and College, Drainage and Stormwater Management, Life Cycle Cost and DOE Energy Analysis, Architectural Design, MEP Design, LEED or FGB Consultation/ Certification, and Renderings/ Models. Mr. Villar is the Civil Engineer for the project, overseeing the Civil Site Designer for the Grading and Paving analysis and design, drainage calculations and production of plans for construction. Total buildout will be 42,000 SF. Project is expected to be completed by March 2021. (06/2019 - Ongoing)

Design / Build Services for New Alexander Orr Water Treatment Plant: Miami-Dade Water & Sewage Department (WASD) – Miami, FL
CSA is the lead designer for the new water laboratory, providing: Architecture, Landscape Architecture, Civil Engineering, Structural Engineering, Mechanical, Electrical, and Plumbing Engineering, Environmental, and Permitting services. The new building is being designed as a Risk Category, IV Essential Facility, per ASCE 7-10. The project entails 11,500SF and accommodations for: 20 staff, 12 visitors, 32 vehicles with charging stations. The project is planned and designed to achieve LEED Silver Certification. Mr. Villar I the Civil Engineer of Record, responsible for of the paving, grading and drainage, water distribution, fire protection and sewage collection system for the new building. Client: Miami-Dade Water and Sewer Department (WASD), Rosangelina Castro, (786) 552-8894, Rosangelina.Castro-Hernandez@miamidade.gov. (08/2020)

Cleveland Clinic North Parking Lot Expansion & MRI/PET Scan Trailer - Broward County, FL
CSA Group provided surveying, planning and civil engineering services which included specific purpose and topographic survey, master site plan and plan preparation, including pavement markings, signage and paving, grading and drainage plans, preparation of mobile MRI/Pet Scan Trailer addition plan, processing of city approvals, permits and licenses associated with the site engineering plans and site construction related services. Additional professional engineering services included Stormwater/Drainage System Re-Certification thru the City of Weston. Client: Studio Plus Architecture, Lou Ann Kapcin, (239) 357-2121, (5/2012 – 12/2013).

Univision HD Studios - Miami-Dade County, FL
New facility design to house two HD studios; a large studio "E" consisting of 15,000 ft^2 and a small studio "F" of 5,000 ft^2 and associated support spaces. The new facility was designed to provide hurricane protection for ratings of high category 3 to low category 4 hurricanes and will be supported by Generator power. The construction work was executed in a fully occupied facility requiring a strategic phasing plan as part of the design. Client: LeMartec Engineering & Construction Corp., Bert Delgado, (305) 471-8223, (2009-2012).

Tamiami Airport - Miami-Dade County, FL
Mr. Villar was responsible for the civil 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 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. For 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, (2007 – 2008)

Miramar (Snake Creek) Readiness Center - Miramar, FL
Full civil engineering services including design of the paving, grading and drainage plans and pavement markings with traffic calming features. Mr. Villar was responsible for the design of the internal roadway system of the Site which included parking areas for regular vehicles and heavy-duty military vehicles. Driveway connection at the entrance road and exit to the main arterial road at the front of the property. Responsibilities extended to the design of the paving grading and drainage including design of a network of drainage ponds/lakes with the control structure discharging into Snake Creek Canal. Client: Federal Miramar Associates for the Florida Army National Guard, LTC Kevin Holiday, (904) 823-0281, (2009 – 2012).

Northwest Bus Depot and Fuel Station - Orange County, FL
CSA Group was responsible for providing civil engineering, permitting, lighting, architectural, mechanical and structural design services. Mr. Villar's provided Civil Engineering Services which included paving, grading and drainage, water distribution, sewage collection, parking facilities, perimeter road(s) signage and pavement markings plan, permitting and construction administration. Client: R.L. Burns, Inc., Kory Kruel, (407) 839-1131, (2012 – 2013).

GILBERT CRUZ MORETA, E.I.T.

Staff Engineer

Education

M.S. Quality Manufacturing Engineering,
Polytechnic University of Puerto Rico, 2018

B.S. Civil Engineering,
Polytechnic University of Puerto Rico, 2014

Professional Licenses and Registrations

Engineer in Training

FL No. 1100021708

PR No. 27367

TIN: C625-286-89-424-0

Training & Certifications

- AutoCAD
- ArcGIS
- QGIS
- SketchUp
- Sidra Intersection
- Minitab
- Revit
- OSHA 30 hours certified in Construction Safety and Health
- OSHA 40 hours HAZWOPER
- Troxler, Nuclear Density Gauge
- Troxler, HAZMAT Certification
- FDOT MOT Intermediate
- CTQP Asphalt Paving Technician, Level 1
- CTQP Asphalt Paving Technician, Level 2
- CTQP Earthwork Construction Inspection, Level 1
- CTQP Earthwork Construction Inspection, Level 2
- FEMA: IS-100.c, IS-200.b, IS-700.b, IS-800.c, IS-1013, G-300, G-400, IS-01013

Mr. Cruz is a Civil Engineer in Training with over 5 years of experience with project management, engineering, construction management and geospatial data handling. His working experience includes water and wastewater, residential and commercial construcion projects in Puerto Rico and United States. Mr. Cruz previously worked for CSA in Puerto Rico as a GIS Field Technician working with a system designed to capture, store, manipulate, analyze, manage, and present all types of geographical data and translate to the programs used by the engineers. He has also develop experience in quality management and Six Sigma application in his graduate school program. Currently serving as a Staff Engineer for CSA he uses different engineering techniques and works with diffent engineering programs and application under the supervision of a Professional Engineer in the Civil Engineering Division.

PROFESSIONAL EXPERIENCE

Architectural and Engineering Construction Services for New Building Construction: Hialeah Housing Authority - Hialeah, FL

CSA is contracted by the Hialeah Housing Authority (HHA) to provide design services, which incorporates site design, site layout and site revitalization services. Services include support of demolition, and renovation of existing sites and new constructions, both interior and exterior. Mr. Cruz reviewed technical and civil engineering drawings, and made revisions accordingly using Computer-Aided Design (CAD) applications. Additionally, he aided in the structural design using ETABS and SAVE2014 for reinforced concrete platform. Client: Hialeah Housing Authority (HHA), Miguel A. Hernandez (305) 888-9744, miguel.hernandez@hialeahhousing.org. (01/2019 - Ongoing)

Miami International Airport (MIA) Central & South Terminal Upgrades to FOG Control Devices – Miami, FL

CSA was contracted to provide a complete survey of the FOG system, identify tenant connection, prepare flow calculations, provide as-built drawings, make upgrade recommendations, and prepare an all including final report to the Client, Miami-Dade County RER-DERM. In total, CSA has been assigned to inspect fifteen (15) locations with nineteen (19) In-ground Gravity Interceptors (IGT). Fats, Oils and Grease (FOG) Inspections for conditions of the existing grease traps including the connections. Mr. Cruz is currently working in the inspections of the FOG systems and reporting their conditions to the Project Manager. Client: Miami-Dade Aviation Department (MDAD), Victor Mendez, VMendez@Miami-airport.com. (06/2019 – Ongoing)

CEI Services for Construction of Venetian Shores Stormwater Management System – Village of Islamorada, FL

Mr. Cruz is responsible for the oversight inspection of all stormwater drainage system's installation and testing. He is also tasked with inspecting concrete curb, asphalt pavement placement for slope correction, and associated pavement markings while providing punch-list inspection and certification of substantial and final completion. As part of his CEI role, Mr. Cruz also prepares inspection reports for the Client, the Village of Islamorada. Client: Islamorada, Village of Islands, Andrew Engelmayer, Andrew.Engelmeyer@islamorada.fl.us (06/2019 – 12/2019)

A/E Professional Contract for Emergency Power Generator Assessments and Buildings Retrofit - Miami-Dade County, FL

CSA is working with the PHCD to conduct assessments in 12 of their multi-story Assisted Living Facilities (ALFs) buildings and retrofit them with new 100% capacity generators. CSA will conduct the required assessments to define electrical, architectural, structural, mechanical and environmental considerations that would entail the retrofit so that an accurate cost estimate can be developed.

Mr. Cruz provides support to the Senior Engineer with site inspections and project design while using Computer-Aided Design (CAD) applications. Client: Miami-Dade County Public Housing Development, Francisco Trujillo (305) 888-9744, francisco.trujillo2@miamidade.gov. (2018 – Ongoing)

Chlorine Building | WASD South District Wastewater Treatment Plant – Cutler Bay, FL
The Miami-Dade Water and Sewer Department (WASD) existing Chlorine Building is a reinforced concrete structure designed in 1981 for the purpose of storing and the application of gaseous chlorine to the effluent for disinfection purposes. Due to the age and conditions facility is in need of upgrades consisting of repairs, rehabilitation, replacement. CSA was contracted by WASD to develop Construction Documents for the Scope of Work developed by CD PMCM. CSA is tasked with providing the Technical Memorandum to specifically perform evaluations, confirm project Scope of Work, and identify the design criteria. Mr. Cruz reviewed technical and civil engineering drawings, and made revisions accordingly using Computer-Aided Design (CAD) applications. Additionally, he aided in the structural design using ETABS and SAVE2014 for reinforced concrete platform. Client: Miami-Dade Water and Sewer Department (WASD), Tiffany Harrison (443) 810-6172, tiffany.harrison@miamidade.gov. (2018-Ongoing)

Big Cypress Basin (BCB) Electrification of Cork 1, Cork 2, Cr951-1(S), Cr951-2(N) And FU-5 Generator Addition: South Florida Water Management District (SFWMD) – Collier County, FL
The project encompasses the electrification and installation of full monitoring and remote operations capabilities and associated works at water control structure Cork 2. Also, the electrification of water control structures Cork 1, CR951-1(S) and CR9512(N), and the addition of a generator and generator building at Faka Union 5 (FU-5) water control structure. Cork 2 consists of two (2) gated box culverts with manual opening vertical lift steel gates (single leaf) 10 feet wide by 8 feet high located on the upstream (north) side to control flow. This structure prevents over-drainage of Bird Rookery Swamp. All sites are part of the Big Cypress Basin located in Collier County, Florida. Mr. Cruz assists the professional engineers' teams with work related to project design as well as creating technical design drawings. Client: South Florida Water Management District (SFWMD), Jeff LeBlanc (561) 682-2614, jleblanc@sfwmd.gov. (2017 – 2019)

Cleveland Clinic ED/ICU and CUP Buildings - Broward County, FL
The Cleveland Clinic project consisted of construction of a new five story building of approximately 167,000 square feet on the Weston campus. CSA prepared the surveys, plans, details and specifications including: new surveys to those areas that have been altered by the staging of construction equipment and materials and of contractor's office trailers with adjacent parking areas; three new surface parking lots including the Krupa lot - with the additional 106 parking spaces; revised the parking lot configuration immediately adjacent to the new Central Utility Plant as well as the grading and drainage. Civil Engineering support provided for connection to the new ED/ICU building; preparation of the necessary plans, for the upsizing of the existing 6" force main to a 10" force main; and preparation of the necessary grading and drainage plan for a permanent helipad. Staff Engineer and Field Inspector under the supervision of the Engineer of Record. Client: Cleveland Clinic Foundation, Mark Chesser, (954) 689-5046. (2016 – 8/2019)

Electrical Room Expansion: NBC 6 Universal South Florida Headquarters – Miramar, FL
NBC Telemundo is in the process of expanding their existing facilities to add a two-story office building is adjacent to the existing facilities. The scope includes an Electrical Room Expansion. Mr. Cruz works as Staff Engineer is this project under the supervision of the Engineer of Record. Client: NBC6, WTVJ, Terry Smith (954) 622-7870, terry.smith@nbcuni.com. (2018)

Puerto Rico Aqueduct and Sewer Authority (PRASA) | GIS Specialist
As a GIS Specialist Mr. Cruz entered new map data through use of a digitizer or by direct input of coordinate information using the principles of cartography including coordinate systems, longitude, latitude, elevation, topography, and map scales. His main responsibilities included coordination and updating of cadastral information shared by PRASA (Puerto Rico Aqueduct and Sewer Authority), develop GIS data and extended the attributes of the Country's existing water supply system.

ELENA VAZQUEZ

GIS Analyst

Education

B.S. in Environmental Sciences, University of Puerto Rico, 1998

Certifications

Database Technology and Administration, Interamerican University of Puerto Rico, Río Piedras Campus, 2010

Technical Courses

Investigación de Título, Rendon Training Center Corp. San Juan, Puerto Rico, 2002

GPS Mapping for GIS with Asset Surveyor, Trimble, San Juan, Puerto Rico, 1998

Ms. Vázquez has 21 years of experience in GIS spatial analysis, remote sensing, and cartography which she uses to develop and apply GIS analysis solutions. Her experience has included private and public clients where she supports environmental analysis, route selection and evaluation analyses, suitable site selection, tri-dimensional analyses, hydrologic and hydraulic analyses, population estimation analyses, as well as other data and georgraphic driven activities. Ms. Vazquez coordinates technical GIS projects to achieve the desired plans and goals to ensure the effective preparation and delivery of deliverables. Ms. Vázquez provides expert support for GIS data conversion, cartographic design and high quality map production. She also designs, develops, and maintains databases, works with LIDAR technology application for mapping and analysis, and performs GIS hydro analysis, supporting hydrologic modeling from DEMs based on LIDAR data.

PROFESSIONAL EXPERIENCE

FDOT District 4 Pre-Event, Hurricane Dorian – FDOT District Four, FL

GIS Analyst for the Pre-Event Disaster Monitoring/Construction Engineering and Inspection (CEI) services required for contract administration, collecting all information related to disaster damage assessment of roads, high mast lighting and sign structures and environmental clearance support for the event preparation and recovery efforts in District Four (4). CSA coordinated the FDOT's emergency plan for 5 of the total 13 affected counties. (09/2019)

MDCPS Debris Monitoring Project (GIS Specialist)

CSA provided Debris Monitoring Services for the Hurricane Irma Debris Removal Program of Miami Dade County Public Schools. As a result of the passage of Hurricane Irma, over 400 schools had vegetative impacts in their properties. CSA provided monitoring services initially for contractor's working a force account basis and later monitored hangers and leaners cutting operations as well as debris hauling. Ms. Vazquez worked in preparing GIS maps based on status of each school as reported by operations and publishing of digital and hard copy maps.

PREMA – PR Recovery Restoration and Resiliency (GIS Specialist)

The Governor of Puerto Rico, created a Program Management Office (PMO) led by Secretary of Housing Fernando Gil to provide for the oversight and integration of all public efforts leading to the prompt repair of all damages and the recovery of all Puerto Rico residents from the impact of Hurricane Maria (MARIA PMO). The purpose of the Consul-Tech Caribe Team was to support the MARIA PMO with comprehensive emergency management and disaster recovery services designed to ensure that Puerto Rico optimizes its reimbursement for disaster-related damages from all available federal sources. Ms. Vazquez worked with the spatial data management, data transformation, geocoding, maps preparation for the project.

Biologist Services PREPA Power Grid Emergency Restoration (GIS Specialist)

Web maps preparation. Survey 123 Form creation and management for field data collection. Geospatial data creation and management. Maps preparation (field maps and reports).

Monsanto New Seed Building No. 5 and Modifications for Building No. 4

This is one of the first of the Site Expansion projects, involving the design and permitting for a new 15,000 square foot laboratory building for research and development, and modifications to the exiting building to complement the seed preparation activities. The permitting services includes environmental compliance through construction permitting. As a GIS analyst MS. Vazquez performed spatial analyses, maps preparation, data conversion and other tasks related to Environmental Permitting Phase.

New York City Build it Back is the City's program to assist homeowners, landlords and tenants in the five boroughs whose primary homes were damaged by Hurricane Sandy. Funded by the Federal Community Development Block Grant – Disaster Recovery (CDBG-DR) Bill passed by Congress, the goal of NYC Build it Back is to help affected residents return to safe, sustainable housing by addressing unmet housing needs. CSA is responsible for design, permitting and project management. As a GIS analyst MS. Vazquez performed spatial analyses, maps preparation, data conversion and other related tasks.

GIS Specialist - PUMA Storm Sewer System Improvement
CSA was contracted to perform civil services including site and stormwater management planning to provide a site layout of proposed structures, paved areas, storm drainage pipes and structures, and other proposed site features and improvements; grading; stormwater drainage design for required stormwater runoff and hydraulic calculations, stormwater collector sewer design for conveyance to storm sewer system, and the site domestic sewer systems layout and design. Ms. Vazquez was assigned to develop GIS Data to support the Hydraulic-Hydrologic Analysis (Watershed Delimitation, Hydraulic Length, Maximum and Minimum Watershed Elevations, Watershed Mean Slope, Land Cover Classification, Curve Numbers Determination, etc.) and map preparation.

Project Technical Leader - PRASA_ Puerto Rico Water Recovery Analysis Phases 1 and 2
PRASA contracted CSA to work on the localization of 510,000 water accounts, and to make a large number of corrections for accounts already in their database. CSA conducted field visits and quality verification process. The client locations were submitted monthly in a GIS format, which uses the Geographic Information System "Lambert Conformal Conic" map projection for Puerto Rico and the State Plane Coordinates System referred to in the "1983 North American Datum", in meters (FIPS 5200/EPSG 32161). Ms. Vazquez assisted with recruitment interviews and process to expand the needed resource pool to conduct the extensive field verifications. She provided technical support and training to GIS technicians; assigned daily work to GIS technicians and supervised their work. Ms. Vazquez worked directly with the design, creation and management of the relational database for the project using MSSQL, integrated the database with GIS applications; created web feature services and maps used by the technicians to collect data in the field using a tablet; downloaded and processed the field data, and integrated the updates into the master database. She was responsible for all project deliverables to the client.

GIS Specialist - Puerto Rico R&D & Parent Seed Facility – Hydrologic-Hydraulic Study, Dow AgroSciences
CSA was contracted to conduct an H&H study to identify the drainage basin within the project site for new development planned by Dow. The results from this study will determine the extent of flood levels in a rain events and how to manage the levels without negatively impacting the surrounding properties as a result of the project development. Ms. Vazquez developed the maps and GIS analysis to support the Hydrologic and Hydraulic (HH) Study. Some of the GIS analyses performed were: watershed delimitation, flow length determination, mean watershed slope calculation, land use/land cover classification, and runoff curve numbers (CN's) determination.

GIS Specialist - LMMIA Security Improvements, Aerostar
This capital improvement program was comprised of airfield, landside and terminal projects to enhance the safety, security and capacity of the airport. As part of the Use Agreement between the signatory airlines at SJU and Aerostar, a Capacity Enhancement Program ("CEP") was executed by Aerostar in the terminal areas. The estimated value of the CEP is $100M. CSA was contracted to provide Architecture, Mechanical, Electrical, Plumbing, and Structural Engineering, Environmental Studies (lead & asbestos) and permitting. Ms. Vazquez was responsible for the GIS analysis and mapping for environmental permits (Environmental Assessment, Joint Permit, Noise Study, Wetland Jurisdictional Determination, and others).

GIS Specialist - PRASA Hydropower, Puerto Rico Aqueducts and Sewer Authority (PRASA)
CSA is assisting the Puerto Rico Aqueduct and Sewer Authority (PRASA) in its efforts to evaluate and rehabilitate Puerto Rico's Hydroelectric System. Our services included in this task order included determination of water availability; hydroelectric generation potential; development of operational policies, rehabilitation and modernization plans for the systems; and development of economic feasibility studies. As GIS Specialist, Ms. Vazquez used LiDAR data to perform advanced spatial analysis including: generation of elevation contours, creation of cross-section profiles, watershed delimitation, flow length calculations, mean watershed slope calculation, land use/land cover classification, and runoff curve numbers (CN's) determination.

LUIS E. OSELLA

Bid / Construction Support – Scheduling & Cost Estimating

Education

Business Administration
National University of Technology, Argentina, 1997

B.S. in Civil Engineering
National University, Rosario, Argentina, 1974

Professional Licenses and Registrations

Professional Board of Engineering, Architect & Surveyors, Rio Negro, Argentina: License No. A-995-1

Professional Board of Civil Engineers, Buenos Aires, Argentina: License No. 9925

Santa Fe, Argentina: License No. 211150

Entre Rios, Ley 8.902 Argentina: License No. 4730

Training & Certifications

- CTQP Earthwork Construction Inspection, Level 2
- ACI Concrete Field Technician, Level 1
- Final Estimates, Level 1
- Maintenance of Traffic, Intermediate Level Course No. BT-05-0078
- CTQP Asphalt Paving Technician, Levels 1 & 2
- Primavera P6 Training
- FEMA - IS-00100.a, Introduction to Incident Command System, ICS-100
- FEMA - IS-00200.b, ICS for Single Resources and Initial Action Incident, ICS-200
- FEMA - IS-00700.a, National Incident Management System Introduction
- FEMA - IS-00800.b, National Response Framework Introduction
- FEMA – ICS-300 Intermediate Incident Command System for Expanding Incidents
- FEMA – IS-634 Introduction to FEMA's Public Assistance Program

Mr. Osella has more than 40 years of experience dedicated to engineering and construction management of infrastructure facilities projects, including buildings and roadways projects, drainage and water resources, industrial facilities, hospitals and correctional facilities. In his extensive professional career Mr. Osella has held a variety of management positions related to design and construction, from Contract Administractor, thru Project Superintendent, and Construction Project Manager, operations and maintenance, project control and construction inspection of civil, electrical and mechanical projects. His experience also includes participation in emergency recovery projects, ruled by FEMA.

PROJECT EXPERIENCE

Design / Build Services for New Alexander Orr Water Treatment Plant: Miami-Dade Water & Sewage Department (WASD) - Miami, FL

Cost-Estimator and Scheduler, working closely with the Contractor in the early stages of the project ensuring that all factors are considered to maintain the project on time and on budget throughout the entire design and construction stages. CSA is the lead designer for the new water laboratory, providing: Architecture, Landscape Architecture, Civil Engineering, Structural Engineering, Mechanical, Electrical, and Plumbing Engineering, Environmental, and Permitting. The new building is being designed as a Risk Category, IV Essential Facility, per ASCE 7-10. The project entails 11,500 square feet and accommodations for: 20 staff, 12 visitors, 32 vehicles. The project is planned and designed to achieve LEED Silver Certification. Client: Miami-Dade Water and Sewer Department (WASD), Rosangelina Castro, (786) 552-8894, Rosangelina.Castro-Hernandez@miamidade.gov. (2019 – Ongoing)

Riverglades Elementary School Parkland 24 Classroom Addition | Broward County Public Schools - Parkland, FL

The project required the integration of a modular two-story classroom building into an existing school campus. The site planning and location analysis was a very important aspect of the design process given the existing conditions and functional aspect of the building. The functional integration and the operational functionality of the school had to be maintained as part of the implementation of the master plan. Mr. Osella provided constructability reviews and the role of Assistant Project Manager. Client: The School Board of Broward County, FL, Steve Jones, (754) 321-4306, (2015 – 2017)

NYS GOSR Professional Services for CDBG-DR Project Coordinators

The project consisted of managing CDBG-DR funds to provide project management expertise to coordinate, plan, manage, and implement a variety of programs and projects, including infrastructure and local community-driven disaster recovery projects throughout the Superstorm Sandy and Hurricane Irene/Lee affected areas. CSA Group provided the following A/E Subject Matter Expert s to execute the following contract tasks: Provide A/E Technical Expertise for development of applications pertaining to energy, transportation, water and wastewater treatment and provide A/E Technical Reviews & Cost Reasonableness of Infrastructure project applications and designs. Client: Hunt, Guillot & Assoc, LLC (HGA), Jay Guillot (318) 255-6825, jguillot@hga-llc.com. (2015-2017)

Auburndale Elementary School | Miami Dade County Public Schools

Assistant Project Manager/Constructability Reviewer. Architectural and Engineering basic services and additional services related to a new bid and award phase with a new Construction Manager. CSA's scope included scope definition for bidding purposes for removal and installation of new high impact windows

modifications and reinforcement of existing openings for Building #1; removal and installation of exterior door assemblies; Installation of new A/C Bard units and louvers in existing window openings; partial renovations of group toilets; removal of existing drinking fountains and installation of new ADA complaint drinking fountains; partial removal and installation of VCT flooring in identified areas; and removal and installation of new entry doors and re-installation of existing canvas canopy. Client: Miami-Dade County Public Schools, Alejandro Pupo (305) 995-4858, alejandropupo@dadeschools.net. (2014-2016)

Parking Lot Expansion | NBC 6 Universal South Florida Headquarters– Miramar, FL

CSA was contracted for the design of the NBC 6 Universal - South Florida Headquarters (NBC 6) parking lot expansion in their existing parking area and make some improvements to the existing parking lot. The parking lot expansion was in the north existing green area part of the lot and wrapping to the west between the existing building and I-75. Other services included improvements in the eastern part and main entrance to the existing parking lot. The total project site area is approximately 5.55 acres (Ac). The design includes the updating of the drainage permit required by the South Broward Drainage System (SBDD), South Florida Water Management District (SFWMD) and the City of Miramar. Mr. Osella is the Assistant Project Manager and Constructability Reviewer. Client: NBC6, WTVJ, Terry Smith, 954-622-7870, terry.smith@nbcuni.com. (2017)

Retrofit and Reconstruction of "Hermanos Rodriguez" Racetrack for 2015 F1 Mexico Grand Prix - Mexico City, DF

The Autódromo Hermanos Rodríguez ("Rodríguez Brothers Racetrack") is a 4.484 km (2.786 mi) racetrack in Mexico City, Mexico, named for the famous racing drivers Ricardo and Pedro Rodríguez. At 4.421 km, the course is approximately 60 meters shorter than the previous Grand Prix layout. Mexican Grand Prix organizers predict lap times of around 75 seconds and speeds in excess of 325 km/h (202 mph) for the current turbocharged Formula One cars. CSA worked jointly with Grupo Omega to provide project management, project controls, technical advice, and quality control services. Mr. Osella was the representative of CSA providing all these services on-site on behalf of the Contractor. (2014 – 2015)

Construction Engineering and Inspection | All Electronic Tolling (AET-5B) Project, SR 869

This project belongs to Florida Turnpike Enterprises, Inc. consist of conversion of 2 mainline toll plazas into electronic toll, 17 new toll buildings, 19 new gantry structures, new toll facilities including mechanical and electric equipment. Mr. Osella served as the Senior Building Inspector for this project. Client: Target Eng. Group, Mr. Ritch Lavin (954) 448-0647. (2013 – 2014)

South Florida Water Management District | Construction Observations Services Program Management Services – Palm Beach & Hendry Counties, FL

Mr. Osella was a Senior Inspector for this project involving the design and construction of an additional stormwater treatment area (STA) in Compartment B. The objective of the project is to increase the performance of the STAs improving the quality of water entering the Everglades Protection Area (EPA). The long-term Everglades water quality goal is for all discharges to the EPA to achieve and maintain compliance with water quality standards. The project includes a six-gated single barrel inflow structure, a 2x 26 cfs seepage pump station, 2 water control structures with electrical actuators and Remote Terminal Units, communication equipment, power generators and UPS. These projects were under the management by the South Florida Water Management District. Client: TY Lin International / HJ Ross, Kevin Snell (561) 682-2588, ksnell@sfwmd.gov. (2005 - 2009)

SR A1A Light Replacement Project - Broward County, FL

CSA was contracted by the City of Fort Lauderdale to provide civil engineering consulting services to include design, permitting, preparation of construction documents and participation in the implementation of various City projects. 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)

HANS FIGUEROA, P.E.

Stormwater – Water Resources

Education

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

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

Professional Licenses and Registrations

Professional Engineer

Puerto Rico License #13025
Florida License # 79164
Maryland # 46869
New York # 095322-1

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 – Member of Stormwater Committee

Puerto Rico Water and Environment Association

Mr. Figueroa has 25 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, MS4 and environmental permitting. He leads the Water Resources team, which provides a variety of services to water utilities including compliance assistance, peer review, capital improvements, cost analysis, project and program management services. For the past 5 years, Mr. Figueroa has been working on sustainability and green infrastructure projects, and served as a Subject Matter Expert for the 100 Resilient Cities.

PROFESSIONAL EXPERIENCE

Structure S-151 Culvert Replacement: South Florida Water Management District (SFWMD) - Ft. Lauderdale, Florida

The structure allows release of water from WCA 3A to meet water needs for South Miami-Dade County and to discharge excess water to tide from WCA 3A and 3B, when capacity is available in the Miami Canal. Routine inspections over the years have determined that the structure can no longer be considered reliable. The scope of work includes design calculations, studies, plans, specifications, opinions of probable construction costs, construction schedule, operations plan, and continued development of the design for replacement of the S-151 structure. Hydraulic Engineer for the hydraulic evaluation for the proposed culvert structure replacement. (2017 – 06/2020)

Hydraulic Study for River Oaks Stormwater Park - Ft Lauderdale, FL

Mr. Figueroa was the Hydraulic Engineer for this T.O., responsible for the hydraulic evaluation for the drainage improvement necessary for the development of this community park that also included a wetland demonstration and provided stormwater runoff management and reduce flooding risk. (2015-2016)

Parking Lot Expansions and Additions: Cleveland Clinic - Weston, FL

Mr. Figueroa was responsible for the hydraulic evaluations for the development of parking lots in response to clinic expansions and addition of buildings. Project included compliance with water quality treatment requirements of the South Florida Water Management District, and design requirements of the City of Weston, and Broward County. (2014 -2018)

PRASA Puerto Nuevo Wastewater Treatment Plant

Mr. Figueroa was charged with managing the design phase of a $17M contract between Honeywell Building Solutions and PRASA, directed at cutting energy consumption by 80% through the operation of a steam turbine that recuperates wasted heat and vapor from the facility sludge incinerator. (2014 - 2016)

Guajataca Dam Failure Stabilization, Puerto Rico Electric Power Authority

As a direct consequence of the passage of Hurricane Maria, the Guajataca Dam was damaged in one of its key components, the emergency spillway. As Project Manager, Mr. Figueroa lead a team of dam safety expert consultants participating in a team effort with the US Army Corps of Engineer and PREPA to develop immediate response actions to stabilize the damaged spillway. Actions included geotechnical, structural and hydraulic aspects with respect to the dam. The Dam was stabilized within 50 days of work and USACE took over the emergency response mission and will continue until fully stabilized.

Environmental Engineer – Puerto Rico Highway and Transit Authority

Emissions calculations and runoff management alternatives as part of the planning and environmental impact statement phases of three highway extension projects. Emissions were calculated using MOVEs and CALRoads software. (2017)

Project Manager - CORCO WWTP Design

CSA is assisting NewFields, Inc. in the architectural, structural, and electrical design of an industrial wastewater treatment plant that will provide efficient removal of inorganic contaminants using oil water separation and high rate coagulation and settling processes. Sludges will be dewatered onsite using centrifuge technology. (2016 - 2017)

PRASA Puerto Nuevo Wastewater Treatment Plant

Honeywell is negotiating an Energy Savings Performance Contract (ESPC) for a Buildings Guaranteed Energy Savings Project with the Puerto Rico Aqueducts and Sewer Authority (PRASA) for the Puerto Nuevo Wastewater Treatment Plant. CSA Services include: Data Collection and Site Visits, Preparation of Drawings and Specifications, Permitting, Services during Construction and Value Engineering (Allowance). Mr. Figueroa was the Project Manager, charged with managing the design phase of a $17M contract between Honeywell Building Solutions and PRASA, directed at cutting energy consumption by 80% through the operation of a steam turbine that recuperates wasted heat and vapor from the facility sludge incinerator. (2014 - 2015). (2015 - 2016)

Subject Matter Expert – DC Jerome Avenue Re-Zoning, Bronx, NY

This is an ongoing project where Mr. Figueroa is responsible for the technical evaluation and documentation of the expected impacts of the proposed re-zonification on the water, wastewater and stormwater infrastructure. The project expects to impact up to 80 lots along Jerome Avenue. The project seeks to promote the development of affordable residential units, and commercial space in the area. (2016-2017)

Environmental Engineer - Empire State Development, 888 Fountain Ave. Environmental Impact Statement. Environmental Engineer

Working as subconsultant for STV, Mr. Figueroa evaluated and documented the water, wastewater and stormwater impact of a proposed redevelopment project in the Brooklyn Developmental Center. The project included adding 1000 affordable residential units, and commercial space on two separate lots totaling 6 acres. The project was able to connect to existing infrastructure improving the economic feasible. (2015-2016)

Quality Control/Assurance for Engineer Services - CDBG-DR Sandy Recovery, NYS GOSR, NY

Working as a subconsultant to the Program Manager, Mr. Figueroa provided resource management and technical assistance to prepare engineering and architectural services cost reasonableness estimates for community restoration projects related to the impact of extreme storm events. The projects included a variety of scope ranging from directly related projects such as storm sewer infrastructure repair including hydraulic and hydrologic studies, to feasibility studies for the reconstruction of an emergency response shelter. (2015 - present).

Subject Matter Expert - Sewer Projects for Four Communities, Suffolk County DPW, NY

Working as a subconsultant to a County contractor, Mr. Figueroa provided technical assistance related to a HUD grant application seeking funding for sewer projects in four communities that have historically observed poor performance with septic systems and cesspools, resulting in significant impact to local estuary and bay ecosystems. Mr. Figueroa focused on ensuring that robust technical data would be used in support of the grant application. (2015).

Design Engineer - Water Systems Design, Dow AgroScience, PR (Dow)

Mr. Figueroa prepared water system designs for two building areas using water supply wells as a water source. He also designed the treatment process, selected equipment, and managed the preparation of construction drawings. (2014)

WILSON ORTIZ, P.E.

Sr. Civil / Environmental Engineer – Water Resources / Resiliency

Education

B.S. in Civil in Engineering, University of Puerto Rico, Mayagüez 1990

M.S. in Civil Engineering, University of Puerto Rico, Mayagüez 1991

Professional Licenses and Registrations

Licensed Professional Engineer:

- New York #96990-1
- Puerto Rico #11578

Certifications

Board Certified Environmental Engineer (BCEE): American Academy of Environmental Engineers, Certification in Water and Wastewater Engineering #04-10064

Professional Affiliations

- College of Professional Engineers and Land Surveyors of Puerto Rico
- Water Environment Federation (WEF)
- American Water Works
- Association (AWWA)
- PRWEA Past President
- WEF House of Delegates Member 2003-2006

Awards

Arthur S. Bedell Award Water Environment Federation

2009 Puerto Rico

Years Experience

28

Wilson Ortiz is a licensed professional engineer with 28 years of experience in consulting engineering, project management, and disaster recovery programs. With extensive experience in the Water market and water resources, his main project areas include design for water and wastewater infrastructure projects, sludge treatment process design, industrial and residential infrastructure projects, pollution prevention, and water quality analysis.

PROFESSIONAL EXPERIENCE

DEP Wastewater Resiliency Plan initiative RLCY-DES-A & RLCY-DES-B, Various Wastewater Projects, NYC

Project Manager for structural and electrical design of resiliency upgrades at the following DEP Wastewater Treatment Plants:

- Hunts Point WWTP: Structural Resiliency Facilities Planning, Basis of Design Report, and design.
- Newtown Creek WWTP: Structural Resiliency Facilities Planning, Basis of Design Report, and design.
- Tallman Island WWTP: Structural Resiliency design.
- Red Hook WWTP – Electrical Resiliency Facilities Planning
- Port Richmond WWTP – Electrical Resiliency Facilities Planning

DEP General Engineering Consultant Services for projects at various Bureau of Wastewater Treatment ("BWT") facilities, Southern and Eastern Regions, NYC

Project Manager for Task Orders at the following wastewater Treatment Plants:

- Red Hook WWTP
- Oakwood Beach WWTP
- Port Richmond WWTP
- North River WWTP
- Owls Head WWTP
- 26th Ward WWTP
- Jamaica WWTP

NYC OMB Disaster Recovery Program Management Services, NYCDEP, New York City

Mr. Ortiz conducted field inspections of damages caused by Hurricane Sandy to NYC DEP Wastewater Treatment Plants (WWTP) and Pump Stations. (March 2015 – Feb 2017), followed by more specific assessments, tasks included:

- Adaptation Assessment Reports and Cost estimates of the affected WWTP's to define eligibility for FEMA Hazard Mitigation Funding under Section 406 (Stafford Act).
- Worked directly with FEMA NY Staff on validation of damages, assessments, PW revisions, data, etc.
- Conduit and Wire Inventory Analysis for all NYC WWTP's.
- Provided restoration scopes of work to FEMA for approval.
- Provided WWTP/Pump Stations hazard mitigation recommendations within the NYC Wastewater Resiliency Plan.
- Review of Flood Vulnerability
- Provided assessment on mitigation projects funding, under FEMA Section 406 and/or DEP SMLP Mitigation Projects for the following:
  - WWTP's: North River, Hunts Point Bowery Bay, Red Hook, Wards Island, Oakwood Beach, Rockaway, Coney Island, and 26 Ward.
  - Pump Stations: Nevins St; 49th St.; Bush Terminal; Douglaston; Seagirt; Rosedale; 2nd Ave.; and South Beach Pump Station.

Downtown Revitalization Initiative for Owego New York

Mr. Ortiz assisted the team developing the Downtown Revitalization Initiative for Owego New York. His work on this project included review of soil and drainage conditions in two park areas, development of conceptual solution for drainage issues

in Marvin Park, identification of possible floodway impacts, review of waterfront conditions and permitting requirements for potential projects along the Susquehanna River, and review of river flooding and possible control measures.

Water Distribution System Optimization and NRW Program, Puerto Rico Aqueduct and Sewer Authority (PRASA)
Project Manager overseeing 15 CSA technical staff members assigned to PRASA's five Operational Regions. Services include water distribution system optimization (flow and pressure management, pump station optimization, distribution system modeling, GIS), and Non-Revenue Water analysis.

Puerto Rico Water Capital Improvement Program, Puerto Rico Aqueduct and Sewer Authority (PRASA)
CSA was selected as the East Region Program Manager for PRASA's Capital Improvement Program (CIP). This is a $700 million plus program with over 140 projects identifiela ord in the region. Mr. Ortiz was the Technical Leader in charge of the water and wastewater projects providing program management, engineering and design management, geographic information system (GIS), environmental compliance, land acquisition, construction management, start-up and commissioning.

Beatriz Reservoir, Puerto Rico Aqueduct and Sewer Authority (PRASA)
The existing water supply for areas surrounding the Municipality of Caguas, Puerto Rico, fell short of demand for the region. This project was developed to increase supply including the construction of a 36-meter high by 450-meter long earthen dam and reservoir along Beatriz creek CSA managed and revised the Environmental Impact Statement. Mr. Ortiz was the Technical Leader for this project, responsible for developing the preliminary design for raw water line, dam, and transmission line, and in charge of the Preliminary Engineering Report for the new water treatment plant.

Haiti New Sports Center and Residential Development Water and Wastewater Design, IOC and US Aid Developments
Mr. Ortiz was responsible for the water and wastewater infrastructure design for the International Olympic Committee Sports Center and US Aid water and sanitary projects for two residential developments at the Republic of Haiti.

Valenciano Reservoir, Puerto Rico Aqueduct and Sewer Authority (PRASA)
Mr. Ortiz was the Technical Leader of the design for the construction of a new raw water pump station, a new 15 million-gallons per day (mgd) water treatment plant, and a new dam and reservoir along Río Valenciano, which would inundate approximately 554 acres. Valenciano reservoir has a drainage area of approximately 14.5 miles with a maximum storage volume of approximately 20,000 acre-feet. The reservoir yields an average of 14.4 mgd, with a maximum yield of 21.6 mgd.

Ensenada Sanitary Sewer System, Puerto Rico Aqueduct and Sewer Authority (PRASA)
The Ensenada Community and other sectors disposed their sanitary sewer in septic tanks and by others means. The inadequate structural conditions of the septic tanks, growing volume of domestic waste, and ponding areas surrounding the tanks sites, generally resulted in discharges of sewage over land with flows reaching Guánica Bay. Infrastructure was developed to collect, transport and discharge the sanitary sewer collection system. In addition, the project provided the required facilities and environmental improvements for the tourist and recreational developments of this area resulting in a better quality of life for the local population. Mr. Ortiz was the Engineering Supervisor

John T. Doogan

Professional Land Surveyor / LS4409 / Florida
Project Surveyor

Years with Avirom & Associates: 21
Total Years of Experience: 45

Education

1974 / Associates in Science / Engineering

Professional Experience

John Doogan had twenty four years of survey experience prior to joining Avirom & Associates in 1999. He has been a Florida registered surveyor since July of 1987 and became certified in Geographic Information System from Florida Atlantic University in June of 2003. He is currently responsible for boundary surveys, topographic surveys, GPS surveys and expert witness testimony. John is a member of the Florida Society of Professional Land Surveyors.

Professional Projects

WAWA – Pompano Beach – ALTA/NSPS survey and metes and bounds land description
Walmart – Pompano Beach – boundary, topographic and tree survey; ALTA/NSPS survey
First Step Behavioral Health – Pompano Beach – boundary, topographic and tree survey; sketch and description
Cypress Bend Shopping Center – Pompano Beach – boundary survey and elevation certificate
City of Lauderhill:
- *Fire Station 30 Relocation* - boundary and topographic survey
- *First City Hall* - topographic and final survey
- *Habitat Condo* - topographic survey
- *Lift Station #37* – topographic survey for design of lift station improvements
- *Veterans Park/Fire Station* – boundary and topographic survey
- *Jackie Gleason Park* – boundary and topographic survey

Office Depot - boundary, topographic and tree survey; miscellaneous layout
Lynn University - overall boundary, topographic and tree survey; survey support for construction
City of Coral Springs – route-of-line survey, base mapping for existing utilities above and below ground for engineer's design
Coral Springs Public Safety Complex – boundary and topographic survey for architect and engineer's design of police headquarters and fire substation renovation
Atlantic Business Center – boundary and topographic survey; coordination of aerial photography; preparation of plat; coordination of survey support for engineering design and development (130 acres)

RAFAEL A. TORRENS III, AIA

Senior Architect

Education

Post Graduate Studies
Architecture Association
School of Architecture,
London, England 1989

B. Arch. Professional Degree
University of Notre Dame du Lac, South Bend, Indiana 1988

Professional Licenses and Registrations

Registered Architect:

Florida License No. AR0017381

Puerto Rico License No. 14050

AIA Member No.30158204

Training and Certifications

- FEMA IS-1013 Costing-Estimates and the Cost Estimating Format

Mr. Torrens has a vast architectural experience having worked for 30 years in various design roles in Puerto Rico, Japan, Venezuela, Europe, and Florida. He brings a strong management capability to ensure implementation of design intent, and works effectively with clients, subconsultants and staff. He has worked on a broad variety of projects including single and multifamily housing developments, educational, marine and railway terminals, hotels and restaurants, retail stores, and in the public and private sectors.

PROFESSIONAL EXPERIENCE

A/E Professional Contract for Emergency Power Generator Assessments and Buildings Retrofit - Miami-Dade County, FL

CSA is working with the Miami-Dade Public Housing Community Development to conduct assessments in 12 of their multi-story Assisted Living Facilities (ALFs) buildings and retrofit them with new 100% capacity generators. CSA conducted the required assessments to define electrical, architectural, structural, mechanical and environmental considerations that would entail the retrofit so that an accurate cost estimate can be developed. Mr. Torrens is the Architect of Record, responsible for the design of any modifications to the sites. Client: Miami-Dade County Public Housing Development, Francisco Trujillo, (305) 888-9744, francisco.trujillo2@miamidade.gov. (10/2019 – 06/2020)

Design / Build Services for New Alexander Orr Water Treatment Plant: Miami-Dade Water & Sewage Department (WASD) – Miami, FL

CSA is the lead designer for the new water laboratory, providing: Architecture, Landscape Architecture, Civil Engineering, Structural Engineering, Mechanical, Electrical, and Plumbing Engineering, Environmental, and Permitting. The new building is being designed as a Risk Category, IV Essential Facility, per ASCE 7-10. The project entails 11,500 square feet and accommodations for: 20 staff, 12 visitors, 32 vehicles. The project is planned and designed to achieve LEED Silver Certification. Mr. Torrens is the Design Project Manager and Lead Architect, and as such is responsible for performing the due diligence, research on latest laboratory trends, and programmatic requirements including 'Future-Proofing' of the Laboratory. He is coordinating all disciplines involved with a holistic design approach to provide the client a state-of-the-art facility. Client: Miami-Dade Water and Sewer Department (WASD), Rosangelina Castro, (786) 552-8894, Rosangelina.Castro-Hernandez@miamidade.gov. (2019 – 08/2020)

Chlorine Building: WASD South District Wastewater Treatment Plan – Cutler Bay, FL

The Miami-Dade Water and Sewer Department (WASD) existing Chlorine Building due to the age and conditions, is in need of upgrades consisting of repairs, rehabilitation, and replacement. CSA was contracted by WASD to develop Construction Documents for the Scope of Work developed by CD PM/CM. CSA is tasked with providing the Technical Memorandum to specifically perform evaluations, confirm project Scope of Work, and identify the design criteria. Mr. Torrens is the Architect of Record for this contract. (2019 – 05/2020)

Architecture and Engineering Services for the Upper Keys Center at the College of the Florida Keys – Key Largo, FL

CSA has recently started working on the A/E design services for the new Upper Keys Center at the College of the Florida Keys (CFK). The design is for a two-story building housing multiple STEM programs, where the College plans to expand its Nursing/ Allied Health, Apprenticeships, Business Administration, Engineering Technology and Public Safety academic programs. Scope of work includes providing Architectural, Engineering and Professional Services for the design and construction

of the facility. Facility Programing, Civil Engineering, Site Permitting at the County and College, Drainage and Stormwater Management, Life Cycle Cost and DOE Energy Analysis, Architectural Design, MEP Design, LEED or FGB Consultation/ Certification, and Renderings/ Models. Total buildout will be 42,000 SF. Project is expected to be completed by March 2021. Mr. Torrens is the Sr Architect and CSA representative and as such is responsible for coordinating all Architectural and Engineering services on behalf of CSA, as well as responsible of fine-tuning Schematic design. (2019 – Ongoing)

Retrofitting of Fire Station 20 to Comply with FEMA 361 Standards "Safe Room" – Islamorada, Village of Islands, FL

Electrical designer for the design of a FEMA 361 safe room at Fire Station 20, located at 81850 Overseas Highway in Islamorada, Florida. CSA's services include Professional Design, Engineering, and Surveying Services. Mr. Torrens is the Architect of the project, working closely with the Structural Engineer in the addition of the room. The safe room must be designed to withstand a wind speed of 250mph and to comply with Florida's Division of Emergency Management (FDEM). Client: Islamorada, Village of Islands. Terry L. Abel, Fire Chief, terry.abel@islamorada.fl.us, 305-664-6490. (03/2020 - Ongoing)

Architectural and Engineering Construction Services for New Building Construction: Hialeah Housing Authority - Hialeah, FL

CSA Group was recently awarded a one-year contract with the Hialeah Housing Authority to conduct Architectural and Engineering design, including associated Mechanical, Electrical, and Plumbing design. The Hialeah Housing Authority (HHA) provides housing assistance to over 5,000 eligible, low income families through the Affordable Housing Program, Housing Choice Voucher (Section 8) Program, Palm Centre, and Public Housing Program. Design work incorporates site design, site layout and site revitalization services. It includes support of demolition, and renovation of existing sites and new constructions, both interior and exterior. Design has been requested by the client to meet ADA and UFAS requirement for the handicapped. Mr. Torrens is the lead designer and Architect of Record in charge of design and production of the various projects. Client: Hialeah Housing Authority; Miguel A. Hernandez, (305) 888-9744, miguel.hernandez@hialeahhousing.org. (01/2019 - Ongoing)

A/E Services for Capital Renewal and Replacement Projects - City of Miami Beach, FL

CSA Group was contracted by the City of Miami Beach to provide Architectural, Environmental Engineering, and Civil Engineering services through the Capital Renewal and Replacement Program (the "CRR Program"). The intent of the CRR Program is to provide funding a proactive renewal and replacement of the City's facilities and the systems within those facilities (e.g., HVAC, roofs, fire safety systems, etc). The CRR is also used for approved for small repair, remodel or renovation projects. CSA has been commissioned to perform services for the following tasks: Architecture and Engineering Design for improvement of restroom facility at City's Parking Garage (400 West 42 St), and at City's Property Management Facility (1800 Bay Road). Mr. Torrens serves as the Architect of Record for all T.O.'s. assigned to date. Client: City of Miami Beach, Jorge Guanchez, (786) 390-2040, jorgeGuanchez@miamibeachfl.gov. (2018 - Ongoing)

All-Sports Fitness Complex and Bernhardt Student Wellness Center: Christopher Columbus High School – Miami, FL

The two-story Christopher Columbus All-Sports Fitness Complex and Bernhardt Student Wellness Center was an addition of 100,000 square feet of athletic facilities to this all-boys Catholic school. The design incorporates generous glazing, high ceilings and a covered walkway that provides a tropical feel in keeping with the South Florida environment. A central lobby houses a grand staircase and elevator and allows for the use of the second floor without interfering with the two ground-floor training spaces. The second story of the building provides additional exercise spaces, nutrition education, coaches' offices and locker rooms, a large varsity sports locker room and showers, equipment storage, and a spacious and flexible conference room overlooking the field. The new sport fitness room has an optimum 10,000 square feet of space and has built-in flexibility for future growth and advances in equipment. The wellness center was designed with the general student population in mind, with a focus on cardiovascular training. Materials were chosen to ensure long-term use with little maintenance. Mr. Torrens assisted in the overall architectural design for the project. (2013)

CARLOS ORTIZ, PE

ASSOCIATE

GEOTECHNICAL ENGINEERING & PROJECT MANAGEMENT

Las Olas Corridor Improvement,
Fort Lauderdale, FL

MET Miami, Miami, FL

Mr. Ortiz has more than 21 years of geotechnical and environmental engineering experience in Puerto Rico and Florida. His experience has included site reconnaissance visits for proposal and report preparation, proposal preparation for geotechnical and environmental explorations, supervision of both field testing, sampling and drilling activities, and writing subsoil exploration reports and environmental site assessment reports for a wide variety of projects throughout the island of Puerto Rico and the State of Florida. The projects have included offshore projects, private housing developments, manufacturing and pharmaceutical projects, highway projects, commercial structures, parking structures, slope stability analyses, and geotechnical instrumentation monitoring.

SELECTED PROJECTS

- 1040 South Miami Avenue, Miami, FL
- 1400 Biscayne Boulevard, Miami, FL
- 1401 Brickell Avenue, Miami, FL
- 1450 Brickell Avenue, Miami, FL
- 2000 Biscayne Boulevard, Miami, FL
- 2937 Biscayne Boulevard Retail Renovation, Miami , FL
- 5958 South Dixie Highway, Miami, FL
- 5th Avenue Lofts, Sunny Isles Beach, FL
- Adventure Activities Billie Swamp Safari, Clewiston, FL
- Apple Store - Lincoln Road, Miami Beach, FL
- Auto House, Miami, FL
- Aventura Mall - Piazza, Miami, FL
- Beach House, Surfside, FL
- Berths 6 & 7 at Port of Miami, Miami, FL
- Biscayne Beach Club, Miami, FL
- Brickell City Centre, Miami, FL
- Brightline (Formerly All Aboard Florida), Miami, FL
- Byblos Condominium, Miami, FL
- Costco Wholesale and Super Target, Leesburg, VA
- Downtown Dadeland, Kendall, FL
- Elysee, Miami, FL
- Empire World Towers, Miami, FL
- Expansion to Anglers Hotel, Miami Beach, FL

EDUCATION

MBA, University of Florida

M.S., Civil Engineering
Georgia Institute of Technology

B.S., Civil Engineering
Syracuse University

PROFESSIONAL REGISTRATION

Professional Engineer (PE) in FL, Puerto Rico

LEED Accredited Professional (LEED AP)

Diplomate, Geotechnical Engineering (D.GE)

AFFILIATIONS

American Society of Civil Engineers (ASCE), Associate Member

ASCE Puerto Rico Chapter, Secretary

ASCE Geo-Institute, Member

Colegio de Ingenieros y Agrimensores de Puerto Rico (CIAPR), Member

Las Olas Corridor Credit: EDSA

- Expansion to The Raleigh Hotel, Miami Beach, FL
- Expansions to Sorento, Miami, FL
- Fairfield Dadeland, Kendall, FL
- Fontainebleau Resort, Miami Beach, FL
- Four Midtown, Miami, FL
- Four Seasons Hotel and Tower, Miami, FL
- Infinity I and II, Miami, FL
- JLB Barcardi, Miami, FL
- Greystone Hotel Renovation, Miami Beach, FL
- Las Olas Boulevard Corridor Project, Fort Lauderdale, FL
- Lehman Plumbing Site Redevelopment, Miami, FL
- Lennox Hotel (Building 4), Miami Beach, FL
- Lynx Downtown, Miami, FL
- Mana Wynwood, Miami, FL
- Met 1, 2, and 3, Miami, FL
- MetSquare, Miami, FL
- Metropolis at Dadeland, Miami, FL
- Miami Herald/Knight Ridder Site, Miami, FL
- Miami Marine Stadium, Miami, FL
- Miami World Center – Block D East, Miami, FL
- Mosaic Condominium, Miami Beach, FL
- NASA Headquarters, Merritt Island, FL
- Oceanside at Pompano Beach – Parcels A and B, Pompano Beach, FL
- One Bal Harbour, Village of Bal Harbour, FL
- One Brickell City Centre, Miami, FL
- One Miami, Miami, FL
- One Thousand Museum, Miami, FL
- Platinum Condominium, Miami, FL
- Plaza Coral Gables, Coral Gables, FL
- Plaza on Brickell, Miami, FL
- Port Aventura, Aventura, FL
- PortMiami Tunnel, Miami, FL
- Publix Supermarket – 17th and Biscayne, Miami, FL
- Quantum on the Bay, Miami, FL
- Resorts World Miami, Miami, FL
- Seminole Hard Rock Hotel & Casino, Hollywood, FL
- Seminole Hard Rock Hotel & Casino, Tampa, FL
- Sole Condominium, Sunny Isles Beach, FL
- Solis Resort Development, Sunny Isles Beach, FL
- Spanish Village Residence, Miami, FL
- Ten Museum Park, Miami, FL
- The Axis, Miami, FL
- The Ritz Carlton Residences, Sunny Isles Beach, FL
- The Shoppes at Coral Way, Miami, FL
- Turnberry Isle-Cascada Expansion, Miami, FL
- Versailles Development, Miami Beach, FL
- Weck Wynwood, Miami, FL
- Wynwood 25, Miami, FL
- Wisdom Village Crossing, Fort Lauderdale, FL
- Whole Foods and Parking Structure, Miami, FL

INSTITUTIONAL

Continuing Services Contract for Civil Engineering

Fort Lauderdale, FL

OWNER/CLIENT

City of Fort Lauderdale

CONTACT

Elkin Diaz, MBA, P.E.
100 North Andrews Avenue
Fort Lauderdale, FL 33301
(954) 828-6539
ediaz@fortlauderdale.gov

SERVICES

Civil Engineering
Construction Management
Drainage
Maintenance of Traffic
Surveying & Mapping
Transportation Engineering
Landscape Architecture
Marine Facilities Design

COMPLETION DATE

2016

FEE

$436,434

CONSTRUCTION COST

$1 Million

www.csagroup.com

CSA Group was contracted by the City of Fort Lauderdale to provide civil engineering consulting services to include design, permitting, preparation of construction documents and participation in the implementation of various City projects.

CSA Group was directly responsible for all services as it relates to roadway and site design, neighborhood improvements and beautification, underground utility design, site grading and stormwater runoff modeling and design, erosion and sediment control design, pavement marking and signage design, maintenance of traffic (MOT), engineering analysis, cost estimation and reporting, permitting, construction observation and inspection, shop drawing review, preparation of project rendering and presentation materials, specialized training to City staff, and coordination with City staff, consultants, utility owners and contractors. To date, CSA Group has been commissioned to perform services for the following tasks:

Task 1: Outfall design of Two Control Structures into North Fork New River
Task 2: Lighting
Task 3: Drainage and Tidal Flooding Problems at Riviera Isles (Phase I) .
Task 4: CEI for Harbordale Sidewalk Project
Task 5: CEI for Commercial Boulevard Landscape
Task 6: CEI for NE 15th Street Landscaping Improvements
Task 7: Bridge Replacement Harborage Parkway
Task 8: SR A1A Light Replacement Project
Task 9: Sunrise Boulevard Landscape Improvements
Task 10: River Oaks Preserve
Task 11: Aquatic Center Master Plan

WATER

Pump Station Monitoring Panels Replacement
Clewiston, West Palm Beach & Ft. Lauderdale, FL

Florida

OWNER/CLIENT
South Florida Water Management District (SFWMD)

CONTACT
Gregg Coffelt, PE, PMP
Principal Engineer
Bureau of Engineering and Construction
3301 Gun Club Road
West Palm Beach, FL 33406
(561) 682-6853
gcoffelt@sfwmd.gov

SERVICES
Mechanical Engineering
Electrical Engineering

COMPLETION DATE
01/2020

FEE
$285,032

CONSTRUCTION COST
$3,169,000

www.csagroup.com

The five pump stations S-2, S-3, S-4, S-7 and S-8 are flood control pump stations with diesel engine driven storm water pumps. Each engine driven pump has an existing monitoring panel that monitors the engine and reduction gear parameters through existing engine and reduction gear mounted sensors and instrumentation.

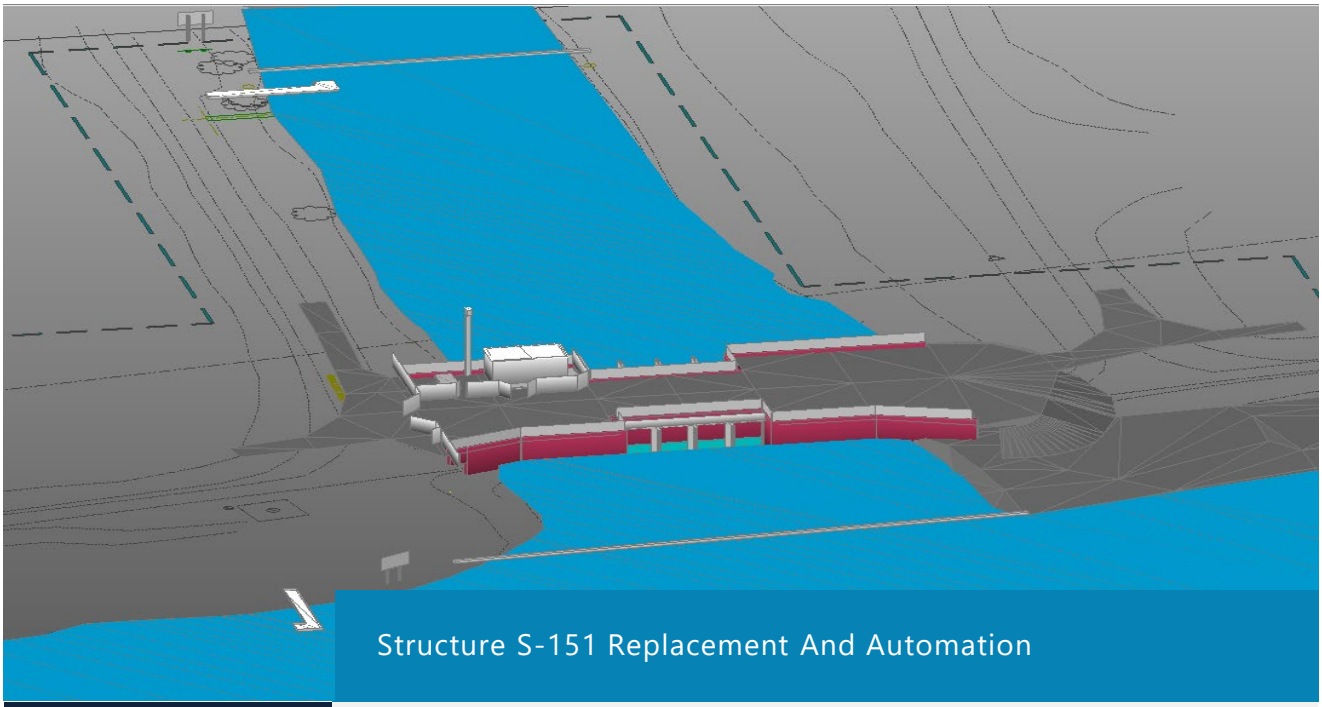
The scope of work consisted of replacing the existing engine monitoring panels with new PLC based monitoring panels. This included the installation of new sensors, instrumentation, conduit and wiring to provide emergency shutdown of the engine. Once installed these sensors, instruments, conduit and wiring automated the engine blower bypass valve.

The pump stations involved in this task order included:

- Pump Stations S-2, S-3 and S-4 located by Lake Okeechobee managed by the SFWMD Clewiston Field Station
- Pump Station S-7 is located on the West Palm Beach and Broward County Line over US 27 managed by the SFWMD West Palm Beach Field Station
- Pump Station S-8 is located 12 miles west of S7 managed by the SFWMD Ft. Lauderdale Field Station

CSA was responsible for gathering all the A/E design documentation from a team of multiple contractors, to produce all technical specifications and assemble the overall design package for the owner.

CSA was part of a team comprised of Hillers Electrical Engineering Contractors and Stantec.



Structure S-151 Replacement And Automation

Broward County, Florida

OWNER/CLIENT:

South Florida Water Management District (SFWMD)

CONTACT:

Jennifer McKim
Bureau of Engineering and Construction
3301 Gun Club Road
West Palm Beach, FL 33406
(561) 682-2621
jmckim@sfwmd.gov

SERVICES:

Design
Environmental Support
Geotechnical
Surveying

COMPLETION DATE

04/2020

FEE

$474,065 Design
$341,928 Engineering During Construction

CONSTRUCTION COST:

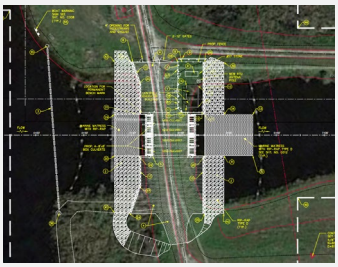
$5.6 Million

www.csagroup.com

Structure S-151 is located in Water Conservation Area (WCA) 3A at the intersection of the Miami Canal (C-304) and L-67A Canal, which is approximately 5.7 miles south west of the S-9 Pump Station and the Everglades Holiday Park. The original S-151 Structure consisted of six (6), 84-inch x 98-foot CMP culverts, operated sluice gates mounted on a steel frame erected on the upstream side of the structures. The structure allows release of water from WCA 3A to meet water needs for South Miami-Dade County along the Miami Canal C-6, C-7 and C-8 during the dry season. It can also be used to discharge excess water to tide from WCA 3A and 3B, when capacity is available in the Miami Canal. The SFWMD determined that the structure could no longer be considered reliable to function in accordance with its requirements and replacement was critical to the SFWMD to continue to meet its obligations for water supply, flood control and water quality.

The CSA design team designed a cast-in-place box culvert to maintain the existing water discharge capacity and to also allow complete access to the gates for maintenance purposes complying with the standards of the SFWMD. CSA provided services related to the Design Process such as:

- Environmental and Permitting Support
- Design calculations and engineering studies
- Plans and specifications
- Opinions of probable construction costs
- Construction schedule
- Operations plan



The design process includes the following submittals: Preliminary, Intermediate, Final, and Corrected Final/RTA. These were prepared in accordance with Everglades Restoration and Capital Projects Engineering Submittal Requirements. Presentations are prepared for briefings and meetings with the SFWMD management.

WASD South District Wastewater Treatment Plant – Chlorine Building Improvements

Cutler Bay, FL

OWNER/CLIENT

Miami-Dade Water and Sewer Department (WASD)

CONTACT

Tiffany Harrison
3071 SW 38th Ave, Miami, FL 33146, USA
443-810-6172
tiffany.harrison@miamidade.gov

SERVICES

Electrical Engineering
I&C
Mechanical Engineering
Structural Engineering
Permitting
Cost Estimating

COMPLETION DATE

May 2020

FEE

$156, 651

CONSTRUCTION COST

$1,500,000

The Miami-Dade Water and Sewer Department (WASD), in its South District Wastewater Treatment Plant, has an existing Chlorine Building. This building is a reinforced concrete structure designed in 1981 for the purpose of storing and the application of gaseous chlorine to the effluent for disinfection purposes. Due to the age and condition of the facility, upgrades were required consisting of repairs, rehabilitation and replacement.

CSA was contracted by WASD to provide construction documents and technical specifications for the scope of work developed by the Consent Degree Program Management / Construction Management (CD PM/CM). CSA was also required to provide a Technical Memorandum to specifically confirm project Scope of Work and identify the design criteria.

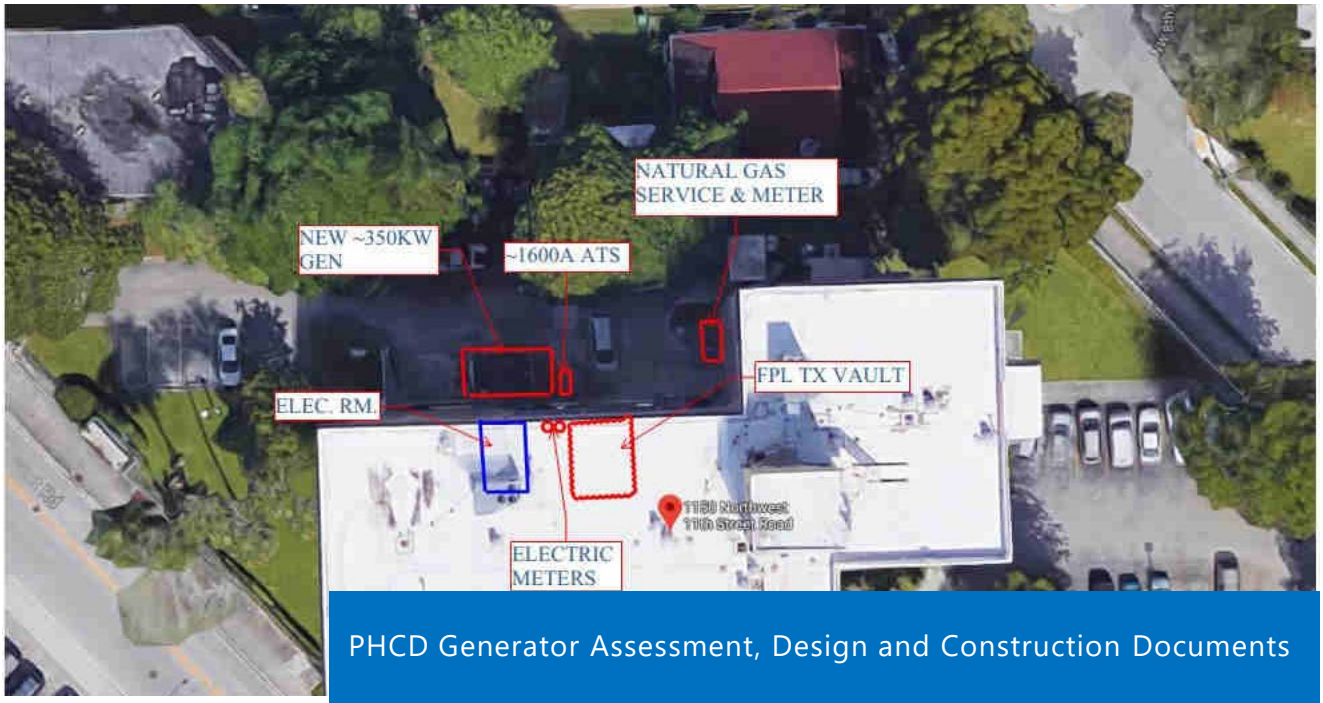
The project scope consisted of electrical upgrades, Instrumentation and Controls (I&C), Structural, and HVAC engineering work. A major portion of the electrical scope was for the replacement of the existing Motor Control Centers (MCC's).

Existing equipment in the building is susceptible to flooding, and new equipment will be elevated outside of the flood zone.

CSA is also providing Opinion of Probable Construction Cost (OPCC) and project schedule.

Scope of Work includes the following:

- Task 1 – Project Management
- Task 2 – Technical Memorandum (TM)
- Task 3 – Preliminary Design (30%)
- Task 4 – Detailed Design
- Task 5 – Permitting Services
- Task 6 – Bidding Services



PHCD Generator Assessment, Design and Construction Documents

Miami, Florida

OWNER/CLIENT

Miami Dade County Public Housing and Community Development

CONTACT

Francisco Trujlllo, RA
Project Manager
MD-PHCD
701 NW 1st Court, 16th FL
Miami, Florida 33136
786-469-4125

SERVICES

Assessments
Design Development
Construction Drawings
Construction Administration

COMPLETION DATE

06/2020

FEE

$1,058,174 (9 sites)

CONSTRUCTION COST

$ 7,000,000

Miami Dade County Public Housing and Community Development (MD-PHCD) has contracted CSA for the scope assessment and design services for 100% emergency power generation for nine sites owned and operated by the County. This resilience initiative is focused on assuring that residents of these public housing facilities have a reliable source of power during emergency situations.

One facility, Helen Sawyer Assisted Living Facility (ALF), built in 1976, has 104 apartments within an eight-story building of approximately 73,990 square feet in a 1.37 acre site. The main objective of the Project is to supply 100% standby power supply to the Facility to comply with the requirements of Rule 58A-5.036.F.A.C. that requires backup power generation in ALF as required by the State of Florida. The site is located in a flood zone (Zone AE) per FEMA Flood Map FIRM number12086C0312L.

The scope assessment determined that a new standby natural gas generator of 350 KW capacity would be necessary to support the facility and fire pump system with a new 1600A ATS. The existing Generator House (GH) will be demolished and replaced with new, code compliant GH. This new GH is proposed as a pre-cast construction, a Category III facility per FBC 2017 (power generating station). As such, the finish floor elevation of the GH will be at a minimum elevation of 10 feet (9 feet BFE per FEMA FIRM map plus 1 foot of freeboard as required by FBC).

The proposed design will have resiliency features such as elevating the generator and critical equipment above the Base Flood Elevation, an N+1 redundancy interconnection for a portable power generator as a backup to this new system and the installation of water resistant cabling and conduits if they fall below the Base Flood Elevation. The GH will also be designed to meet current Florida Building Code wind resistance features.

The contract involves assessments at nine sites and design for five sites.

EDUCATIONAL

Riverglades Elementary School Parkland 24 Classroom Addition

Parkland, Florida

OWNER/CLIENT

The School Board of Broward County, FL

CONTACT

Divine Amoah
Project Manager
7720 W. Oakland Park Blvd
Suite 323
Sunrise, FL 33351
(754) 321-1546
Divine.amoah@browardschools.com

SERVICES

Design
Value Engineering
Constructability Review
Construction Administration
Warranty Services

COMPLETION DATE

November 2015 – March 2017

FEE

$298,503

CONSTRUCTION COST

$8 Million

www.csagroup.com

The Riverglades Elementary building design is based on a site-specific adaptation of the 24-classroom addition designed for Oakland Park Elementary School. Design updates were also made to comply with the 5th Edition of the 2014 Florida Building Code and the District's current Design and Materials Standards and Design Criteria.

The two-story classroom facility in Broward County is 31,300 square feet with 24 student classrooms. The school design provides complete accessibility, utilizing a passenger elevator and protected roofed canopy structures to connect to the existing building assembly. Re-configuration of the school bus drop-off and pick-up area was also addressed as part of the master plan.

The project requires the integration of the modular two-story classroom building into the existing school campus and careful site planning and location analysis factoring existing conditions and functional aspects of the building. The functional integration and operational functionality of the school had to be maintained as part of the master planning. The existing playgrounds, accessory facilities and support utilities had to be relocated or adapted within the site as part of the overall effort. An emphasis on safety was a priority given that the operation of the facility was on-going during construction.

This building was conceived as a modular assembly that could be replicated in a cost-effective manner. The structural components are pre-cast concrete modular wall panels with prefabricated concrete floors and roofing structural elements. The modular assembly has a quality controlled manufactured aspect, reduces the assembly time, reduces cost, and provides other benefits such as lower life cycle cost, longer life cycle and a more resilient design.

CSA Group performed professional architectural, site adaptation and civil engineering services including drainage, sanitary sewer and water distribution design. Additional services included parking lot and student bus drop-off enhancements, signing and pavement makings, relocation of play courts, bidding, construction administration and warranty services.

EDUCATIONAL

Design Professional Services
Hollywood Park Elementary School - Florida

Broward County, Florida

OWNER/CLIENT

The School Board of Broward County

CONTACT

Shelley Meloni
Director Pre-Construction
smeloni@browardschools.com, (754) 321-1515.
7720 West Oakland Park Blvd. – Suite 323
Sunrise, FL 33351

SERVICES

Architecture, Mechanical Engineering, Fire Protection Engineering, Civil Engineering, Surveying, Environmental

COMPLETION DATE

January 2021

FEE

$366,630

CONSTRUCTION COST

$4.5 Million

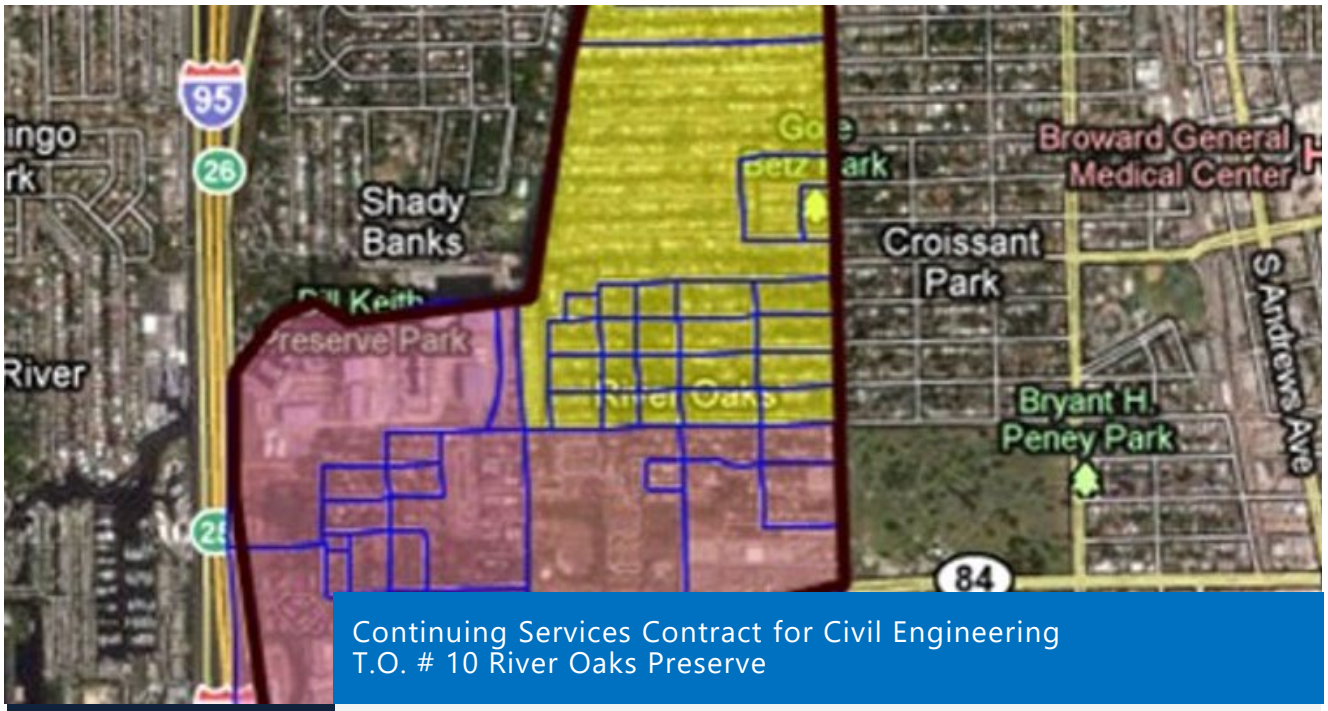
www.csagroup.com

As part of the Safety, Music, Art, Athletics, Renovations, and Technology (SMART) initiative to enhance early learning, a Broward County districtwide assessment found Hollywood Park Elementary School to require improvements and renovations in multiple physical areas. As part of a General Obligation Bond Program (GOB), the School Board of Broward County earmarked funds to improve the school through building envelope improvements, fire sprinkler installation, media center improvements as well as HVAC and electrical improvements.

Hollywood Park Elementary School is an existing school originally built in 1969 with extensions and renovations having taken place in 1976 and 1991. The campus comprises a total of (4) buildings of various extents with an approximate square footage of 78,000 square feet. The budget for the renovations is approximately $4 million and is projected to be completed by January 2021.

The main activities to be performed by the CSA team in compliance with the 2017 Florida Building Code and State Requirements for Educational Facilities (SREF) include but are not limited to:

- Conduct assessment and validation review providing a report of findings
- Replacement of fire sprinkler system for all buildings and site fire loop design
- Full design of media center improvements
- New electrical, HVAC, and building envelope improvements
- Replacement of canopy lighting, mounted building lighting, and distribution panels in multiple buildings
- Replacement of mechanical equipment in multiple buildings
- Replacement of exhaust fan and registers
- Installation of a new 1600A switchgear
- Replacement of electrical distribution panels and panel boards
- Replacement of two central plant air cooled chillers
- Test and balance of HVAC systems in multiple buildings
- Replacement of various envelope and building systems
- Reroofing of multiple buildings
- Raising existing roof areas



Continuing Services Contract for Civil Engineering
T.O. # 10 River Oaks Preserve

Fort Lauderdale,, FL

OWNER/CLIENT

City of Fort Lauderdale

CONTACT

Elkin Diaz, MBA, P.E.
100 Andrews Avenue N
Ft. Lauderdale, FL
(954) 828-5069
ediaz@fortlauderdale.gov

SERVICES

Civil Engineering
Drainage
Environmental
Permitting

COMPLETION DATE

06/ 2015

FEE

$120,000

CONSTRUCTION COST

$800,000

Fort Lauderdale planned for several stormwater preserves in areas that have historically been prone to flooding. The River Oaks Preserve is one of the first. Most of the development in River Oaks happened prior to modern water management technologies were available or required, and some subsequent road construction was done without evaluation of stormwater flow. As a result, River Oaks was subjected to repetitive and worsening flooding. An $800,000 grant was used for development of a stormwater preserve on 9.1 acres of undeveloped land in the area. In addition, the City, in conjunction with the Florida Department of Transportation, relocated the nearby historic railroad bridge to span a created water or wetland feature, thereby reaping the benefits of two complimentary projects.

CSA Group (CSA) was contracted to develop a stormwater infrastructure on the project site that allows for the development of a regional facility to provide water quality benefits while reducing flooding in the River Oaks neighborhood. Services include master planning, drainage, permitting and environmental services. The goal of the project is to preserve and enhance existing forested wetlands and to restore herbaceous wetlands to a "filter marsh community." The site is designed and permitted for storage and treatment of stormwater flows.

CSA reviewed all existing plans and reports provided by the City, then conducted field investigation to verify existing drainage patterns and boundaries, offsite contribution areas, localized flooding issues and outfall locations. We determined the boundaries of drainage basis to evaluate contributing flows, discharges and stages for different storm events. A draining map was developed along with a Hydraulic/Hydrologic Model using ICPR to evaluate conditions and determine flooding stages and peak discharges for both the 25 Year – 72 Hour and the 100 Year – 72 Hour storm events. We prepared a set of plans, analyzed cost for each alternative, a Stormwater Report and a Conceptual ERP Permit Package. A key aspect of the work was coordination and meetings with City, Broward County Environmental Protection, SFWMD Water Resources.

Everglades Agricultural Area (EAA) Compartments B & C - Pump Stations

Palm Beach & Hendry Counties, FL

OWNER/CLIENT

South Florida Water Management District / TY Lin International/ HJ Ross

CONTACT

Valle Mariano
201 Alhambra Circle # 900
Coral Gables, FL 33134
Tel.: 305-567-1888
Fax: 305-567-1771

SERVICES

Project Controls
Construction Supervision
Surveying

COMPLETION DATE

2011

FEE

$923,265

CONSTRUCTION COST

$137 Million

This project entails the construction of five pump stations with a total capacity of 5,475 cubic feet per second (2,457,180 gallons per minute) to support operations of EAA's Compartment B (9,500-acre project area), located in southern Palm Beach County, and Compartment C (8,800-acre parcel) located in Hendry County, Florida. The project is part of a larger program to add Stormwater Treatment Areas (STA) to the Everglades Protection Area (EPA), to improve the quality of water entering the Everglades.

CSA Group provided Construction Inspection/Management for the Everglades Agricultural Area (EAA) Compartment B and Compartment C Pump Stations. Services include project coordination, construction monitoring, submittal review and processing, project controls, materials testing and surveying, monthly activity reporting and project close-out.

Corporate Medical Facility Site Plans, Elevation Certification & Emergency Generator Installation

Miami, Florida

OWNER/CLIENT

Baptist Health Town & Country Corporate Medical Facility / TLC Engineering

CONTACT

James Ferris, P.E.
Direct (407) 841-9050
Office (407) 487-1222
Fax (407) 540-0234
James. ferris@tlc-eng.com

SERVICES

Civil Engineering
Surveying
Permitting
Specifications
Construction Administration

COMPLETION DATE

2012

FEE

$19,625

CONSTRUCTION COST

$750,000

The project is comprised of the installation of an emergency generator and elevation certificate at the Baptist Health South Florida's Town & Country Corporate Medical facility.

CSA Group services provides full civil engineering for site engineering, plans approval/ permitting, specifications and complete construction administration services. Professional surveying services include the preparation of as-built and special purpose surveys as well as elevation certificate survey services.

Central District Wastewater Treatment Plant & ITS Appurtenant Facilities Including Pump Stations 1 & 2

Miami, FL

OWNER/CLIENT

Miami-Dade Water and Sewer Department (MDWASD) / MWH International, Inc.

CONTACT

Luis Casado, P.E.
MWH, International
2655 Lejeune Road #320
Coral Gables. FL 33134
(305) 779-4948

SERVICES

Engineering Design
Site Investigations
Surveying
Geotechnical
Hydraulic Modeling & Analysis
Permitting
Construction Technical Support

COMPLETION DATE

2013

FEE

$161,880

CONSTRUCTION COST

$8 Million

www.csagroup.com

In 2013, the County negotiated a Consent Decree with the United States Environmental Protection Agency, the United States Department of Justice, and the State of Florida Department of Environmental Protection to reduce sanitary sewer overflows, eliminate treated effluent limitation violations and ensure proper capacity, management, operation and maintenance (CMOM) practices. The Consent Decree consists of three major components: pump station improvements, CMOM, and improvements to the three regional wastewater treatment plants, totaling $1.6 Billion over the next 15 years.

This project consisted of renewal and replacement tasks for plant existing Central District facilities including evaluation of existing equipment condition, capacity and useful life expectancy and preparation of a prioritized rehabilitation / replacement schedule and related design services. The MWH project scope includes preparation of preliminary designs, final designs, and construction documents, permitting and bid services and design services during construction at all three WWTPs, ensuring the project meets stringent deadlines, and is in full compliance with Consent Decree programs.

Contracted by MWH International, Inc., CSA's scope of work for the Central District WWTP and ITS Appurtenant Facilities included engineering design for selected plant upgrades and expansions, site investigations, surveying, geotechnical work, hydraulic modeling and analysis, coordination with other utilities, preparation of design reports, preparation of drawings and contract specifications, permitting and technical support during construction.

Emergency Disaster Recovery Architectural/Engineering Services Task Order #1

U.S. Virgin Islands

OWNER/CLIENT

Virgin Islands Housing Authority (VIHA)

CONTACT

Robert Graham, CPM
Executive Director / Contracting Officer
The Virgin Islands Housing Authority
4402 Estate Anna's Retreat #200
St. Thomas, Virgin Islands 00802-1737

SERVICES

Architecture
Engineering

COMPLETION DATE

7/2019

FEE

$38,303

CONSTRUCTION COST

$72,550

The Virgin Islands Housing Authority (VIHA) is responsible for planning, financing, constructing, maintaining, and managing all public housing developments located on the three islands of St. Thomas, St. Jahn and St. Croix. There was extensive damage caused to these islands by Hurricanes Irma and Maria. As part of the recovery process, VIHA solicited architectural and engineering services and experience in aggressive redevelopment, repositioning, modernizing or disaster resiliency improvements for several of its public housing communities and VIHA properties. CSA was one of the firms selected to provide such services on an IDIQ Task Order based contract.

The scope of work for these projects involves redesign and redevelopment of structures to be more resilient to hurricanes and other natural disasters. This work includes repairs with code upgrades to damaged roofs, windows, doors, interior and exterior of severely damaged apartments within various communities, demolition of existing buildings, redesign of hurricane damaged buildings and improvements to site utilities and infrastructure through hazard mitigation.

Our scope of work for Task Order #1 is the design of a standby generator for the multi-use building, to develop construction documents and provide construction administration for the installation of a standby generator at Wilford E. Pedro Homes located in Whim, St Croix, USVI. The objective of this effort is to assist VIHA provide reliable standby power to the development's multiuse building during emergency conditions.

Optimization of PRASA'S Islandwide Water Distribution Systems

Puerto Rico

OWNER/CLIENT

Puerto Rico Aqueducts and Sewer Authority (PRASA)

CONTACT

Jose J. Rivera Sanabria
Deputy Executive Director for Infrastructure
604 Barbosa Avenue
Hato Rey, PR 00917-4310
(787) 999-1717
Jose.Rivera3@acueductospr.com

SERVICES

Field and system mapping
GIS
Hydraulic Modeling
Hydraulic analysis
Water distribution system sectorization

COMPLETION DATE

2015

FEE

$18,488,630

CONSTRUCTION COST

$N/A

CSA assisted PRASA with the Non-Revenue Water Program (PRANF) to address operational and infrastructure issues for which certain types of field support, studies and/or designs are required. In order to do this, CSA provided over 20 qualified experts in the field (hydraulic engineers, GIS professionals, field personnel, and flow and pressure measurements subconsultants) to give PRASA's Regional and Planning Division's staff the necessary tools and information to achieve the optimization objective. This staff analyzed macro and micro sectors in order to reduce water losses, leakages and cost impacts as well as information to reduce the energy consumption in the operation of the distribution system. During the last decade, CSA performed several hydraulic models across the island, which were used to address optimization challenges as the ones presented in this projects. These hydraulic models resulted in operational and water quality improvements that impacted the health and wellbeing of PRASA's clients.

The optimization studies conducted as part of this project resulted in the elimination of several water treatment plants and approximately 15 pump stations, saving tens of millions dollars to PRASA. Moreover, this effort was important in the generation of new revenue by detecting illegal connections, updating PRASA's GIS data base and the generation of operational scenarios for various sectors. The operational scenarios developed provided PRASA with the flexibility necessary to maintain uninterrupted water services, even when experiencing water main breaks or pumping system failures, resulting in a more reliable system. To accomplish the project goals, CSA used the best technology available and industry recognized professionals, demonstrating CSA's leadership in Puerto Rico's water engineering market.

CSA provided the following services in this project:

- Field and system mapping information collection
- Geographic Information System development
- Hydraulic modeling and support to assist PRASA's Operations and Infrastructure Division
- Hydraulic analysis of water distribution systems
- Water Distribution Sectorization (Schematic Diagrams & Preliminary Hydraulic Analysis)

LOCATION OF PROJECT AND CLIENT:
Las Olas Marina, Fort Lauderdale, FL

Client(s): Las Olas SMI, LLC

DESCRIPTION OF PROJECT
Redevelopment of the Las Olas Marina including removal of existing marina components; excavation and expansion of submerged areas into a portion of the on-grade parking lot; construction of a seawall based on the new shape of the marina; construction of floating docks; construction of several new structures including a two-story restaurant, 3-story marina services Building, and a three additional one-story structures for bathrooms, storage and a sundry shop; construction of an on-grade parking area; new concrete sidewalks and on-grade supported features; and a new lift station.

YOUR SCOPE OF INVOLVEMENT IN PROJECT
Langan is providing environmental and geotechnical services including a Phase I Environmental Site Assessment and Geotechnical Engineering Study. The geotechnical study includes a field investigation consisting of drilling borings to varying depths, performing engineering evaluations and analyses, and preparing a geotechnical engineering study report.

CONTRACT TYPE (E.G. REIMBURSABLE/FIXED FEE/FIXED PRICE)
Lump sum

APPROXIMATE VALUE OF CONTRACT
$125,000

DURATION OF WORK
06/2019 - Present

PROJECT MANAGER UTILIZED
Carlos Ortiz, PE

LOCATION OF PROJECT AND CLIENT:
Miami Dade Water and Sewer Pump Station 3 Interceptors, Miami, FL

Client(s): Jacobs Engineering

DESCRIPTION OF PROJECT
The gravity sewer interceptors for Master Pump Station No. 3 was a design-build project built to provide increased sewer capacity throughout the residential and business districts in Downtown Miami. The project included the installation of approximately 5,000 lineal feet of 30-inch-diameter and 48-inch-diameter sanitary sewer interceptor lines. Because of the congested urban nature of the project site, heavy traffic, and existing underground utilities, the interceptors were installed primarily with micro-tunneling methods using a 48-inch-diameter micro-tunneling boring machine (MTBM), with invert depths of 15 to 25 feet below surface. The project also involved the construction of ten vertical shafts to launch and retrieve the MTBM as well as the installation of permanent access man-hole structures.

YOUR SCOPE OF INVOLVEMENT IN PROJECT
As the geotechnical consultant to the design-build team, Langan accomplished the subsurface investigation and geotechnical engineering evaluation required for the design of the vertical shafts, man-hole structures and sewer pipelines. Langan also provided geotechnical parameters for developing the methods for micro-tunneling and excavation. In addition, Langan performed an environmental assessment along the project alignment to identify potential sources of soil and groundwater contamination. During construction, Langan provided construction administration and support during the construction of the shafts, excavations, and pipeline installation with the MTBM.

CONTRACT TYPE (E.G. REIMBURSABLE/FIXED FEE/FIXED PRICE)
Lump sum

APPROXIMATE VALUE OF CONTRACT
$71,000

DURATION OF WORK
04/2014 – 11/2015

PROJECT MANAGER UTILIZED
Rafael Pina, PE

LOCATION OF PROJECT AND CLIENT:
Miami Beach West Avenue Improvements, Miami Beach, FL

Client(s): CES Consultants and RicMan Construction

DESCRIPTION OF PROJECT
This project consists of infrastructure improvements along about 3,500 LF of West Avenue in Miami Beach, FL. Improvements include raising of roadway grades, construction of retaining walls, harmonization with adjacent properties, installation of new drainage systems, replacing water distribution systems and sanitary sewer systems and installation of new street lights and mast arm structures.

YOUR SCOPE OF INVOLVEMENT IN PROJECT
Langan has completed a subsurface investigation for the proposed improvements and provided geotechnical engineering recommendations.

CONTRACT TYPE (E.G. REIMBURSABLE/FIXED FEE/FIXED PRICE)
Lump sum

APPROXIMATE VALUE OF CONTRACT
$232,000

DURATION OF WORK
07/2017 – Present

PROJECT MANAGER UTILIZED
Rafael Pina, PE

City of Lauderhill
Lauderhill, Florida

Topographic survey for Lift Stations 15, 47 & 48

John T. Doogan, Project Manager and Surveyor

Fixed price contract of $14,650.00

Kimley-Horn and Associates, Inc.
City of Fort Lauderdale Pump Station Improvements
Fort Lauderdale, Florida

Topographic/pump station survey for Pump Stations A-16, C-1, C-2, route of line at SE 4th Avenue and cross section of Tarpon River at SE 4th Avenue

John T. Doogan, Project Manager and Surveyor

Fixed price contract of $13,400.00

Kimley-Horn and Associates, Inc.
North Bay Village Pump Stations
North Bay Village, Florida

Topographic/pump station survey for Pump Stations located at the Main Station and Hispanola Station

John T. Doogan, Project Manager and Surveyor

Fixed price contract of $3,700.00

Kevane
Grant Thornton

Consolidated Financial Statements and Report of Independent Certified Public Accountants

CSA Central Inc. and Subsidiary

December 31, 2018 and 2017

CSA Central Inc. and Subsidiary

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Report of Independent Certified Public Accountants

To the Board of Directors of
CSA Central, Inc. and Subsidiary:

Report on the Consolidated Financial Statements

We have audited the accompanying consolidated financial statements of **CSA Central Inc. and Subsidiary** ("the Companies"), which comprise the consolidated balance sheets as of December 31, 2018 and 2017, and the related consolidated statements of operations and accumulated deficit and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Companies' preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Companies' internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Kevane
Grant Thornton

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of **CSA Central Inc. and Subsidiary** as of December 31, 2018 and 2017, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Kevane Grant Thornton LLP

San Juan, Puerto Rico
May 28, 2019.

CSA Central Inc. and Subsidiary

Consolidated Balance Sheets
December 31, 2018 and 2017

Assets

	2018	2017
Current assets:		
Cash	$ 73,852	$ 9,958
Accounts receivable:		
Trade	2,668,846	3,841,269
Contract work in progress	794,033	681,030
Prepaid expenses	63,279	197,158
Total current assets	3,600,010	4,729,415
Due from related parties	24,636,048	20,978,925
Property and equipment, net	51,380	218,091
Deferred tax asset, net	663,035	368,477
Intangible assets, net	3,649,836	4,008,945
Other assets	147,816	669,445
Total assets	$ 32,748,125	$ 30,973,298

The accompanying notes are an integral part of these consolidated balance sheets.

CSA Central Inc. and Subsidiary

Consolidated Balance Sheets
December 31, 2018 and 2017

Liabilities and Stockholders' Equity

	2018	2017
Current liabilities:		
Accounts payable, trade	$ 1,909,386	$ 2,438,485
Accrued expenses	478,815	529,741
Income tax payable	-	69,671
Total current liabilities	2,388,201	3,037,897
Notes payable to stockholder	693,769	693,769
Due to related parties	28,173,611	25,114,419
Total liabilities	31,255,581	28,846,085
Stockholders' equity:		
Common stock, no par value, 850 authorized, 100 shares issued and outstanding	-	-
Additional paid-in capital	4,140,869	4,140,869
Accumulated deficit	(2,648,325)	(2,013,656)
Total stockholder's equity	1,492,544	2,127,213
Total liabilities and stockholder's equity	$ 32,748,125	$ 30,973,298

The accompanying notes are an integral part of these consolidated balance sheets.

CSA Central Inc. and Subsidiary

Consolidated Statements of Operations and Accumulated Deficit
December 31, 2018 and 2017

	2018	2017
Contract revenue and management fees	$ 6,128,547	$ 7,016,344
Operating expenses:		
Direct costs	3,587,911	3,857,702
General and administrative	3,503,512	3,280,788
Total operating expenses	7,091,423	7,138,490
Operating loss	(962,876)	(122,146)
Other (expense) income :		
Interest expense	(23,137)	(754,725)
Loss on disposal of property and equipment	(14,178)	-
Gain from debt restructuring	-	1,000,000
Other income	1,287	7,671
Total other (expense) income	(36,028)	252,946
(Loss) income before benefit (provision) for income taxes	(998,904)	130,800
Income tax benefit (provision):		
Current	69,671	(69,671)
Deferred	294,564	(800,429)
Total income tax benefit (provision)	364,235	(870,100)
Net loss	(634,669)	(739,300)
Accumulated deficit, beginning of year	(2,013,656)	(1,274,356)
Accumulated deficit, end of year	$ (2,648,325)	$ (2,013,656)

The accompanying notes are an integral part of these consolidated statements.

CSA Central Inc. and Subsidiary

Consolidated Statements of Cash Flows
Years Ended December 31, 2018 and 2017

	2018	2017
Cash flows from operating activities:		
Net loss	$ (634,669)	$ (739,300)
Adjustments to reconcile net loss to net cash provided by operating activities--		
Depreciation and amortization	181,697	132,658
Bad debts	6,651	116,150
Amortization of goodwill	359,109	218,953
Deferred taxes	(294,564)	800,429
Loss on disposition of property and equipment	14,178	-
(Increase) decrease in operating assets		
Accounts receivable	1,165,772	(291,393)
Contract work in progress	(113,003)	(307,912)
Prepaid expenses	133,879	(14,163)
Other assets	521,634	83,602
Due from related parties	(3,657,123)	969,445
Increase (decrease) in operating liabilities		
Accounts payable	(529,099)	(759,597)
Accrued expenses	(50,926)	122,917
Income tax payable	(69,671)	69,671
Due to related parties	3,059,192	7,873,634
Total adjustments	727,726	9,014,394
Net cash provided by operating activities	93,057	8,275,094
Cash flows from investing activities--		
Payments for acquisition of property and equipment	(29,163)	(135,259)
Cash flows used in financing activities:		
Payments to line of credit	-	(5,137,000)
Payments of notes payable	-	(3,000,000)
Payments of obligations under capital leases	-	(16,942)
Net cash used in financing activities	-	(8,153,942)
Net increase (decrease) in cash	63,894	(14,107)
Cash, beginning of year	9,958	24,065
Cash, end of year	$ 73,852	$ 9,958
Supplemental disclosures:		
Interest paid	$ 23,137	$ 613,725

Schedule of non-cash investing transactions:

During the year ended December 31, 2018, the Company retired fully depreciated property and equipment with a cost of $1,766,365.

During the year ended December 31, 2018, the Company retired property and equipment with a cost of $15,753 and accumulated depreciation of $1,575, which resulted in a loss on disposal of $14,178.

The accompanying notes are an integral part of these consolidated statements.

(1) Nature of business:

The consolidated financial statements include the operations of CSA Central, Inc. (the Parent Company), and ANG Associates, Inc., hereafter the Companies.

The Companies are part of a group of entities (the Related Group), affiliated through common management and controlling ownership, which render a wide range of engineering and architectural services, including design, construction management, environmental studies, air, ground and water studies, energy studies, and other related services.

Other entities comprising the related group are: CSA Holdings, Inc. and Subsidiaries (CSA Holdings), CSA Group NY Architects and Engineers, P.C., CSA Architects & Engineers, LLP and CSA Central Architects and Engineers, P.C., which are affiliated through common management and controlling ownership. Subsidiaries comprising CSA Holdings' group include: Consul-Tech Caribe, Inc., including CSA Development Corporation, CSA Group Panama, Inc. and EPC Panamá Services, Inc., Consul-Tech Enterprises, Inc., Consul-Tech Americas, S.A. (an Argentinian corporation) and Consul-Tech Surverying and Transportation, Inc.

(2) Summary of significant accounting policies:

The significant accounting policies followed by the Companies are summarized as follows:

(a) Basis of presentation –
The Companies' fiscal year ends on December 31st of each year. All references to years in these notes to consolidated financial statements represent calendar years then ended, unless otherwise noted. The Companies have evaluated subsequent events through May 28, 2019, the date the consolidated financial statements were available to be issued.

(b) Principles of consolidation –
The consolidated financial statements include the account balances of the Parent Company and its Subsidiaries, all of which are wholly-owned. All significant intercompany balances and transactions are eliminated in consolidation.

(c) Revenue recognition and management fees –
Contract revenue and management fees are recognized as services are rendered using the accrual method of accounting based on labor hours incurred. Management periodically reviews the profitability of its contracts and records allowances when necessary. The Companies also provide for estimated losses on uncompleted contracts in the period in which losses are determined. Hours and expenses incurred are recognized in excess of amounts billed are classified as current assets under contract work in progress. Amounts billed to clients in excess of hours and expenses are classified as current liabilities under advance billings on contracts in progress.

(d) Allowance for doubtful accounts and contract work in progress –
The Companies maintain allowances for trade accounts receivable and contract work in progress based on the current circumstances, loss experience, economic conditions and other factors of each specific contract. As of December 31, 2018 and 2017, the allowance for doubtful accounts had a balance of $0.

(e) Property and equipment –
Property and equipment is stated at cost. Major renewals and betterments, which extend or improve the useful life of the asset, are capitalized. Depreciation and amortization is computed using the straight-line method over the estimated useful lives of the assets, as follows:

Description	Estimated Useful Life
Equipment	1 - 3 years
Leasehold improvements	5 -10 years
Furniture and fixtures	3 - 4 years
Vehicles	3 - 5 years

(f) Impairment of long-lived assets –
The Companies review long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell. As of December 31, 2018 and 2017, there was no impairment loss.

(g) Intangible assets –
Intangible assets include goodwill and trade name. Goodwill represents the excess of purchase price over fair value of net assets acquired and is allocated to the appropriate reporting unit when acquired. Accounting standards require that goodwill be tested for impairment al teast annually, unless a company elects an alternative method, which allows goodwill to be amortized on a straight-line basis over 10 years, or less than 10 years if the company demonstrates that another useful life is more appropriate. Under this alternative method, goodwill should be tested for impairment when a triggering events occurs that indicates that the fair value of the entity (or reporting unit) may be below its carrying amount.

During the year ended December 31, 2017, the Companies elected to adopt the provisions of the alternative method and amortize goodwill over 10 years. Amortization of goodwill amounted to $359,109 and $218,953 for the years ended December 31, 2018 and 2017, respectively. No impairment losses were recorded during the years ended December 31, 2018 and 2017.

(h) Use of estimates –
In preparing financial statements in conformity with accounting principles generally accepted in the United States of America, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, and revenues and expenses during the reporting period. Actual results could differ from those estimates.

(i) Income taxes –

The provision for income taxes represents the sum of the separate Companies' tax provisions, rather than an income tax computed on a consolidated basis. Income taxes are accounted for using the asset and liability method under which deferred income taxes are recognized for the tax consequences of "temporary differences" by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities and operating loss carry-forwards. The effect of deferred taxes for a change in tax rates is recognized in income in the period that includes the enactment date. Management provides valuation allowances against the deferred tax asset for amounts which are not considered "more likely than not" to be realized.

The Companies follow the accounting standard on accounting for uncertainty in income taxes, which addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under this guidance, the Companies may recognize the tax benefit from an uncertain tax position only if it is more-likely-than-not that the tax position will be sustained on examination by taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. The guidance on accounting for uncertainty in income taxes also addresses de-recognition, classification, interest and penalties on income taxes, and accounting in interim periods.

(j) Concentration of credit risk –

Financial instruments that potentially expose the Companies to concentration of credit risk include bank accounts and accounts receivable. The Companies maintain these accounts at reputable financial institutions. While the Companies attempts to limit any financial exposure, its deposit balances may, at times, exceed federally insured limits. The Companies have not experienced any losses on such accounts.

The Companies' customer base also includes contracts with U.S. government agencies. Contract revenue from services performed to governmental agencies for the years ended December 31, 2018 and 2017 represents approximately 69% and 52%, respectively. As of December 31, 2018 and 2017, amounts due from U.S. government agencies amounted to $1,632,042 and $2,111,017, respectively.

Revenues from the Companies' three and two most significant customers represented 61% and 32% of net contract revenues for the years ended December 31, 2018 and 2017, respectively. Accounts receivable from these three and two customers represented 24% and 34% of total trade accounts receivable as of December 31, 2018 and 2017, respectively. Contract work in progress from these customers represented 10% and 3% of total contract work in progress as of December 31, 2018 and 2017, respectively.

(3) Property and equipment:

The following is a summary of property and equipment as of December 31, 2018 and 2017:

Property Category	2018	2017
Equipment	$ 567,881	$ 1,394,680
Leasehold improvements	12,961	183,246
Furniture and fixtures	27,044	676,389
Vehicles	3,301	94,073
	611,187	2,348,388
Less: Accumulated depreciation and amortization	(559,807)	(2,130,297)
Property and equipment, net	$ 51,380	$ 218,091

(4) Intangible assets:

As of December 31, 2018 and 2017, intangible assets include the following:

Description	2018	2017
Goodwill:		
ANG Associates, Inc.	$ 332,627	$ 332,627
CSA Central, Inc.	3,645,271	3,645,271
	3,977,898	3,977,898
Less: Accumulated amortization	(578,062)	(218,953)
Goodwill, net	3,399,836	3,758,945
Trade name:		
CSA Central, Inc.	250,000	250,000
Intangible assets, net	$ 3,649,836	$ 4,008,945

(5) Note payable to stockholder:

As of December 31, 2018 and 2017, note payable to stockholder consists of a 5% unsecured promissory note due by CSA Central, Inc. to one of its stockholders. This note was due on demand in a single amount of $693,769 plus accrued interests. Interest expense related to this note amounted to $141,000 for the year ended December 31, 2017. No interest was recognized in 2018.

(6) Commitments:

The Companies have entered into various operating lease agreements for the rent of its facilities. Such agreements range from one to four years and others are paid on a month-to-month basis. Rent expense during the years ended December 31, 2018 and 2017 related to these agreements, amounted to $346,909 and $311,784, respectively.

Future minimum rental commitments under non-cancelable operating leases with initial or remaining lease terms in excess of one year, are approximately as follows:

Year Ending December 31,	Amount
2019	$ 214,894
2020	117,827
	$ 332,721

(7) Gain from debt restructuring:

In November 2017, the Related Group entered into a $15,000,000 loan agreement. This loan was used to pay off the loans of various entities within the group, including the Companies. In relation to this transaction, the Companies recognized a gain of $1,000,000 during the year ended December 31, 2017.

(8) Income tax:

The Companies are organized and operate in the states of Ohio, Florida, Pennsylvania and Illinois, and consequently are subject to federal and state income taxes in the United States. The effective income tax rate differs from the applicable statutory rated due to certain items that are not taxable or deductible for tax purposes.

Deferred taxes result from the future tax consequences of temporary differences between the amounts of certain assets and liabilities recorded for tax and financial statement purposes and the effect of the Companies's net operating loss (NOL's) carryforwards.

As of December 31, 2018 and 2017, the Companies had a net deferred tax asset of $663,035 and $368,477, respectively, which consists of the following:

Description	2018	2017
NOL'S	$ 271,501	$ 288,702
Goodwill amortization	390,676	20,071
Aternative minimum tax	-	75,369
Interest expense carryforward	4,859	-
Depreciation	(4,001)	(15,665)
	$ 663,035	$ 368,477

Management considers such deferred tax asset to be realizable, for which there is no valuation allowance as of December 31, 2018 and 2017.

At December 31, 2018 and 2017, the Companies have net operating losses of $1,292,862 and $723,796, respectively, which do not expire.

The Company's actual income tax expense for the years ended December 31, 2018 and 2017, differs from the theoretical income tax provision as a result of the following:

	2018	2017
Theoretical income tax benefit (expense) at statutory rates applicable to the pre-tax income per financial statements	$ -	$ (27,668)
Effect of alternative minimum tax	-	(69,671)
Effect of permanent and termporary differences between financial statements and taxable income	69,671	27,468
Increase (decrease) in deferred tax asset	294,564	(800,429)
Income tax (provision) benefit, net	$ 364,235	$ (870,300)

(9) Employee retirement savings plan:

The Related Group established an employee savings plan for the U.S. participants, in which all employees who have attained the age of 21 are eligible to participate. Employer match percentage is discretionary based on the Related Group's entities' profits and is reviewed by the Board of Directors annually. The Plan's contributions for the years ended December 31, 2018 and 2017, amounted to $6,904 and $6,690, respectively.

(10) Related party transactions:

Certain administrative processes of the Companies and the Related Group are shared and allocated among the the Related Group. During the years ended December 31, 2018 and 2017, the Companies charged to related parties an allocation of common general and administrative expenses of approximately $3,922,000 and $3,238,000, respectively.

The Companies guarantee a note payable of its Related Group, which amounted to $17,000,000 and $15,000,000 as of December 31, 2018 and 2017, respectively. Substantially, all the Companies' and the Related Group's assets are pledged as collateral to this financing arrangement. In relation to these facilities, the Related Group is required to comply with certain financial and non-financial covenants. There were certain covenants with which the related group did not comply, but they obtained a waiver from the corresponding financial institutions.

The Companies depend on the continued support of its majority owner and the Related Group to comply with the discharge of its obligations to the extent these are not satisfied with cash originated from its operations.

(11) Contingencies:

The entities comprising the Related Group are parties to certain claims arising in the ordinary course of business. Management, based on the advice of the legal counsel, is of the opinion that the outcome of such litigation will not have material adverse effect on the entities' financial position or results of operations.





CORPORATE

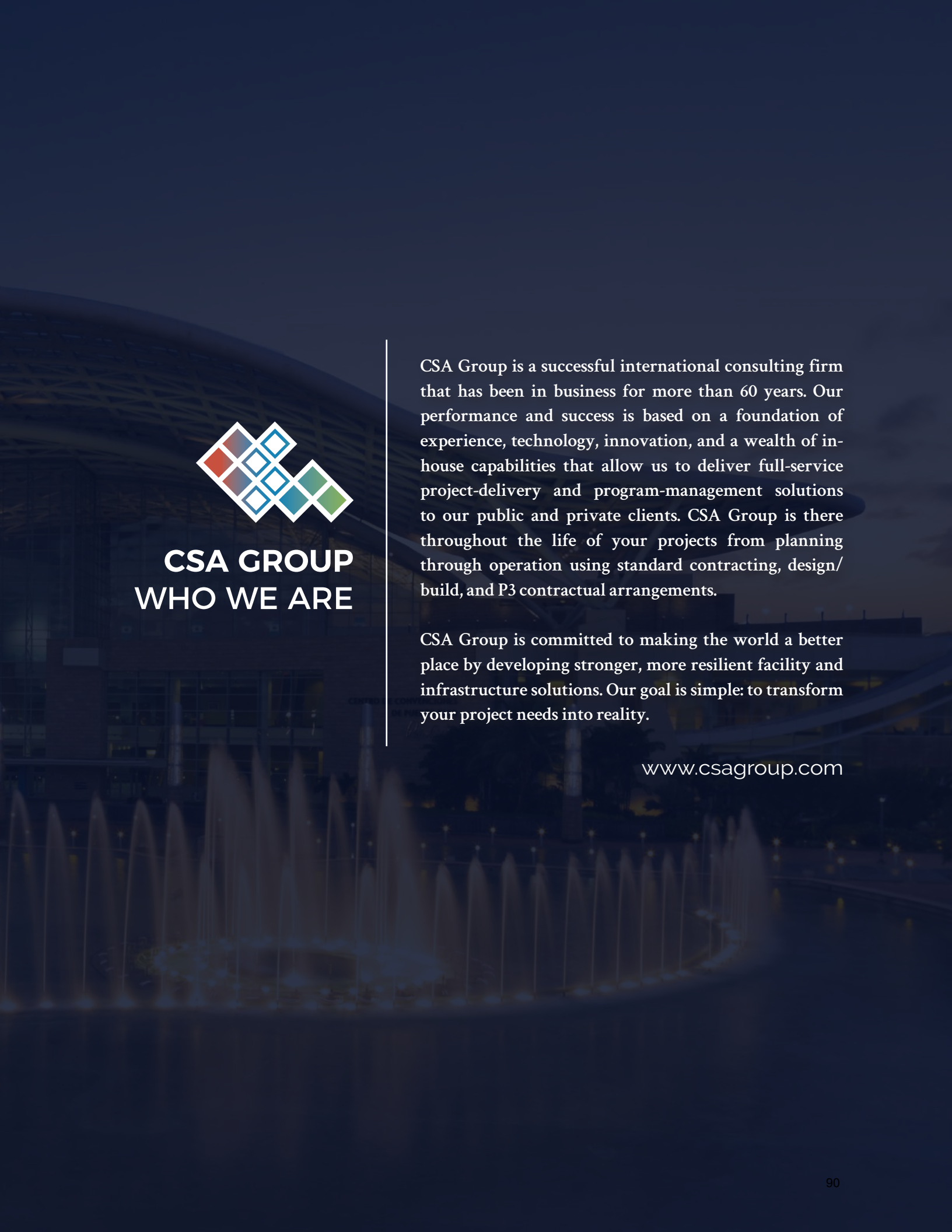
QUALIFICATIONS







CSAGROUP
EST. 1956



CSA GROUP
WHO WE ARE

CSA Group is a successful international consulting firm that has been in business for more than 60 years. Our performance and success is based on a foundation of experience, technology, innovation, and a wealth of in-house capabilities that allow us to deliver full-service project-delivery and program-management solutions to our public and private clients. CSA Group is there throughout the life of your projects from planning through operation using standard contracting, design/build, and P3 contractual arrangements.

CSA Group is committed to making the world a better place by developing stronger, more resilient facility and infrastructure solutions. Our goal is simple: to transform your project needs into reality.

www.csagroup.com

CSAGROUP
EST • 1956

we transform + innovate

CONTENT

COMPANY PROFILE

MISSION

Transform our client needs into reality, by providing integrated program management, project delivery and asset optimization services to public and private sectors throughout the Americas.

VISION

To be the leading firm in markets, where our full service offerings and multicultural affinity provide a distinctive added value to our clients.

SERVICES

- Program & Project Management: *Planning, contract administration, project controls*
- Construction Management & Inspections: *Special Inspections, Construction Engineering & Inspections (CEI), procurement, controls, safety, contract administration, permitting*
- Engineering: *Mechanical, HVAC, electrical, plumbing, fire protection, life safety, civil, structural*
- Architecture: *Building design, interiors, landscape architecture, land planning, urban designs*
- Response, Recovery, Resilience: *FEMA & CDBG-DR grant preparation and management, A/E reconstruction services*
- Asset Optimization: *Energy audits, conservation and environmental planning, LEED® based project development process*
- Operations & Maintenance: *Commissioning, owner's representation, schedules & protocols, maintenance support*
- Environmental: *Impact assessments, permitting, technical studies, air quality, noise, wetlands, endangered species, GIS services*

OFFICES

- New York City
- Philadelphia
- Washington D.C.
- Miami
- San Juan
- St. Thomas (USVI)
- Panama City
- Mexico City

RANKING AND AWARDS

- Award winning architectural and engineering firm in the United States
- Top 50 program management firm in the United States, *Engineering News Record (ENR) 2019*
- Top 100 construction management-for-fee and project management firm in the United States, *Engineering News Record (ENR) 2019*

PERSONNEL

- Professional registered architects, engineers, and environmental scientists
- LEED® accredited professionals: architects, engineers, and scientists
- Envision® sustainable professionals (ENV SP)
- Project management professionals (PMP)
- Certified construction managers (CCM)
- Certified energy managers (CEM)
- Certified public accountants (CPA)
- FEMA certified staff

MARKET SEGMENTS

- Water
- Highways
- Rail
- Energy
- Institutional
- Commercial
- Housing
- Education
- Hospitality
- Public Safety
- Industrial
- Airports
- Seaports
- Healthcare

SOCIAL COMMITMENT

One of CSA Group's most important Guiding Principles is our commitment to contribute to the industries we serve and the communities we live in. This translates into active involvement in a variety of activities and organizations, which provide many opportunities for education and growth for our employees.

OUR PARTNERSHIPS

ACE MENTORSHIP PROGRAM

CSA actively participates in the Architecture, Construction and Engineering (ACE) Mentorship Program, a nationally recognized organization that mentors high school students and inspires them to pursue careers in design and construction. Our professionals make significant contributions as role models, advisors and coaches throughout our offices, where we sponsor summer interns to provide for those planning a future in the ACE industry. The program provides a chance for students to engage on the job with architects and engineers, providing practical work experience to students.

CIRT

CSA Group is a member of The Construction Industry Round Table (CIRT), an association of chief executive officers of America's leading design and construction companies responsible for billions in private and public section design and construction work. The Round Table strives to be a force for positive change working to improve the performance of the construction industry and actively representing the industry on public policy issues. CIRT's forum develops strong management approaches through networking and peer interaction.

NMSDC

CSA is certified as a Corporate Plus Minority Business Enterprise (MBE) by the National Minority Supplier Development Council® (NMSDC®). The NMSDC Corporate Plus certification recognizes companies that have the capability to do business on a national level, have a proven track record of performance and can provide top quality products and services.

ROCKEFELLER FOUNDATION

In 2016, CSA joined the program 100 Resilient Cities, led by the Rockefeller Foundation, as a Platform Partner. CSA Group has pledged pro bono solutions and services to assist with initiatives that provide resilient solutions to improve cities' capacity to thrive in the face of acute and chronic challenges.

Program Management

CSA Group's Program Management service merges our full architectural, engineering, environmental, 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, community outreach, agency coordination, 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.

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 Manager 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.

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 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.

Construction Management

CSA offers public and private sector clientele outstanding capabilities in every facet of the construction management industry. CSA's skilled and experienced architects, engineers, and technicians strive to deliver quality, ease of operation and long-term reliability at the lowest life-cycle cost. We have been involved in over $20 billion worth of projects for satisfied clients including Federal and State agencies, municipalities and private clients. Each Field Professional is fully versed in construction techniques, industry standards, and applicable local and national building codes. Construction Supervision/Inspection services are provided to ensure that construction is performed in strict compliance with the contract documents (drawings and specifications) and within the allocated construction period. Our professionals are experienced and skilled in building construction methods, procedures and administration.

CSA's Construction Management approach recognizes that the most effective influence on a project's bottom-line cost and timely delivery occurs prior to the start of the construction phase. Through the Construction Industry Institute (CII), CSA actively participated in studies and development of methodologies that measurably improve the delivery of construction projects. Statistically, CII has shown that expenditures during the Pre-Project Planning, Design, and Constructability Reviews phases have the greatest influence in reducing the overall costs, while ensuring the timely delivery of a project.

Construction Management services that CSA provides include:

- Contract Administration
- Change Order Management
- Cost and Schedule Management
- Safety Program and Performance Monitoring
- Special Inspections
- Construction Engineering and Inspection (CEI)
- Quality Control and Quality Assurance
- Document Control
- Claims and Dispute Resolution
- Value Engineering

Inspections

Our construction inspection unit was specifically created to promote the quality delivery of projects. CSA's experience includes a broad spectrum of transportation, buildings and infrastructure, in both the public and private markets. The experience and expertise of the field inspectors provides unequaled flexibility and capacity to facilitate high volumes in a single day. CSA consistently conducts in-house training for all inspector skill-sets enabling the team to grow and meet the demands of our clients. CSA has provided decades of construction inspection services from all office locations.

Building Condition Assessment Surveys: Each field Inspector is fully versed in construction techniques, industry standards, and applicable local and national building codes. CSA has been successfully completing facility assessment surveys for various types of facilities for over 60 years. 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.

Construction Engineering Inspections (CEI): CSA's Construction Engineering and Inspection group brings to the market the expertise of construction industry veterans with the support of engineers, architects and inspectors. Our approach to CEI embodies a cross discipline approach whereby we draw on the wealth of experience and technical knowledge our staff possess—over $20 billion of construction in Federal and State agencies, municipalities and private client programs and projects. Our in-house professionals successfully manage all aspects of rehabilitation, reconstruction and replacement of public infrastructure and private projects.

Special Inspections: CSA Group has the largest team of Master Special Inspectors in the NYC area. The team holds accreditations in every possible category of the International Accreditation Service (IAS) and are licensed in every category for Class 1 New York City Special Inspections as required by the New York City Department of Buildings.

Architecture & Engineering

Architecture: Architectural services include collaborative design strategies through planning, interior design, architectural, and landscape architecture design solutions; assisting our clients with targeted design innovation services including agile ground-up building design, corporate interiors, building additions and renovations, building due-diligence surveys and evaluation analysis, programming and facilities space planning, test fits, LEED® consulting/sustainable design, commissioning, change-in-use applications, life safety, tenant protection, finishes-furniture-equipment selection (FFE), custom millwork and custom furniture design.

Mechanical / HVAC Engineering: CSA's experience with mechanical systems include the design and the preparation of contract documents for heating, ventilating and air-conditioning, automatic temperature controls, chillers, central and packaged air-conditioners, refrigeration power plants, heating power plants including high and low pressure steam, high/medium/low temperature water, gas fired units, and fuel storage and dispensing systems.

Electrical Engineering: CSA's experience with electrical systems include the design and the preparation of contract documents for electrical power (including code-regulated, emergency systems), 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, infrared sensors, key lock-out, intrusion alarms), computer rooms, and Uninterrupted Power Source (UPS) systems.

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

Fire Protection / Fire Life Safety Systems: CSA's experience with fire Protection and fire life safety systems include the design of state-of-the-art fire alarm, fire protection system, emergency lighting and emergency power distribution systems. We work with local authorities having jurisdiction to assure all aspects of fire/life safety systems are in compliance with local requirements.

Structural Engineering: CSA 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. Experience includes wood, steel, concrete, aluminum, and composites.

Civil Engineering: CSA's experience includes planning, design and construction phase services. We prepare site plans, grading plans, soil erosion and sediment control plans, drainage studies, roadway and parking lot design, dry and wet utility re-location plans, water distribution, pumping and storage design, wastewater collection and pumping design, storm water management plans, storm sewer design, and storage depots for various bulk material used for maintenance and public works (salt, sand, etc.).

Mapping, Surveying and GIS: Our in-house land surveyors and GIS analysts have mapped thousands of acres of land, roads and buildings within South Florida. CSA's Land Survey / GIS capabilities allow us to quickly provide our clients with important information by rendering multi-faceted solutions, which combine various levels of data in a systematic approach.

Energy Modeling / 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.

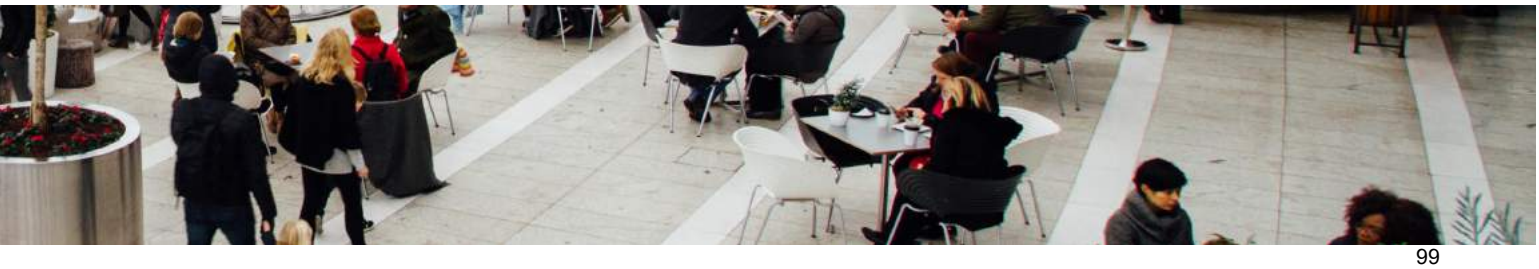
Technology / Communications: CSA Group offers Technology Engineering Design and Consulting services such as Cabling Infrastructures, Voice / Data, Energy Management Control Systems, Fire Detection, and Telecommunications. The Technology Group is responsible for communication devices, telecommunication systems, industrial and consumer electronic products and systems, and specification writing for various types of installations.

Construction Services: Each field architect / 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 field architects / engineers are knowledgeable in preparing condition reports for existing and retrofitted projects. Each field architect / engineer is sufficiently experienced with electrical and mechanical systems with the approach toward preparing condition reports, which would evaluate and recommend building and system conditions, upgrades, and replacements.

Software Capabilities: CSA uses a variety of technical design software, including AutoCAD, Civil 3D, Navisworks, MicroStation, GEOPAK and Revit. For structural analysis and foundation design, we use Staad. Pro, LPILE and other software. For Fire Protection system design, we use specialty software such as HASS. Our water resources modeling software (InfoWater and H2O Map, SWMM, ICPR, Multiple HEC, etc.) is fully GIS-integrated. For renderings and simulations, we use 3D Studio, SketchUp Pro and other software. We stay current with the latest versions via subscription licensing. We have a state-of-the-art computer network that links all our offices, and our servers that are constantly monitored by our in-house IT Department to ensure optimum performance.

Sustainable Design: CSA has a commitment and dedication to "Green" Building Design. We have LEED® Accredited Professionals, Envision® Sustainability Professionals and Certified Energy Managers (CEM) on staff. At CSA Group, we are committed to the development of projects that minimize their impact on the natural environment and provide the client with the most efficient, cost effective building possible. We believe integrated, sustainable or "green" design should be a standard, common sense practice for all design firms.



Environmental

CSA's Environmental Unit provides environmental and permitting services to public and private sector clients. Service areas include:

- Environmental Review and Impact Statements
- Natural Resource Assessment and Management
- Wetlands Permitting and Mitigation
- Threatened and Endangered Species Assessment & Consultations
- Marine Assessments
- Air Quality Permits
- Noise Evaluations and Mitigation
- Open Space Assessments
- Shadow Studies and Visual Impacts
- Water, Storm Water and Sewer Evaluations
- SWPPP, SPDES/NPDES
- Pollution Prevention
- Site Characterization
- Construction Impact Assessments and Environmental Monitoring
- Pre-construction and Construction Permitting (including Department of Buildings) and environmental compliance

Our Environmental Unit is formed by a highly experienced team of Professionals specializing in all areas of environmental science and engineering, environmental compliance, and project permitting and licensing. These biologists, ecologists, geologists, marine scientists, wetland specialists, environmental engineers, water resources specialists, air resource specialists, noise specialists and permitting specialists, among others, contribute to the strength of the Unit, which is further enhanced by CSA's geographic information systems (GIS) group and its vast database of geographic and environmental data.

Response, Recovery, Resilience

CSA has the in-house professionals to successfully manage many aspects of disaster preparedness, response and recovery. For over 20 years, CSA has been actively involved in disaster response and recovery, including grant management and engineering services such as design, construction management and environmental compliance. CSA can assist municipalities in the following key areas:

- Program Management
- Grantee and Subgrantee Public Assistance Support
- Damage Assessments
- Debris Monitoring
- FEMA and CDBG-DR Compliance
- Resilient Design and Permitting
- Cost Estimating and Reasonableness Reviews
- Disaster Recovery Engineering
- Design and Permitting Management
- Procurement Support
- Outreach
- Project Formulation
- Grant Management
- GIS Spatial Analysis and Damage Estimates
- Environmental and NEPA Compliance

CSA participated as key member of the overall Program Management team managing $3 Billion of design, procurement and construction for the New York City Housing Authority (NYCHA) Sandy Recovery Program. This program was the first ever funded by the Stafford Act Section 428. Additionally, after Hurricanes Irma (Cat. 5) and Maria (Cat. 4), CSA provided consulting services to the Government of Puerto Rico, assisting directly over 20 government agencies in the Public Assistance process for Category A and B damages. CSA also provided support to FEMA and the Government of Puerto Rico in the first ever application of the Stafford Act Section 428 funding at a state level.

Asset Optimization

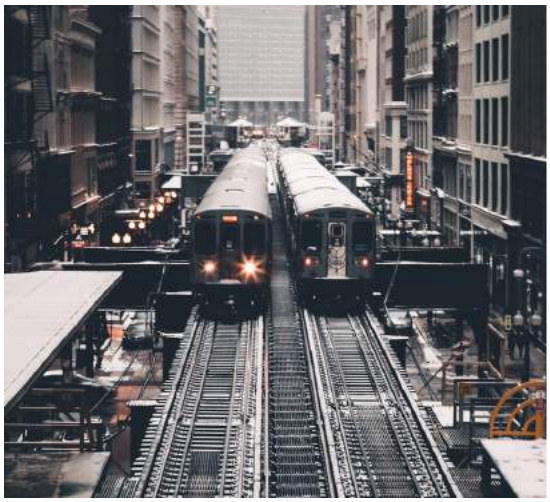
With a growing need to optimize the use of valuable assets and real estate, CSA's experts can provide the critical support our clients need. Our services include:

- Energy Audits
- Conservation and Environmental Planning
- Permitting and code compliance
- LEED® Based Project Development Process and sustainable design to reduce energy costs
- Infrastructure Gap Analysis
- Site Audit/Evaluation/Selection
- Asset Evaluation and Management

Operations & Maintenance

CSA Group provides a broad spectrum of services, competencies, processes, and tools required to assure the built environment will perform the functions for which a facility was designed and constructed. With a goal of reducing capital repairs, unscheduled shutdowns and repairs, extend equipment life, realization of life-cycle cost savings and providing safe functional systems and facilities that meet the design intent, O&M addresses the day-to-day activities necessary for maintaining the building, its systems and equipment, so the facility can operate at peak efficiency. Let CSA's experts provide the critical support you need to optimize the use of valuable assets and real estate such as:

- Commissioning to provide the most efficient operation of building services through optimized building controls and testing
- Schedules and protocols for ongoing maintenance activities for HVAC, plumbing, fire protection, electrical lighting and power, energy conservation, energy management systems, vertical transportation, security, fire alarm, data and communications
- Maintenance support and preparation of condition reports to evaluate system conditions and make recommendations for upgrade and/or replacement



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PROJECT
EXPERIENCE

PRASA CAPITAL IMPROVEMENT PROGRAM - EAST REGION PROGRAM MANAGEMENT

PUERTO RICO

The PRASA water supply and wastewater systems were highly complex and required upgrades, replacement, expansions or rehabilitation due to compliance issues, changes in regulatory requirements or deterioration due to age. In 2005, the Authority divided the island into five operational regions and contracted Program Management Consultants to implement their Capital Improvement Program. CSA was contracted to manage the East Region. CSA experienced staff provided environmental, engineering, design, hydrology/hydraulic modeling, GIS mapping, as well as project/program, design and construction management services.

NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION SANDY TOC & BWT IDIQ

NEW YORK CITY, NY

The DEP is responsible for maintaining the operational capability of wastewater facilities located in the five boroughs of New York City. These facilities include but are not limited to wastewater treatment plants and wastewater pumping stations. CSA Group is providing MEP, structural, architectural design services and environmental services for this contract as a subconsultant to D&B Engineering and Greeley & Hansen.

WSSC DEVELOPMENT SERVICES GROUP FIVE-YEAR CONTINUING SERVICES CONTRACT

MARYLAND

The Washington Suburban Sanitary Commission (WSSC) Basic Ordering Agreement provides staff augmentation, hydraulic modeling, plan review, plan quality assurance, training, development of internal business process and regulations, technical engineering expert resource services, reports and studies, and other development related consulting services for their Development Services Group. WSSC is one of the largest water/wastewater utilities in the United States. WSSC serves about 1.8 million people in an approximately 1,000-square-mile area. It owns and manages about 10,000 miles of water and sewer mains. CSA was retained as a subconsultant team member providing: H&H modeling, engineering, quality assurance, cost estimating, benefit/cost analysis, and schedule preparation services.

SFWMD STRUCTURE S-151

WATER CONSERVATION AREA 3A, MIAMI, FL

The project is considered a core mission of SFWMD in maintaining the Central and Southern Florida Flood Control system. The project involved refurbishing, enhancing and/or adding components to allow the SFWMD maintain the current level of flood protection and water supply through culvert replacements, telemetry enhancements, dredging activities, bank stabilization, building hardening, levee repairs and repowering existing pump stations. CSA provided full scale engineering design, environmental, construction management for high and low hazard embankments and levees, associated canal excavation/bank stabilization, stormwater pump stations, control structures, spillways, bridges, monitoring systems, communication towers, control systems and miscellaneous service buildings, among other.

PRHTA INTERSECTION 5 REDEVELOPEMENT

SAN JUAN, PUERTO RICO

The existing roadway configuration of Intersection 5 consists of five main highways merging at one point. These corridors carry high daily traffic volumes, creating congestion when merging at the intersection. The Puerto Rico Highway and Transportation Authority wanted to unify these areas into a seamless urbanscape. CSA proposed geometric improvements and access configurations to ease congestion by organizing the traffic movements. We designed traffic signal systems with overhead fixed cameras to detect the presence of vehicles, providing the best optimal green time based on traffic demand. This Intelligent Transportation System (ITS) system was not only cost-effective and energy efficient; but improved traffic flow and offered wireless radio communication which enabled users to make better informed, safer, coordinated, and 'smarter' use of transportation networks.

FDOT DISTRICT 6, PORT OF MIAMI TUNNEL

MIAMI, FL

This major infrastructure project included a .75 mile (1.1 km) long twin-tube highway tunnel for two 12-foot traffic lanes with curbs, walkways, ventilation fans and additional safety features that connect the MacArthur Causeway on Watson Island to Port of Miami on Dodge Island in Miami. CSA was part of the PB Americas' Construction Engineering and Inspection (CEI) Team for the Florida Department of Transportation (FDOT) providing construction contract management and inspection services. CSA was also awarded a 30-year term contract for Operations and Maintenance of the tunnel.

MIAMI-DADE EXPRESSWAY AUTHORITY, S.R. 874 KILLIAN PARKWAY INTERCHANGE IMPROVEMENTS

MIAMI, FL

This project incorporated capacity and safety improvements to SR 874 mainline from 117th Avenue to Kendall Drive and the reconstruction of the Killian Interchange. The project was one of the first corridors to incorporate Open Road Tolling (ORT) which allowed for toll collection electronically using overhead gantries without having to stop at a toll plaza. CSA's scope of services included: geotechnical engineering, surveys, drainage, signage and pavement markings, signalization, lighting, utility coordination and relocation, landscaping, maintenance of traffic/traffic control, cost estimates, environmental permits, public involvement, noise abatement analysis, specifications and all necessary items for a complete design and construction support services.

PR-66 CONSTRUCTION INSPECTION AND DESIGN SERVICES

CANÓVANAS, PUERTO RICO

PR-66 connects expressways PR-53 and PR-26 to create a non-stop trip from San Juan to the eastern part of the island. Phase I consisted of a section of four-lane controlled access, toll collection expressway. The project scope involved the asphalt roadway, shoulders and medians. CSA provided an inspection team to manage the revision of contract documents, specifications, and the selection and submittal of all laboratory tests samples for construction. CSA was responsible for the Phase II A/E design scope involving approximately five miles of PR-66. The expressway has four lanes with future expansion planned for six lanes. The toll plaza at the center of the project is a high-speed toll with four high-speed lanes and eight-coin change lanes. Due to the proximity of El Yunque National forest, the environmental aspects of the project were strict and meticulously observed.

AMTRAK PENN STATION, EAST RIVER, AND HUDSON RIVER 26-MILE TUNNEL FIRE PROTECTION

NEW YORK & NEW JERSEY

Amtrak needed a custom fire protection system in their New York City Tunnels. This experience included the following MEP elements in the tunnels and mechanical rooms: fire standpipe, electrically actuated valves, power panels and wiring, low-voltage control wiring, compressed air system, deluge valves, fire alarm control system, and monitoring devices and annunciators. CSA Group conducted studies and research of state and national codes and standards, in coordination with NY and NJ fire departments, and examined existing systems throughout the world to define a basis of design.

NYCT & LIRR ENHANCED STATION INITIATIVE DESIGN/ BUILD PACKAGES

NEW YORK CITY, NY

The Enhanced Station Initiative, initiated by Governor Cuomo, included a new approach to rapidly redesign and renew dozens of existing subway and rail stations across the MTA system. It also included a number of technology initiatives to bring the system into the 21st century, including expanding Wi-Fi hotspots, accelerating mobile payments and ticketing to replace the MetroCard and providing USB ports in stations to allow customers to charge their mobile devices. CSA Group was contracted on the Design-Build team for mechanical, electrical, plumbing, and communications engineering disciplines.

TREN URBANO CAROLINA EXTENSION – TECHNICAL CONSULTANCY

CAROLINA, PUERTO RICO

The Puerto Rico Highway and Transportation Authority (PRHTA) began the process of constructing an extension of the Tren Urbano that would take the rail system to the Municipality of Carolina. As part of this process, CSA provided technical consultancy services including the following: analyzed, evaluated and made recommendations on contractor proposed O&M plans, policies, and procedures; monitoring tools developed for measuring contractor performance of approved plans, policies and procedures; assistance to the Department of Transportation & Public Works with contractor compliance of Federal Transit Administration requirements and soundness of services plans; and reviews and recommendations on contractor developed System Safety Plan, and Drug and Alcohol Program.

PANAMA METRO LINE 2

PANAMA CITY, PANAMA

The first phase of the Panama Metro Line 2 involved a length of 21 km of elevated track with 16 stations in areas of the highest concentration of users including developments, shopping centers, entertainment venues, universities and hospitals. CSA performed a technical cadastral survey along the route and designed utility relocations between rail sections and stations including electric beam pipeline system design, telecommunications, potable and rainwater systems as well as providing commissioning services.

PAULSBORO MARINE TERMINAL

PAULSBORO, NJ

The South Jersey Port Corporation redeveloped the former 130-acre British Petroleum Oil Terminal and the adjacent 45-acre former Essex Industrial Chemicals properties into the Paulsboro Marine Terminal. CSA's scope of services for the project included architecture and MEP engineering for all the vertical buildings on the site, renovation of an existing main terminal administration building, and design of a new maintenance building for servicing the terminal transportation equipment.

PORT OF THE AMERICAS TRANSSHIPMENT PORT

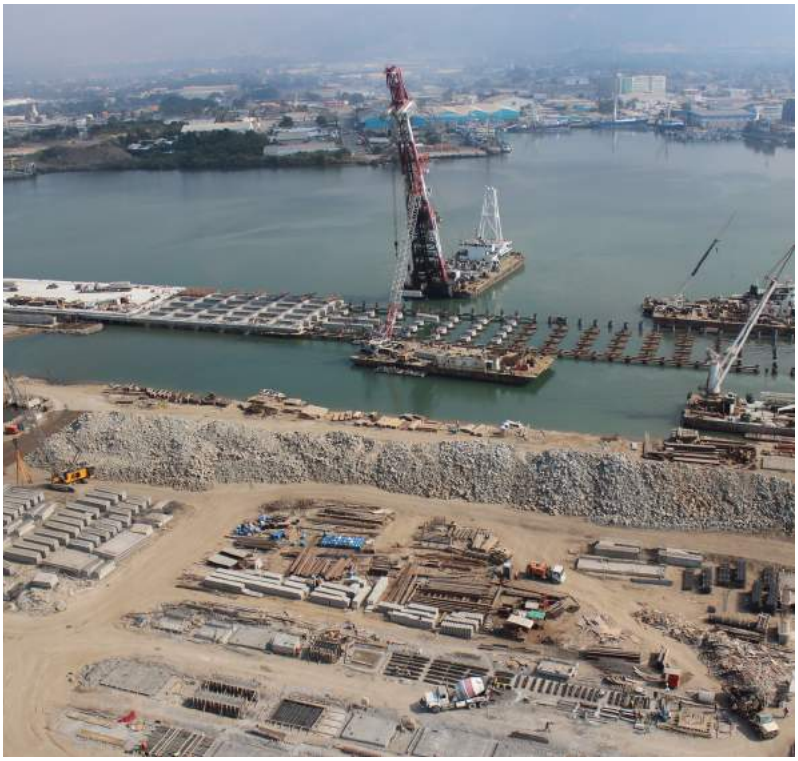
PONCE, PUERTO RICO

This project is designed to provide deep world class draft port facilities for containment ships and for the transshipment of cargo containers for international and local markets. CSA prepared the Environmental Impact Statement (EIS) for the regulatory local agency, the Environmental Quality Board, and in coordination with the U.S. Army Corp of Engineers, the NEPA Environmental Impact Statement as well as the Site Consultation for the Puerto Rico Planning Board. CSA also prepared all documentation to procure permits for the dredging activities in Ponce Bay.

BAHIA URBANA SAN JUAN WATERFRONT

SAN JUAN, PUERTO RICO

The Bahía Urbana project is a redevelopment of approximately 100 acres along the San Antonio Channel, to provide a pedestrian-friendly, mixed use waterfront area and create public access along the San Juan shore. A Master Plan was developed incorporating residential, commercial, hotel, park, and other dockage uses. Our scope of work was to perform comprehensive surveying work, assist in the environmental planning and permitting process, perform secondary studies related to the permitting process; and to provide civil engineering for the conceptual design of infrastructure requirements to support the master plan proposed along the San Antonio Channel.



PORT OF MANZANILLO

MEXICO

The Port of Manzanillo handles 90% of the containerized cargo that is moved on the Mexican Pacific. China Harbour Engineering Company (CHEC) was contracted to provide design and administration services for this project. CSA was contracted to provide administrative procedures and processes for contract documents, schedule, quality control, configuration, and health and safety compliance.

NYPA TRANSMISSION LIFE EXTENSION AND MODERNIZATION ENGINEERING SUPPORT

NEW YORK STATE

Transmission Life Extension and Modernization (TLEM) is a multilayer program to upgrade the New York Power Authority's transmission system to maintain availability, increase reliability and ensure regulatory compliance. CSA Group is part of the team to provide technical support for TLEM, a four-year program. CSA provided electrical engineering for typical upgrades for 13.8kV and 480V station service equipment in accordance with NYPA design criteria and applicable standards and codes including the National Electric Code and National Electric Safety Code.

EL GIRAL THERMOELECTRIC PLANT

BUENA VISTA, COLON, PANAMA

Térmica Del Caribe, S.A. is a company dedicated to thermoelectric energy generation through a 49.1MW thermoelectric plant. The plant needed to comply with environmental requirements and regulations. Initially, CSA prepared an Environmental Impact Statement (EIS) and subsequently provided all engineering and architecture designs, construction management and commissioning services.

SANTA BARBARA SOLAR PHOTOVOLTAIC 40 MW PARK

CAROLINA, PUERTO RICO

Hanwha-Solar Monkey selected a site in Puerto Rico to build a 40MW Solar Park. The scope of work involved multiple environmental studies and the preparation of permitting requirements including: Pre-consultation, lead agency selection, and coordination of meetings for the project EIS; jurisdictional wetland determination study; hydrologic & hydraulic study; noise level study; access study; socioeconomic and environmental justice study; initial review of archeological Phase 1A and 1B, flora & fauna studies and draft EIS Document; siting application; participation on the siting public hearing; Certification and Notification of Adjacent Property Owners (after siting application is filed); USACE joint permit process and application; construction permits; operational permits; preparation of a technical report of the findings and recommendations; project execution plan/schedule; preparation of reports; and project coordination.

SANTA ISABEL WIND FARM

SANTA ISABEL, PUERTO RICO

The Santa Isabel Wind Farm Project was the first industrial scale wind farm to be built in Puerto Rico. The project installed up to 65 Wind Turbine Generators (WTG) and associated foundations, access roads, a power collection system, transmission line, electrical substation, switch yard, operations and maintenance buildings and meteorological towers. CSA was contracted to prepare environmental studies to determine locations with optimum wind conditions and minimal impact to the environment of surrounding areas. Some of the parameters evaluated were wind speed, temperature, and altitude, availability of land, access to the proposed properties, and accessibility for connection to the electric power grid. CSA also prepared an EIS as required by Puerto Rico Environmental Public Policy.

REDEVELOPMENT OF TWO BUILDINGS AT AN AEROSPACE MANUFACTURING PLANT SITE AT INDUSTRIAL PARK – ENVIRONMENTAL AND PERMITTING SERVICES

SANTA ISABEL, PUERTO RICO

An Aerospace manufacturing plant site needed to expand its operations and identified two existing adjacent buildings that would provide a combined expansion of approximately 95,600 SF. The Initial Phase of the Project consisted of the rehabilitation of a portion of 12,000 SF in one building to house administrative offices. The development of the remaining 83,600 SF consisted of the partial demolition and extension of the existing buildings and the construction of a new area between both buildings. CSA provided professional environmental consulting and permitting services for this redevelopment project.

ADDITIONAL PARKING SPACES AT A MEDICAL DEVICES MANUFACTURING SITE

JUNCOS, PUERTO RICO

A Medical Devices company wanted to develop additional parking spaces at its manufacturing site. CSA evaluated the existing parking and site layout to determine the potential amount of new parking spaces that could be accommodated within the property limits, taking into consideration Puerto Rico Building Code, easement and rights-of-way from infrastructure agencies. The scope of work included: Site visit and reconnaissance of parking lots; analysis of up to two alternatives for additional parking spaces within the site; findings presented in a site evaluation report summarizing the outcome of the parking analysis.

PHARMACEUTICAL BIOTECHNOLOGY MANUFACTURING SITE NEW WATER WELLS AND THE SUPPORTING INFRASTRUCTURE - A/E DESIGN

JUNCOS, PUERTO RICO

This plant site needed 300,000 gallons per day (GPD) of water, as a supplemental source to the water supplied from PRASA, for its process operations. To address this need, the plant site proposed to design, drill, construct, and operate of up to five new water wells at land adjacent to its facilities. Each of the new wells supplies a volume rate of 100,000 GPD. CSA provided civil and structural engineering, and architectural services for the Basis of Design / Conceptual Design phase of this project. Proposed services also included a geotechnical study, hydrologic and hydraulic studies, and permits review.

NEW PROCESS BUILDING - A/E DESIGN SERVICES

PUERTO RICO

Project scope included the construction of a new 15,000 SF Pre-Engineered Metal Building (PEMB) to support research and administrative functions. The building housed Processing Room, Laboratories, Cold Rooms, and a future process areas with its mechanical, electrical and IT support areas, offices, restrooms, and a breakroom. CSA provided A/E design services including: applicable codes review; site visit to identify existing conditions; civil site engineering design; validation of proposed floor plan provided by the owner; architecture design; structural engineering design of a PEMB Structure; HVAC comfort design for the building; plumbing design for building sanitary, potable and stormwater drainage; electrical engineering design; and fire protection systems design.

NYCHA SANDY RESILIENCY & RENEWAL LONG TERM REPAIR PROGRAM

NEW YORK CITY, NY

CSA Group was contracted as a major subconsultant for the $3B NYCHA Recovery and Resilience Department "Sandy Recovery Program "for Program Management Services including overall program management support, design oversight, procurement, construction management, community outreach, and grants management for PMO Funding group support with cost estimating, documentation, reporting and negotiation efforts for the 428 FEMA grant and HUD CDBG-DR funds. A restoration work plan was developed for the 34 public housing developments suffering from short- and long-term damage, affecting structures, mechanical and electrical systems, roofs and facades.

PASEO VERDE MIXED USE HOUSING DEVELOPMENT NATION'S FIRST LEED® PLATINUM FOR NEIGHBORHOOD DEVELOPMENT (AND HOMES)

PHILADELPHIA, PA

Paseo Verde is a transit oriented mixed-use development with 120 units of sustainable housing for low and moderate-income families, 30,000 SF of retail and community space, office space, and parking. CSA provided MEP engineering design and construction support services to WRT Architects for this project. Mechanical and electrical engineering systems included the preparation of an energy model to optimize gas, electric and domestic water usage for each apartment unit. This project serves as a model for sustainable redevelopment in neighborhoods throughout Philadelphia.

ALTURAS DE CUPEY, PUBLIC HOUSING MODERNIZATION

SAN JUAN, PUERTO RICO

This comprehensive modernization project included existing condition assessment surveys and recommendations for 250 apartments in 24 buildings with two different typologies: walk-ups (two and three stories) and row houses. CSA proceeded with the planning, A/E design and construction support services for the upgraded dwelling units. The scope of work also included improvements to ancillary buildings housing administrative offices, maintenance warehouse, auditorium, Puerto Rico Head Start State Collaboration Office, electronic library, covered basketball court, baseball field and playground areas.

HAITI SHELTER PROGRAM

HAITI

As a result of an earthquake in Haiti, millions were displaced from their homes throughout Port-Au-Prince. In an effort to provide shelter for displaced citizens in locations with employment opportunities, the USAID worked with the Government of Haiti to provide housing alternatives in the Port-au-Prince, St. Marc, and Cap-Haitian Development Corridors. In the Cap-Haitian corridor, CSA was contracted to provide A/E design and construction administration services for the development of plans for eight sites and approximately 3,000+ housing units.

LINCOLN FINANCIAL FIELD (PHILADELPHIA EAGLES FOOTBALL STADIUM)

PHILADELPHIA, PA

Lincoln Financial Field, the Eagles football stadium was designed to seat 68,532 fans in a state-of-the-art facility incorporating the latest amenities and viewpoints to maximize the customers' entertainment experience. CSA's scope of work included structural engineering services for all concrete elements: the foundations, Service Level, and Main Concourse Level. In addition, we were responsible for the design of all CMU walls and their associated restraints and structural framing systems for attached roofs.

EMPIRE STATE BUILDING RENOVATIONS/UPGRADES/ FIT-OUTS

NEW YORK CITY, NY

CSA Group contributed to resolving the broadcasting urgency that disrupted all radio broadcasting, regular television and cellular calls within the New York Metro Area that occurred on September 11, 2001. CSA was the MEP engineer for the Channel 11 (WPIX) DTV and VHS Transmitter site at the World Trade Center. The situation impacted all major broadcasters in the industry, to get broadcasting up and running. The immediate response and proactive involvement of our project managers and engineers were critical in dealing with the negotiations and technical issues related to obtaining and distributing any available amperage to the Empire State Building.

UNIVISION HD STUDIOS A & B

DORAL, FL

CSA Group in association with Lemartec Engineering responsible for A/E design services for two HD studios at the Univision Headquarters using the design-build project delivery method. The scope of work consisted of the development of approximately ½ of an acre footprint adjacent to the North side of the existing Univision Broadcasting Center. CSA Group's scope of services includes schematic design, design development, construction documents and construction administration.

PUERTO RICO CONVENTION CENTER DISTRICT

SAN JUAN, PUERTO RICO

CSA was part of a multi–disciplinary team developing the new Puerto Rico Convention Center District. The convention facility and its anticipated ancillary hotels, restaurants, retail establishments, park system and commercial developments were constructed on approximately 113 acres of land. CSA provided a variety of management and technical services including: program management, master plan development, engineering infrastructure design, architectural development guidelines, park architectural & civil design, environmental site assessments, environmental impact statement and permits, asbestos and lead abatement, erosion and sediment control design, archaeological evaluation, equipment and facility reuse option analysis, construction supervision and contract administration services.

FRC HOMEPORT UPGRADES PHASE II, ENGINEERING SUPPORT BUILDING

SAN JUAN, PUERTO RICO

Prime A/E for Phase II of the Fast Response Cutter (FRC) Homeport upgrade project providing support facilities for new Coast Guard FRC. Project included demolition; provision of temporary facilities; construction of a new Engineering Support Building and renovations to existing Building 101; site work including paving and provision of utility services for both temporary facilities and the new Engineering Support Building. A/E Services included: geotechnical investigation, utility survey, survey, abatement survey, civil, structural, architectural, mechanical, electrical, plumbing, and communications design and construction support services.

GOVERNMENT OFFICE BUILDING RENOVATION

NEW YORK CITY, NY

CSA Group is the architect and engineer for this confidential government client involving the renovation of their 350,000 SF, 18 story headquarters office building. The renovation was driven by the implementation of New York Local Law 26/04 requiring installation of sprinklers in high rise office buildings and code related modifications to fire safety systems. Improvements to the facility also incorporated NYS Governor's Executive Order 88 (Sustainable Design), emerging technologies, programmatic needs, life safety matters, and the overall quality of the office environment as part of the new design.

CITY OF THE ARTS

PANAMA CITY, PANAMA

The project "City of the Arts" provided for the development of 1.5 hectares, within a 12.7 hectares property, owned by the National Institute of Culture. The Institute operates the Anthropological Museum located in Llanos de Curundu, Panama City. CSA Panamá offered the following services: preparation of EIA Category II, hydrological and hydraulic study, structural engineering, MEP engineering, fire protection engineering, and security systems.

DMVA MIRAMAR READINESS CENTER

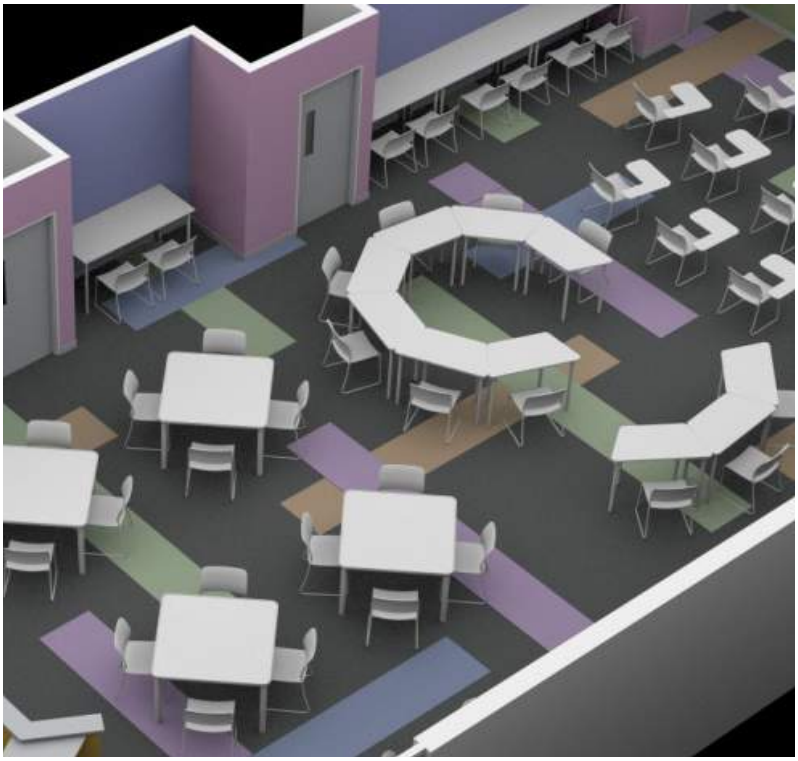
MIRAMAR, FL

CSA was contracted as an A/E full-service firm for the Florida Army Reserve National Guard readiness center. The program was tailored to meet their unique requirements for combat readiness and local emergencies. CSA had to adhere to Department of Military and Veterans Affairs (DMV A) agency specific standards and requirements including minimum anti-terrorist standards for buildings, armories, logistical, aviation, training and construction design guidelines. The two-story building features a 40-foot high assembly hall designed to accommodate the entire battalion, storage spaces, platoon areas and offices.

SUNY STONY BROOK UNIVERSITY WEST APARTMENT BUILDINGS J & K - ENVIRONMENTAL SERVICES

STONY BROOK, NY

Enrollment at SBU's Campus has grown consistently over the past five years. To help with accommodating the growth in enrollment and the need for more onsite student housing, SBU added two new dormitories to its existing West Apartment Complex. SBU enlisted CSA to prepare environmental reports required under New York State Environmental Quality Review ("SEQR") for both projects. The scope of services includes the preparation of Environmental Assessment Forms (EAFs), (Long Form) including Parts 1, 2 & 3 on behalf of the University, as SEQR Lead Agency and in cooperation with DASNY as an Involved Agency.



IMATH LABORATORIES - HIGH TECHNOLOGY LABORATORIES

MIAMI, FL

This project was part of the U.S. Department of Education's Race to the Top Grant Program Initiative to promote a groundbreaking approach to teaching mathematics. Five classrooms at different middle school locations were developed to benefit from digital resources and advanced technologies. The spaces utilized wireless technologies for experimentation and learning centers for group or individual students in advanced mathematics. The A/E designs included different modes of learning and teaching with a capacity for 60 students organized into different group sizes. The different facilities included the renovation and adaptation of existing MEP systems with improved light sources using LED technologies. The project also used green technologies in the form of materials and energy efficient MEP systems.

RIVERGLADES ELEMENTARY SCHOOL 24 CLASSROOM ADDITION

PARKLAND, FL

The project scope was for the integration of a modular two-story classroom building into an existing school campus. The 31,300 SF, two-story classroom facility provided 24 student classrooms, complete accessibility provided through passenger elevators and protected roofed canopy structures making the connection to the existing building assembly. CSA Group performed professional architectural, site adaptation and civil engineering services to include drainage, sanitary sewer and water distribution design. Additional services included parking lot and student bus drop off enhancements, signing and pavement makings, relocation of play courts, bidding, construction administration and warranty services.

UPR MOLECULAR SCIENCES & RESEARCH CENTER BUILDING

SAN JUAN, PUERTO RICO

The University of Puerto Rico (UPR) contracted CSA Group for A/E design and construction support services, contractor procurement support, construction oversight, and permitting services for the development of the sixth and seventh floors of the Molecular Sciences Building. The sixth floor includes a 17,220 SF laboratory and administration area, a vivarium, and administration spaces all within a 12,500 SF area. The lab features a Neuro Plasticity and Chemical Synthesis laboratory, as well as an office area for researchers and scientists.

FONTAINEBLEAU NORTH TOWER NEW RESORT

MIAMI BEACH, FL

This project consisted of the demolition and reconstruction of the Fontainebleau North Tower and Parking Garage, the remodeling of the existing Chateau Tower and the redevelopment of the landscape and pool areas east of the existing buildings. CSA provided complete civil engineering design services for paving, grading, drainage, water and sewer. Services also included topographic and boundary survey services, permitting and construction inspections services.

WYNDHAM GRAND RIO MAR PARCELS R, L2, 5 AND 6

RÍO GRANDE, PUERTO RICO

Located along the coastline of Puerto Rico, the Wyndham Rio Mar development needed to comply with strict local, federal and client related environmental conservation policies and regulations. CSA assisted Wyndham Vacation Ownership with their due diligence, permitting and design processes for the development of 750 timeshare units.

ROYAL SONESTA HOTEL & CASINO PANAMA - CONSTRUCTION MANAGEMENT SERVICES

PANAMA CITY, PANAMA

This privately-owned 30-story building with 300 rooms, is equipped with a large HVAC system with digital controls, generators, elevators, CCTV, access control systems, UPS, and other various support systems. CSA was contracted for construction management support for construction completion; startup of all MEP systems; assurance that building equipment was up and running; and one year of maintenance support.

WYNDHAM GRAND RIO MAR – HOTEL RENOVATION AND TIMESHARE CONVERSION

RIO GRANDE, PUERTO RICO

This seven-story facility consists of 588 guest rooms, a large convention center, spa and outdoor facilities. Renovation of the property involved 400 guest rooms and common areas. The remaining 188 hotel rooms were converted to 132 timeshare units. The development needed to comply with strict local, federal and client related environmental conservation policies and regulations. CSA provided all required permits including the US Corps of Engineers exception, local pre-construction permits, agency endorsements and authorizations plus all related environmental studies. CSA also provided civil and MEP engineering design and construction support services and coordinated with the architect of record, landscapers, pool designers, lighting, structural, interior designers and geotechnical consultants.

PANYNJ LAGUARDIA AIRPORT TERMINAL B - CONSOLIDATED TENANT IMPROVEMENTS

QUEENS, NY

CSA Group was contracted for the La Guardia Airport Terminal B project for the Consolidated Tenant Improvements (CTI). The improvements are comprised of an A/E fit out of approximately 76,825 SF of airline operational space. The fit-out includes flight operations, airline employee spaces, quiet rooms, training stations, baggage service office, airline ticketing office, storage areas, locker rooms, breakrooms and other support functions. CSA's scope of services includes MEP and fire protection engineering systems design and construction support services, and special inspections for structural interior work.

PHILADELPHIA INTERNATIONAL AIRPORT CAPACITY ENHANCEMENT PROGRAM & ENGINEERING

PHILADELPHIA, PA

The Philadelphia International Airport (PHL) Capacity Enhancement Program is a collection of several projects scheduled over 13 years with a total cost of $6.4 billion. CSA is a first-tier sub to the CEP Program Management JV, Global Program Partners, providing structural and civil engineering services as well as program quality management. as part of the program ramp-up, CSA also prepared structural design standard specifications.

LUIS MUÑOZ MARÍN INTERNATIONAL AIRPORT CAPACITY ENHANCEMENT PROGRAM

CAROLINA, PUERTO RICO

Aerostar Airport Holdings LLC (Aerostar) was awarded a 40-year lease by the Puerto Rico Ports Authority (PRPA) for the operation of the Luis Muñoz Marín International Airport (SJU) in San Juan, Puerto Rico. Aerostar executed a Capacity Enhancement Program (CEP) in the terminal areas as part of the Use Agreement between the signatory airlines at SJU and Aerostar. The estimated value of the CEP was approximately $100M. The three phases included work in Terminal B, C and D, Concourse C and D, and Terminal A upgrades. CSA services included: architecture; MEP, civil and structural engineering, environmental studies and permitting.

PANAMA TOCUMEN AIRPORT

PANAMA CITY, PANAMA

The expansion of Tocumen International Airport (T2) aimed to meet a demand of 20 million passengers annually. The new T2 interconnects with the existing Terminal (T1), forming a single airport complex with the ability to optimize operations, consolidate Panama as the Hub of the Americas, and strengthen the demand for new flight frequencies, new airlines and thousands of passengers who will enter the country daily and make connections through Panama. CSA was a consortium team member providing program management, construction management, technical assistance, design supervision, construction supervision, and cost control services. This project received ENR's 7th Annual Global Best Projects Award in the Airport/Port category in 2019.

KINGS COUNTY HOSPITAL CENTER BUILDING 'R' ENGINEERING

BROOKLYN, NY

CSA was the technology and MEP site steam engineer for a new 300,000 SF, King's County Building 'R' psychiatric facility. We designed multiple hardwired staff duress alarm systems for seven floors of the hospital. We also designed the site steam distribution tapping into the campus distribution system and feeding the new building, as well as several other buildings disconnected from the campus system due to phasing.

CLEVELAND CLINIC NEUROLOGY INSTITUTE & CANCER INSTITUTE - CIVIL ENGINEERING SUPPORT

WESTON, FL

CSA provided civil engineering support for the development of an overall Master Plan for the expansion of Cleveland Clinic Florida Weston Campus, including detailed civil engineering, site design, landscape architecture and environmental permitting services for the Neurology and Cancer Institute building. Engineering services included: schematic design, detailed design phase services, construction documents, and construction administration services as well as environmental permitting for the South Florida Water Management District, City of Weston and Broward County.

CHILDREN'S HOSPITAL BUILDING – STRUCTURAL ANALYSIS

PANAMA CITY, PANAMA

After 61 years of operation, the Children's Hospital building showing signs of deterioration. The Ministry of Health asked CSA for a comprehensive structural analysis with the cost-benefit of facility repairs and structural soundness of the structure. We performed non-destructive/ noninvasive tests and identified the building structural elements and systems. Our staff then conducted a structural engineering analysis of the gathered data and issued a final safety recommendations report for immediate actions.

VA HOSPITAL ELECTRICAL DISTRIBUTION SYSTEM UPGRADE

SAN JUAN, PUERTO RICO

The Veterans Affairs (VA) Hospital system contracted CSA to design an office/electrical utility building to be constructed on the VA Hospital grounds. The 9,400 SF, new building is a reinforced concrete structure with masonry infill, consisting of three levels, one main level for office use and two electrical utilities levels. CSA provided A/E design services for the new office/ utility building and the replacement of outdated electrical equipment, construction procurement and construction administration services which included the construction phasing schedule and cost estimate. The design of the building and electrical facilities complied with Federal, VA standards and applicable building codes and regulations.

HURRICANE MARIA PROGRAM MANAGEMENT OFFICE

PUERTO RICO

The MARIA Program Management Office (PMO), supported by Consul-Tech Caribe, a CSA Group Company, and teaming partner Aptim provided comprehensive program management, disaster recovery strategic policy advice and federal grants management for the Government of Puerto Rico. The purpose of the Consul-Tech Caribe Team was to support the MARIA PMO with comprehensive emergency management and disaster recovery services designed to ensure that Puerto Rico optimized its reimbursement for disaster-related damages from all available federal sources.

NYC DDC "BUILD IT BACK" HURRICANE SANDY AFFECTED COMMUNITY RECOVERY CM/DESIGN/ BUILD

NEW YORK CITY, NY

New York City 'Build it Back' is the City's program to assist homeowners, landlords and tenants in the five boroughs whose primary homes were damaged by Hurricane Sandy. Through the repair, rebuilding, and elevation of homes, the 'Build It Back' program is working to enhance resiliency in our waterfront neighborhoods. CSA has been involved in this program in multiple capacities including: A/E design, permitting, project management, sprinkler designs, CEI and special inspections.

NYC OMB DISASTER RECOVERY PROGRAM MANAGEMENT SERVICES

NEW YORK CITY, NY

This contract was for Program Management consulting services in the aftermath of Hurricane Sandy for claims development and administration under Federal Disaster Programs for NYC agencies such as NYC DOT, DEP, DPR, FDNY, NYPS and DSNY. CSA was a sub-consultant providing A/E consulting services for damage inspections, condition assessments, recommendations, hazard mitigation studies, and hazard mitigation proposal preparation.

MIAMI-DADE COUNTY PUBLIC SCHOOLS DEBRIS MONITORING SERVICES

MIAMI, FL

CSA participated as a subcontractor in the Hurricane Irma Debris Removal Program for Miami-Dade County Public Schools. Debris monitoring and reporting included work in over 400 schools affected by Hurricane Irma. Over 50 debris monitors, five prime contractors, 240+ trucks certified and around 40,000+ cubic yards of debris removed.

CSA Group supports
all green initiatives.
Please recycle.

info@csagroup.com www.csagroup.com

CSAGROU-01 JNEIDLE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 5/20/2020

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 have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Joyce Sikes
American Global LLC 390 North Broadway 3rd Floor Jericho, NY 11753	PHONE (A/C, No, Ext): (516) 231-4272 FAX (A/C, No): E-MAIL ADDRESS: joyce.sikes@americanglobal.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Trumbull Insurance Company	27120
INSURER B : Hartford Casualty Insurance Co.	29424
INSURER C : Markel American Insurance Company	28932
INSURER D :	
INSURER E :	
INSURER F :	

INSURED

CSA Central, Inc.
8200 NW 41st Street, Suite 305
Doral, FL 33166

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 LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			12 UUN BM9482	7/21/2019	7/21/2020	EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 300,000
							MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	POLICY PRO-JECT X LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	OTHER:							$
A	AUTOMOBILE LIABILITY			12 UUN BM9482	7/21/2019	7/21/2020	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
B	X UMBRELLA LIAB X OCCUR			12 XHU BM3213	7/21/2019	7/21/2020	EACH OCCURRENCE	$ 10,000,000
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$ 10,000,000
	DED RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N	N / A					PER STATUTE OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)						E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$
C	Professional Liab			MKLM7PL0001775	7/21/2019	7/21/2020	OCC/AGG	5,000,000

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

Re: Design & Construction Administration Services for Backup Electrical Power Generators; Project No 20-8532
City of Hollywood is included as Additional Insured in accordance with the policy provisions of the General Liability, Auto Liability and Excess Liability Policies.

CERTIFICATE HOLDER

City of Hollywood
Office of City Clerk
2600 Hollywood Blvd
Hollywood, FL 33020

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

American Global LLC

TAB 5

CITY OF Hollywood FLORIDA

PROJECT NO. 20-8532

PROFILE OF CONSULTANT

CSAGROUP EST • 1956

Tab 5: Profile of Consultant

QUALIFICATIONS OF FIRM AND TEAM MEMBERS

Firm's Background: Founded in 1956, and with more than 30 years of experience in South Florida, CSA brings full-service capability with the ability to push the limits of service and creativity. As a local and national firm, our passion for architectural and engineering (A/E) design as well as our strict adherence to budgets and schedules assures our clients the successful completion of their projects. CSA is the largest minority-owned full-service firm (MBE) of its kind in the USA. Engineering News Record (ENR) ranks CSA #28 among the Top 50 Program Management Firm Engineering News Record, and #49 among the Top 100 CM for fee and Project Management Firm. CSA is consistently ranked among the Top 500 Design Firms and the Top 200 Environmental Firms. CSA has a proven track of record in South Florida. Our offices, located in 8200 NW 41st Street, Suite 305, Doral, Florida, is less than 30 minutes from the City of Hollywood.

CSA brings 400+ technical, scientific, and professionals, 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 one roof with eight (8) primary core services:

1. Program & Project Management
2. Construction Management
3. Architecture
4. Environmental
5. Engineering & Design
6. Response, Recovery and Resiliency
7. Asset Optimization
8. O&M

The synergy between our in-house multi-discipline groups enhances projects with a seamless delivery of multiple services, while providing a depth of experience and resources in a single source firm.

Currently, CSA Central, Inc. does not have any pending litigation.

Expertise on Resiliency and Disaster Response (Added Value):

Recognizing and responding to climate change is part of our commitment to developing resilient communities. CSA was a Platform Partner for the now completed **Rockefeller**

Foundation 100 Resilient Cities Program. CSA joined a prestigious group of global Platform Partners that committed to helping cities around the world prepare for, withstand, and bounce back from the 'shocks' – catastrophic events like hurricanes, fires, and floods – and 'stresses' – slow-moving disasters like water shortages, homelessness, and unemployment – which are increasingly part of 21st century life. Platform Partners represent a wide array of private sector, public sector, NGO, and academic community leaders. CSA committed to offering resilience technical support for facility and infrastructure pre-feasibility studies to 100RC's member cities. Under this Program, CSA supported the City of Miami, the municipality of San Juan, Puerto Rico and Panama City in the Republic of Panama.

> *"In an increasingly complex and challenging world, cities need partnerships with companies like CSA Group to withstand the shocks and stresses of the 21st century," said Michael Berkowitz, President of 100 Resilient Cities. "By providing infrastructure pre-feasibility studies to our network cities, CSA Group is leading by example, and is helping to build a global resilience movement, at a critical time for cities worldwide."*

CSA has the in-house professionals to successfully manage many aspects of disaster preparedness, response and recovery. With an in-house team of engineers, planners, architects, construction managers, program managers and environmental and permitting specialists; CSA has assisted public and private sector clients in the following key areas: Vulnerability Assessments, Evacuation Planning, Resiliency Strategy Development, Independent Cost Estimates & Cost Reasonableness, Memo Reviews, Hard and Soft Resiliency Design, Post-Storm Response and Repair, Recovery Planning and Program Management, Regulatory Compliance, Design and Permitting for Recovery, and Construction Management.

CSA has assisted public and private clients with assessing vulnerable assets, critical infrastructure and populations. This includes not only concerns for flooding and tidal surge but also wind considerations and excess heat. We have helped the public and private sector develop hard and soft resiliency features to protect vulnerable assets and occupants and can assist in prioritizing expenditures to maximize benefits. In addition, CSA has developed public awareness and communication strategies.

Expertise on FEMA and Other Federal Programs (<u>Added Value):</u>

As a company, and as individuals, CSA is committed to providing effective, flexible and tailored solutions to meet our client needs. Our personnel is selected based on their relevant experience, ability to work independently, problem solving capabilities, and communication skills. Consequently, they are fully capable of addressing any issues that may arise in the development of the emergency generator projects.

CSA always establishes an organization and execution strategy to meet the goals for Program Reliability, Performance, Cost, Schedule, and Risk Management. CSA will implement a management approach that will facilitate goal attainment. We are confident that, given our past proven experience and results, and commitment to our clients, the CSA Team will be a **VALUE-ADDED** partner for the City.

Starting with Hurricane Andrew in 1992 and for almost every hurricane affecting South Florida since, CSA Group has been involved in all aspects of resiliency, response and recovery assignments. We have managed over $1 Billion of emergency relief locally in Florida.

In the aftermath of Hurricane Irene and "No-Name Storm", CSA was contracted by Miami-Dade County to oversee a massive infrastructure repair program. Due to the extensive floods suffered by the County and the damage to its infrastructure such as drainage systems, canals and roadways, FEMA awarded Miami-Dade County over $800 million for repairs to roads, drainage systems and canals, consisting of over 3,000 individual sites.

CSA has provided direct support related to FEMA funding to water utility agencies in Florida, Puerto Rico and New York. To these agencies, CSA has provided the following services:

- Identification, development, processing/submittal of Project Worksheets (PWs)
- Assessments of status of their facilities pre- and after a storm
- Representing the agency in front of FEMA and other federal/state/local agencies
- Project Management to coordinate, monitor and control, and document contracted work to address infrastructure projects including but not limited to debris removal, emergency protective measures, and temporary infrastructure solutions to mitigate existing and potential risks of health and safety
- Project Management to manage and execute the scope definitions of all sites that require specialized work as identified during the Health & Safety Assessments, including but not limited to water treatment plants, waste water treatment plants, lift stations, water tanks, ancillary facilities
- Project Management to manage and coordinate all logistics including but not limited to transportation, fueling, equipment deliveries, material deliveries
- Engineering Design of resiliency features

Specifically, CSA is currently providing support services to the New York City Department of Environmental Protection related to their efforts of recovery from Hurricane Sandy Impacts. Services include Adaptation Assessment Reports and Cost Estimates of the affected WWTP's in order to define eligibility for FEMA Hazard Mitigation Funding under Section 406 (Stafford Act); Direct coordination with FEMA NY Staff on validation of damages, assessments, data, among others; Conduit and Wire Inventory Analysis for all NYC WWTP's; Restoration scopes of work to FEMA for approval; WWTP/Pump Stations hazard mitigation recommendations

within the NYC Wastewater Resiliency Plan; and, Assessment on mitigation projects funding, under FEMA Section 406 and/or DEP Storm Mitigation Loan Program (SMLP) Mitigation Projects; and, currently providing design services under Task Order Contract (TOCs) in the design of the defined recovery projects.

Our Team's Program Management and Disaster Recovery experience listed below:

- $7 billion American Recovery and Reinvestment Act (ARRA) - Commonwealth of Puerto Rico
- $3.2 billion + Program Management Services Related to Hurricane Sandy Long-Term Recovery, New York, NY – New York City Housing Authority
- $800 million Hurricane Sandy Build It Back Program in New York City-Program Management and Design Services
- $800 million FEMA-funded Infrastructure Repair Program - Miami Dade County, FL
- $62 million Hurricane Wilma, Program Management & Inspection - Florida, Broward & Palm Beach Counties
- New York Governors' office of Storm Recovery (GOSR) Program Management of $1 billion of NYS CDBG-DR funds for Infrastructure and NY Rising resiliency projects (team member for all A/E services for infrastructure projects)
- $1.8 billion water and wastewater infrastructure projects for Infrastructure Financing Authority (PRIFA) for the Commonwealth of Puerto Rico
- $100 million Hurricane Ivan -Miami-Dade and Monroe Counties, FL
- $142 million Hurricane Recovery Program FDOT District 4, District-wide - FL

SPECIFIC RELEVANT FIRM EXPERIENCE

- CSA held a continuing Contract for Civil Engineering Service, Ft. Lauderdale to provide civil engineering consultants services to include design, permitting, preparation of construction documents and participation in the implementation of various City projects. CSA Group was directly responsible for all services as it relates to roadway and site design, neighborhood improvements and beautification, underground utility design, site grading and stormwater runoff modeling and design, erosion and sediment control design, pavement marking and signage design, maintenance of traffic (MOT), engineering analysis, cost estimation and reporting, permitting, construction observation and inspection, shop drawing review, preparation of project rendering and presentation materials, specialized training to City staff, and coordination with City staff, consultants, utility

owners and contractors. CSA was commissioned to perform services for the following tasks:

- Task 1: Outfall design of Two Control Structures into North Fork New River
- Task 2: Lighting
- Task 3: Drainage and Tidal Flooding Problems at Riviera Isles (Phase I)
- Task 4: CEI for Harbordale Sidewalk Project
- Task 5: CEI for Commercial Boulevard Landscape
- Task 6: CEI for NE 15th Street Landscaping Improvements
- Task 7: Bridge Replacement Harborage Parkway
- Task 8: SR A1A Light Replacement Project
- Task 9: Sunrise Boulevard Landscape Improvements
- Task 10: River Oaks Preserve Drainage Master Plan
- Task 11: Aquatic Center Master Plan

- CSA has extensive experience providing services in Fort Lauderdale and Broward County. Below is a summary of our project experience:
  - Select Ft. Lauderdale projects:
    - City of Fort Lauderdale New Aquatic/Mixed-Use Development
    - Fort Lauderdale Water Works
    - Sawgrass Expressway from Sunrise Blvd. To Atlantic Blvd
    - Sawgrass Expressway Deerfield Mainline Toll Plaza Modifications
    - KC Wright Board Offices – Hurricane Repair Project
    - Fort Lauderdale/Hollywood International Airport
    - Imperial Point Medical Center Emergency Department Expansion
  - Select Broward County projects:
    - FDOT D4 Districtwide Architectural Services
    - City of Fort Lauderdale Continuing Contract for Civil Engineering Services
    - Riveroaks Preserve Conceptual Stormwater Facilities
    - Florida National Guard Miramar Readiness Center
    - South Florida Water Management District Operation and Maintenance Contract S-151 Replacement
    - FDOT D4 S.R. AIA (Ocean Drive) from south of Seacrest Parkway (MP 0.870) to Azalea Terrace (MP 2.011), Hallandale Beach
    - FDOT D4 S.R. 820 Hollywood Boulevard
    - FDOT D4 Miscellaneous Right of Way Mapping Service
    - I-75 Express Lanes Segment E from North of Griffin Road to I-595

  - Central Broward Water Control District Professional Surveying Services
  - Cleveland Clinic New Emergency Department and Intensive Care Unit Project and Neurology Institute/Cancer Institute Building Project
  - Hollywood Park Elementary School
  - Lauderdale Manor Early Learning and Resource Center
  - Central Park Elementary School
  - Riverglades Elementary School Parkland 24 Classroom Addition
- CSA is the stormwater and environmental management SME sub-consultant in a contract with the New York State Governor's Office of Storm Recovery (GOSR) to assist the Dormitory Authority of the State of New York (DASNY) in developing green infrastructure construction for water quality and flood impact minimization.
- Miami Dade Housing Agency – CSA developed an assessment to install 100% emergency power generators to nine public housing facilities, including one Assisted Living Facility. The work consists of replacing and upgrading the existing emergency generators, main service equipment including switchboards and ATSs, and fire pump electric equipment to provide 100% backup for all services within the buildings. Special considerations are noise reduction for generator operation, close coordination with Electric and Gas Utilities, additional coordination with project related disciplines, and interface with 30 to 40 year existing systems, including design and construction administration.
- CSA participated as the engineering sub-consultant in a three (3) years long contract for the New York State Governor's Office of Storm Recovery (GOSR) to assist in the preparation of Cost Reasonableness Reviews for engineering services during the procurement phase of design and permitting services related to Hurricane Sandy recovery phase. The work covered the statewide program including hundreds of sub-recipients and $1Bn in damage repair work, and most importantly in resilience work from preparedness to hardening of critical infrastructure including emergency generators and wastewater handling facilities.
- CSA was the structural engineer of record in a contract with the New York Department of Environmental Protection (NY DEP) directed at hardening wastewater treatment facilities (plants and pumping stations) across the City. The project received FEMA funds and included compliance documentation, inspections, and reporting.
- CSA assisted Puerto Rico Electric Power Authority (PREPA) as part of a newly formed Program Management Office (PMO), developed for claiming damages to

Puerto Rico's power grid as part of the Hurricane Maria Disaster declaration in September 2017. CSA was part of the PMO consultants' team and played a key role in structuring PREPA's internal project formulation process and producing the project description packages supporting PREPA's damage claims submitted to FEMA's Public Assistance (PA) Program. The project description packages contained the information necessary for FEMA to create the Project Worksheets under Stafford Act's Section 428 claims review process. CSA's role included structuring the Special Considerations Compliance Program, which is the work unit responsible for identifying, documenting and complying with the documentation requirements related to the Insurance, Environmental and Historic Preservation and Hazard Mitigation (Stafford Act Section 404 Program) issues for each project contained within PREPA's Disaster Recovery Program portfolio. Complying with the special considerations requirements is a prerequisite to the obligation of FEMA PA funds. CSA also supported PREPA in its efforts to formulate projects to be submitted for consideration through FEMA's Hazard Mitigation Grant Program (Stafford Act Section 406). CSA was responsible for providing technical and PA assistance in relation to grant requests in excess of $1 billion.

- CSA has a robust flood management team, which has prepared NEPA compliant hydrologic and hydraulic studies for key federally funded project developments such as for the US Veterans Administration. CSA has also worked as the peer reviewer for FHA's Hurricane Maria damages recovery program related to 300+ road landslides, and for the formulation/DDD phase of the 200+ roads and bridges restoration projects under Eastern Federal Land jurisdiction.
- In the aftermath of Hurricane Maria, CSA deployed a staff of 20 to assess damages on 2600 critical support assets of the government-run island wide water utility in Puerto Rico. Facilities included water and wastewater pumping stations, water distribution tanks, office buildings. A large percentage of these facilities lacked installed emergency generator, resulting in inoperability due to power loss. Wind and flooding damages were typically observed, including downed trees, powerlines, and fences, as well as flooded and debris collection on pump pits.
- CSA assisted the Puerto Rico Psycho-pedagogic Institute in developing a Hazard mitigation proposal that was submitted to FEMA for funding. The proposal involved the repair of stormwater conveyance infrastructure to eliminate flooding of the road access to the facility. The project also included protecting building flooding in low lying portions of the site.

- CSA assisted the Polytechnic University of Puerto Rico in developing a Hazard mitigation project proposal that was submitted to FEMA for funding. The proposal included building underground storage of stormwater runoff in parking areas, using porous pavement in central plaza areas, and converting existing lawns in to bioretention areas.
- AMGEN Water Supply Wells business continuity project currently under construction. The project consisted of developing a water supply well field in an undevelopable property subject to the 100-yr storm event riverine flooding. CSA was instrumental in developing the basis of design that helped define the structural construction limitations to enable the project feasibility. Significant cost savings were realized as a result of a consensual project definition with stakeholders, which included safety, security, reliability, accessibility for operations and maintenance, and business continuity.

CSA Team Subconsultants:

The CSA Team includes Langan Engineering to provide Geotechnical services and Avirom and Associates as the Surveyor. Langan provides an integrated mix of engineering and environmental consulting services in support of land development projects, corporate real estate portfolios, and the oil and gas industry. Clients include developers, property owners, public agencies, corporations, institutions, and energy companies around the world.

Langan was founded as a geotechnical consulting company in 1970, and geotechnical engineering remains a core discipline at Langan today. Working closely with clients and the design and construction team to engineer cost-effective geotechnical solutions appropriate for proposed structures and the governing site conditions. Langan employs more than 1,100 professionals in its Parsippany, NJ headquarters and has regional offices in Fort Lauderdale, Miami, and West Palm Beach. Experience in Hollywood includes:

- HIAD Redevelopment Feasibility Study (City of Hollywood)
- Washington Park Childcare Facility (City of Hollywood)
- ICON Regulatory Support (City of Hollywood)
- Seminole Hard Rock Guitar Hotel and Casino Expansion

Avirom and Associates is a South Florida surveying firm with over 43 employees with an average length of service of 18 years. They are one of the few firms in the State of Florida that has five Registered Land Surveyors. Our 39-year history represents our firm's strength and stability in South Florida. Our staff consists of 6 registered Land Surveyors, 1 Project Manager, 7 CADD Technicians, 10 Field Crew Party Chiefs, 14 Instrument Persons and 5

administrative personnel. We have worked with many municipalities throughout South Florida, and we strive to provide them with a seamless product for their design. Avirom & Associates, Inc. has extensive knowledge and experience in providing a myriad of surveying services and will be responsible for all survey and subsurface utility investigations in the pump stations.

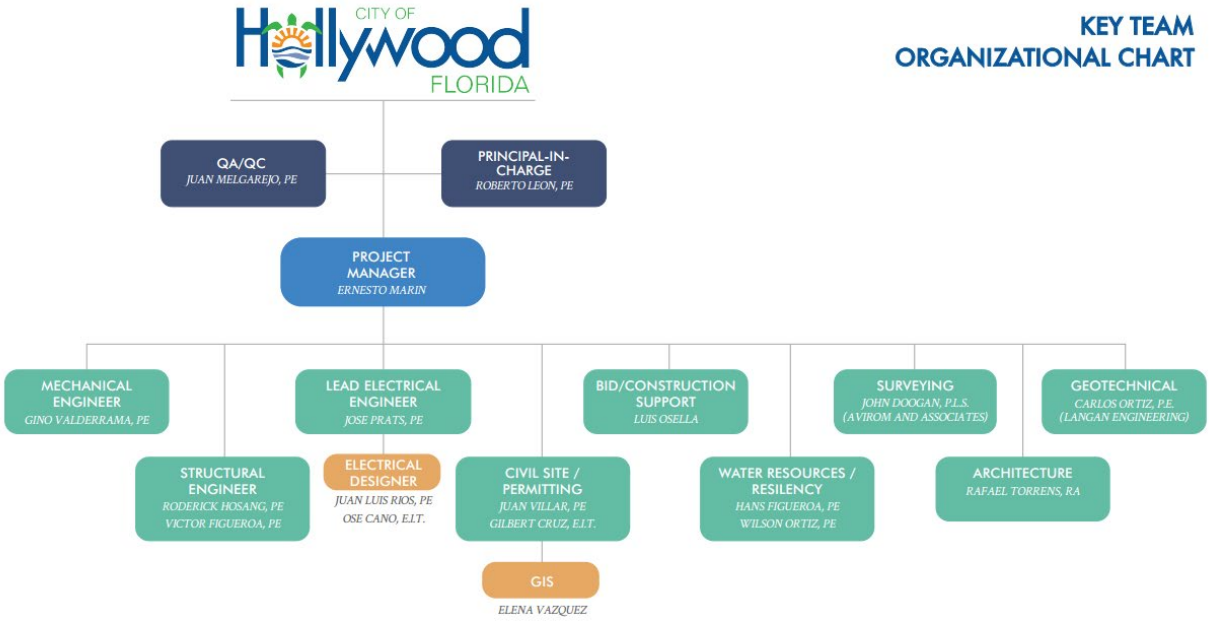
Organization of the Proposed Project Team and Staff

CSA has a proven track of record in South Florida. Our offices in the City of Doral are less than 30 minutes from the City of Hollywood. Additionally, CSA establishes an organization and execution strategy to meet the goals of the City of Hollywood for Reliability, Performance, Cost, Schedule, and Risk Management. Our team will implement a management approach that will facilitate goal attainment. Our team members are committed to providing professional services that meet the requirements of the City of Hollywood and involve all personnel in continually improving work processes.

Furthermore, CSA Group Team understands the execution of construction projects (federally funded) and is committed to include experienced staff that can provide the necessary skills and synergy throughout the different phases. We possess all the staff and infrastructure necessary to efficiently interface with the City of Hollywood and stakeholders in a timely manner and get the job done.

CSA has defined a streamlined organizational structure with our in-house staff along with strategic field subconsultants as presented below:

KEY TEAM ORGANIZATIONAL CHART



Staff resumes are including in this submittal. Our staff is currently running at a 60% utilization level, so CSA can commit each staff member to work on this project once awarded. Key staff experience is summarized below:

- Leading the project is Mr. Ernesto Marin, P.E. with over 30 years of experience in all aspects of project and construction management as well as engineering design. Among his relevant experience are multiple city level contracts, including with the City of Fort Lauderdale as well as Pump Station projects with the South Florida Water Management District.
- Roberto Leon, P.E. will be Principal in Charge. Mr. Leon has over 23 years of experience working with engineering and construction projects that are local, state and federally funded. He is also a licensed engineer in multiple states, a certified Project Management Professional, LEED accredited professional, Board Certified Environmental Engineer from the American Association of Environmental Engineers as well as an Envision Sustainability Professional. He has extensive FEMA training including Incident Command System, Continuity of Operations, Debris Operation, PA Program, Benefit/Cost Analysis, Temporary Emergency Power, Cost Estimating/CEF and Earthquake Mitigation.
- Juan A. Melgarejo, Ph.D., P.E., Quality Control. Dr. Melgarejo has over 33 years of experience in planning, project and program management, contract negotiations,

financing and start-up for turnkey infrastructure projects, with a cumulative value of more than $8.8 billion USD, in the U.S.A. and Latin America. He provided expert consulting for construction claims, change order analysis and award, as well as project planning and scheduling for multiple project types. He has served in senior roles, including Quality Management, for the projects that CSA previously provided support to the City of Fort Lauderdale.

- Jose Prats, PE. Mr. Prats is a licensed engineer in multiple states with over 25 years of experience electrical consulting services, including electrical power and lighting, communications, emergency generators and fire alarm design. He has extensive power experience in the United States and Puerto Rico. Mr. Prats will serve as the Senior Electrical Engineer in this Project providing overall leadership and guidance in the execution of the design efforts. He has worked as Project Manager for electrical system projects and been Technical Leader of MEP Disciplines. He is currently the Engineer of Record for all our temporary emergency generator projects in Miami Dade County.
- Luis Osella, Bid/Construction Support. Mr. Osella has over 40 years of experience in construction projects, large industrial facilities, hospitals, industrial housing, correctional facilities, air traffic control facilities, buildings and roadways. In his extensive professional career, Mr. Osella has held the positions of Project Superintendent, Design Engineer and Construction Project Manager. Mr. Osella's experience includes multiple projects for the City of Fort Lauderdale as well as projects that are in trouble during construction. He will lead our cost estimating effort as well as preparing all bidding documents.

PROJECT APPROACH:

CSA understands the intention of the City of Hollywood to add much needed resilience to six of its critical water pump stations by providing emergency power facilities. The generators form a part of the City's resiliency efforts to mitigate for the loss of electrical power that invariably occurs during severe climatic events. The loss of power could result in sewage spills in violation of permit regulations, threatening public health and endangering the environment. In the case of the stormwater pump station, the loss of power, could result in damage to private and public properties. The generators provide a means of fulfilling the City's commitment to provide safe, reliable, and continuous sanitary sewer and flood protection services to its residents and customers. Some of the

stations are located adjacent to the Intracoastal waterways and others are within established residential communities. However, CSA recognizes that these projects face challenges with respect to their location near existing residential or commercial buildings and roads.

Therefore, CSA will incorporate sustainability concepts as part of the planning and design process, to ensure that the current community needs are met without sacrificing their own quality of life. This includes stakeholder participation as part of the planning phase and conducting sensible environmental and historic preservation review process. Climate change aspects with respect to changing operating conditions will also be considered as solutions are developed for each site. This process will ensure that impacts are avoided, mitigated, abated, or offset, and that the project definition is as clear as possible before moving to the construction phase, where the cost impact of changes are more significant.

Our approach includes Project coordination, monitoring and administration under the responsibility of Ernesto Marin, P.E. CSA will attend project kickoff meeting and any necessary progress and coordination meetings. We will monitor task budgets and project schedule and monitor compliance with FDEM/FEMA contract terms. CSA will perform quality assurance/quality control (QA/QC) activities, our Senior Vice President Juan Melgarejo, P.E will have that responsibility. Mr. Luis Osella will oversee preparing the design, bidding and construction schedules as well as prepare progress/cost summary reports.

During the early stage of Site Investigation, Data Collection, and Record Research, CSA will prepare Archaeological, Historical and Cultural reconnaissance and surveys to include a desktop cultural resource summary report. The report will determine the likelihood of unrecorded cultural resources with each lift station site to comply with Federal and State reviewing agencies. The Geotechnical exploration will be under the scope of our Sub-Consultant Langan under the supervision of the PM and the Lead Structural Engineer Roderick Hosang, P.E. The topographic survey of pump station sites will be performed by Avirom and Associates under the supervision of John Doogan, PLS. The assessment of ROW and easement acquisitions will be under the supervision of Juan Villar P.E. This effort will include the determination of 500-year flood elevation and provide FEMA Elevation Certificate to certify the generator floor elevations.

CSA will review existing records and data including but not limited to geographic information system (GIS) data, drawings, maps, and other documents relevant to the limits and scope of this project. CSA will also perform Subsurface Utility Exploration and

coordinate with the utility companies to locate on-site utilities and collect the existing base maps.

The electrical engineering phase will be under the direction of Jose Prats, P.E.. His team will visually inspect pump station sites for potential generator placement site and potential conflicts and determine the generator size for each specific location. The proposed generator upgrades will be provided in conformance with NFPA 820. The team will prepare preliminary and detailed design drawings and technical specifications for electrical and controls design to add generators for the lift stations. Coordination of generator signals to existing remote telemetry communication equipment. All designs will be in coordination with electric utility (FP&L) for changes and additions to standby power, including changes to main disconnect and automatic transfer system (ATS), upgrades to grounding and lightning arrestor systems, any ancillary electrical components including lighting. The permanent standby power generator(s) and fuel systems will be designed with a minimum fuel capacity for 72 hours.

Due to the sensitive nature of the locations the sound attenuated enclosure will be designed to not exceed 73dBA @ 21' with the installation of a critical muffler. All the designs shall comply with City Ordinance Title IX Chapter 100: Noise.

The team will prepare drawings for permit and construction bid submittal, with diagrams and details for electrical and controls components. The telemetry to each lift station is assumed to be in place. The design will be based and coordinated around existing City telemetry system. The team will perform the final commissioning.

The team will perform an Arcflash Study prior to startup per NFPA 70E. The study shall encompass new equipment to the ATS level. The existing equipment downstream of ATS will not be part of this study unless requested and can be performed at an additional cost. Labels are included with the study to be installed on equipment.

The CSA Team will prepare technical specifications and engineer's cost estimate, bid item descriptions, and apply for and obtain all required permits.

Mr. Roderick Hosang, P.E. will review signed and sealed geotechnical report with soil properties and foundation recommendations if necessary. The structural team will perform stability analysis (gravity and lateral loads) for the generator support. The team will prepare preliminary and detailed design drawings and technical specifications for structural system necessary to support generator and appurtenances. The team will design generator support framing and foundation and prepare Construction Documents

details necessary to construct the primary structural system. The team will prepare Bid item descriptions and apply for and obtain all required permits.

Mr. Juan Villar, P.E. will prepare base mapping which includes elevations, utilities, right-of-way, easement, and other pertinent features. As part of or resiliency analysis the Civil team will design the mitigation components/elements for rising sea levels for the coastal and near-coastal sites.

The civil team will prepare preliminary and detailed design drawings and technical specifications for site improvements necessary to support access to and flood protection for generator and appurtenances. The team will also prepare a Site Clearing and Removals Plan as needed to include removals of existing generators, fuel tanks, concrete slabs, foundations, containment, chain-link fencing, and other site features required to accommodate the proposed transformers and fuel tanks. The team will also prepare Erosion Control and Sedimentation Plans, Notes and Details in accordance with the NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities (Rule 62-621.300(4), F.A.C.).

Mr. Luis Osella will Prepare Project schedule, prepare an engineer's opinion of probable construction costs for proposed improvements and prepare bid item descriptions.

The CSA Team will apply for and obtain all required permits, including but not limited to City of Hollywood Building Department and Broward County Environmental Protection and Growth Management. CSA will work directly with the City to receive their support in the coordination with city and county regulating authorities.

Since the City will administer the bidding and contract award processes and prepare the front-end specifications and incorporate the Consultant's work product, the CSA Team will prepare the Scope of Bids and Bid Schedule specification sections in addition to the technical specifications.

The CSA Team will provide bidding assistance/clarifications which includes responding to questions from potential bidders, attending the pre-bid meeting and job walk, assisting with preparation of addenda (2 each), and reviewing the submitted bids. The team will prepare a conformed set of bid documents incorporating any addenda issued during the bid period.

The CSA Construction Management team will conduct site visits during construction at appropriate stages and prepare the site visit reports. The team will provide submittal list,

review submittals and shop drawings, change order requests and provide written recommendations to the City. The team will manage the preparation and submittal of status reports to FDEM/FEMA and response to requests for additional for information and clarification. The team will review Contractor initiated requests for payment, clarification of contract documents and changes. CSA will review and respond to contractor's request for information (RFI) and clarifications during construction and provide written recommendations to the City. CSA will review of contractor payment applications and participate in the generator startups. During construction, the team will provide all engineering and technical advisory services. CSA will participate in the final inspection and assist with preparing the punch list of deficiencies. The team will prepare punch list and manage closeout activities and review of digital record (as-builts) drawings to the City as provided by the contractor.

Closeout. The CSA Team stands ready to assist the City with final reconciliation and closeout activities for the FEMA/FDEM grant. Our goal is to submit projects that are "closeout ready," where that level of detail does not unnecessarily slow down cost recovery. The advantage of having an engineering firm that has gone through federally funded closeout process will greatly benefit the City.

CITY OF HOLLYWOOD
DEPARTMENT OF PUBLIC UTILITIES
ENGINEERING AND CONSTRUCTION SERVICES DIVISION

1621 N. 14th Avenue
Hollywood, FL 33019
Phone (954) 921-3930 Fax (954) 921-3591

ADDENDUM NUMBER 1

Date: **May 6, 2020**

FOR: **REQUEST FOR STATEMENTS OF QUALIFICATIONS (RFQ)**
DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR BACKUP ELECTRICAL POWER GENERATORS FOR SEWER LIFT STATIONS E-01, E-03, E-06, W-14, W-15 & STORMWATER PUMP STATION SW-08

FILE NUMBER: **20-8532**

ALL RESPONDENTS BE ADVISED OF THE FOLLOWING CHANGES TO THE ABOVE REFERENCED PROJECT AS LISTED BELOW:

This addendum is issued as part of the RFQ package for the above described project. The changes incorporated in this addendum shall be considered as a part of the documents and shall supersede, amend, add to, clarify, or subtract from those conditions shown in the original documents dated April 2020. The respondent shall coordinate all modifications herein with all trades and disciplines related to the RFQ package. **The respondent shall acknowledge receipt of this addendum per Item No. 4 of the "Respondent Check List" included in this addendum**. Failure to do so may subject Respondent to disqualification.

Item 1: NOTICE OF REQUEST FOR STATEMENTS OF QUALIFICATIONS

The signed date for the *NOTICE OF REQUEST FOR STATEMENTS OF QUALIFICATIONS* form has been revised. The revised form is attached.

ALL OTHER TERMS AND CONDITIONS IN THE RFQ PACKAGE SHALL REMAIN THE SAME.

Clece Aurelus, P.E.
Interim Assistant Director
Department of Public Utilities
City of Hollywood

NOTICE OF REQUEST FOR STATEMENTS OF QUALIFICATIONS

DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR BACKUP ELECTRICAL POWER GENERATORS FOR SEWER LIFT STATIONS E-01, E-03, E-06, W-14, W-15 & STORMWATER PUMP STATION SW-08

NOTICE IS HEREBY GIVEN that the City Commission of the City of Hollywood, Florida is advertising for statements of qualifications for the above-named professional services in accordance with Section 287.055, F.S. ("Consultant's Competitive Negotiation Act". The statements of qualifications will be received by the City Clerk of the City of Hollywood, Florida, on or before (but not later than) 2:00 PM Local Time on Thursday, May 28, 2020. The office of the City Clerk is located at City Hall, 2600 Hollywood Boulevard, Room 221, Hollywood, Florida, 33020. On May 28, 2020 at 2:30 PM, the names of the companies submitting statements of qualifications will be read publicly at the Southern Regional Wastewater Treatment Plant, 1621 N. 14th Avenue, ECSD 1st floor Conference Room, Hollywood, Florida, 33020.

Questions shall be submitted in writing via email by no later than Monday, May 18, 2020; Attention: Vernal Sibble, P.E. (vsibble@hollywoodfl.org). The telephone number for general information is (954) 921-3930.

It will be the sole responsibility of the Respondent to deliver personally, or by mail, his/her submittal on the completed Submittal Form to the Office of the City Clerk, at City Hall on or before the closing hour and date for the receipt of Documents as noted above. If a submittal is sent by mail, the Respondent shall be responsible for its delivery to the City Clerk's Office before the closing hour and date shown above for the receipt of the statements of qualifications. If the mail is delayed beyond the hour and date set forth above for the receipt of the statements of qualifications, the delayed submittal will not be considered and will be returned unopened.

A Cone of Silence is in effect with respect to this Request for Qualifications. The Cone of Silence prohibits certain communications between potential Respondents and/or Vendors and the City. For further information, please refer to Section 30.15(F) of the City of Hollywood Code of Ordinances.

The City of Hollywood is strongly committed to ensuring the participation of local Hollywood vendors in the procurement of goods and services. For additional information about the City's Local Preference Ordinance, visit www.hollywoodfl.org.

The City Commission reserves the right to reject any or all submittals, to waive informalities and to accept or reject all or any part of any submittal, as it may deem to be in the best interest of the City of Hollywood, Florida.

Dated this 29th day of April 2020.

CLECE AURELUS, P.E.,
INTERIM ASSISTANT DIRECTOR
DEPARTMENT OF PUBLIC UTILITIES
CITY OF HOLLYWOOD

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ADDENDUM NUMBER 2

Date: **May 20, 2020**

FOR: **REQUEST FOR STATEMENTS OF QUALIFICATIONS (RFQ)
DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR BACKUP ELECTRICAL POWER GENERATORS FOR SEWER LIFT STATIONS E-01, E-03, E-06, W-14, W-15 & STORMWATER PUMP STATION SW-08**

FILE NUMBER: **20-8532**

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Item 1: NOTES RELATED TO RELEVANT REQUEST RECEIVED FROM POTENTIAL RESPONDENTS

1. I'm seeking information regarding the project in the subject line, have you selected an architect or engineer? Also seeking scope details, value, and bidding construction timeline information.

   Response: *The purpose of the RFQ is to seek a qualified engineers. As stated in the RFQ, two (2) qualified candidates will be selected. Scope details will be provided to those candidates.*

2. Will there be a pre-submittal walk through of the site for the referenced RFP?

   Response; *No.*

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ADDENDUM NUMBER 2

3. May some of our reference/example projects included in our submittal be those completed by our major subconsultant?

   Response: *Yes*

4. Do you anticipate extending the bid due date?

   Response: *No*

5. What additional details are you willing to provide, if any, beyond what is stated in bid documents concerning how you will identify the winning bid?

   Response*: Sufficient details have been provided in the RFQ. As stated in the RFQ, the qualifications of the bidders will be reviewed and two (2) candidates will be selected.*

6. Other than your own website, where was this bid posted?

   Response*: Demandstar.com*

7. Was this bid posted to the nationwide free bid notification website at www.mygovwatch.com?

   Response*: No.*

Item 2: DELIVERY OF RFQ PACKAGE

1. To assist in mitigating the 2019 Novel Coronavirus (COVID-19) potential exposure and transmission risks, City Clerk is not accepting personal delivery at this time. All RFQ packages need to be mailed to City Clerk of the City of Hollywood, or delivered to Records and Archives located in the Annex building on the west side of City Hall, 2600 Hollywood Boulevard, Hollywood, Florida, 33020. It is recommended that a delivery confirmation email be sent to the Project Manager, Vernal Sibble, P.E. (vsibble@hollywoodfl.org) after you drop off the packages but before 2 PM on the submittal date stated in the RFQ.

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ADDENDUM NUMBER 2

Item No. 3 CLARIFICATIONS

1. The Demandstar website "Bid Details" portal refers to the Bid Type as a "Request for Proposal' and the Bid ID is shown as "RFP-20-8532-1-2020/VS".

Response: *These are errors. In fact, the "Scope of Work" paragraph, on the portal, refers correctly to the intent of the subject request as a "Request for Statement of Qualifications". This is supported by the content of the request-it is one for qualifications. The City apologizes any inconvenience caused by this error.*

ALL OTHER TERMS AND CONDITIONS IN THE RFQ PACKAGE SHALL REMAIN THE SAME.

Clece Aurelus, P.E.
Interim Assistant Director
Department of Public Utilities
City of Hollywood

CITY OF Hollywood FLORIDA

CSA Group supports all green initiatives. Please recycle.

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