



**CITY OF HOLLYWOOD
Design and Construction
Administration Services for
Hollywood Beach Utility
Improvements**

Project No. 10-5106/18-7098

July 6, 2020 2:00 PM

Miller Legg Proposal 20-P0130





TITLE PAGE

Request for Statements of Qualifications (RFQ)

Design and Construction Administration Services for Hollywood Beach Utility Improvements Project No. 10-5106/18-7098

**Miller Legg
5747 N. Andrews Way
Fort Lauderdale, FL 33309
(954) 436-7000
Michael Kroll, RLA, FASLA, President &
Principal-in-Charge**

July 6, 2020



Design and Construction Administration Services for Hollywood Beach Utility Improvements Project No. 10-5106/18-7098

Miller Legg Proposal 20-p 0130

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July 6, 2020

City of Hollywood
City Clerk's Office
2600 Hollywood Blvd., Room 221
Hollywood, FL 33021



Re: REQUEST FOR QUALIFICATIONS #10-5106/18-7098
Design & Construction Administration Services for Hollywood Beach
Utility Improvements

Dear Selection Committee:

Miller Legg is very pleased to submit our professional qualifications for engineering and construction services for Design & Construction Administration Services for the six projects included in the Hollywood Beach Utility Improvements project. Founded in Broward County in 1965 and with a continuous headquarters presence here since then, our firm has successfully completed many neighborhood improvement and public infrastructure projects over the ensuing 55 years. We have worked on a variety of such projects within Broward County during the past 30 years and understand how effective and focused engineering design will benefit the beach residents of Hollywood during this important infrastructure improvements undertaking. We understand the significance of the community reaping the benefits of a well-designed, permitted and constructed project and pledge to deliver such a result. We will make communication, responsiveness, quality, availability and adherence to time and budget our priorities throughout.



Miller Legg is a 55-year-old company with 53 professionals at your service as necessary: engineers, construction inspectors, surveyors, biologists, environmental specialists, landscape architects, landscape and irrigation designers, certified arborists and GIS coordinators. Our Miller Legg Team presented in this submittal comprises a dynamic complement of firms with extensive utility infrastructure expertise and experience in Broward County and Hollywood.

As you will see throughout our qualifications package, the Miller Legg Team has extensive experience with utility system infrastructure in South Florida. We are truly neighborhood engineers with a proven background in the needed design, permitting, engineering and construction support services for this project.

Miller Legg has had 20+ years of direct design and full project management involvement with Broward County WWS Neighborhood Improvement Projects (NIP) which have necessitated a technical background and skill set such as will be required for this project. For instance, we successfully managed eight (8) Bid Packs of the large multi-year, multi-phase North Andrews Gardens NIP and seven (7) Bid Packs of the North County NIP. Over 15 years, we provided a variety of comprehensive infrastructure design and consulting services to the development of the Monterra community in Cooper City. As the prime consulting firm on these very large and complex undertakings, we successfully carried through these projects from start to finish, handling the preliminary design, full design and engineering services during construction, working closely with a Team of experienced subconsultants where their expertise was called for. We have a thorough grasp of the design standards and procedures required. The specific relevant experience of our Team members is also documented throughout this qualifications packet.

Teaming Partners: Given the six projects within the beach area and scope of this Utility Improvements project, Miller Legg immediately understood that a core group of subconsultants, locally recognized with local project

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South Florida Office: 5747 N Andrews Way • Fort Lauderdale, Florida 33309-2364
(954) 436-7000 • Fax: (954) 493-6539

www.millerlegg.com

offices, and a solid background in the required disciplines and experience of the municipality, location and stakeholders affected, was called for in order to provide the depth of staff and resources required to successfully deliver this project to the satisfaction of our City of Hollywood client.

Miller Legg will be joined by the following subconsultants: **WSP, Inc.** for civil and structural engineering support including QA/QC; **Baxter Woodman** for civil engineering support and surveying; **SGM Engineering** for electrical engineering; **Tierra South Florida (MBE)** for geotechnical engineering; and **Garth Solutions (W/MBE)** for public involvement and community outreach. We have successfully collaborated with or alongside these firms in the past and are confident in their expertise, abilities and commitment. Together, we fully understand the projects' technical scope and magnitude and have a detailed plan for the crucially important public involvement and community engagement facets of this endeavor. Our submittal describes the depth of staff experience and expertise spanned by our Team and demonstrates we have the availability and resources to responsibly dedicate ourselves to this project. With Miller Legg at the helm, our firms form a cohesive grouping which we believe more than measures up to this challenge. We have apportioned the roles appropriate to our specific strengths and expertise so that the City has the benefit of the most efficient, effective and dynamic team available.

Miller Legg has made a corporate commitment to project management excellence which enables our project managers to consistently perform services on or ahead of schedule and within budget. Because of this commitment, Miller Legg showcases numerous projects on which we have managed multi-disciplinary teams of in-house staff and subconsultants toward the successful completion of complex neighborhood improvement projects such as this one.

Glen Harrelson, PE, will be our Project Manager heading up the Miller Legg Team efforts and your single point of contact for this project. Glen has spent his entire 25-year career performing utility projects in several different capacities. Among these have been many municipal projects in Broward County through which he has become very familiar with the requirements, processes, and development priorities. He has earned enormous respect in the industry for his commitment to design and follow through excellence in managing teams on such projects. You can rest assured that he will successfully oversee interdisciplinary collaboration for holistic solutions through execution of this project.

As **Principal-in-Charge**, I, **Michael Kroll, RLA, FASLA**, will be responsible to ensure that our Team will continue to serve as a seamless extension of your staff to carry out the design, coordination, permitting, construction inspection and administrative services as necessary for this Contract. The Miller Legg Team will dedicate 100% available personnel for each assignment.

Miller Legg has developed exceptional working relationships with City staff across many departments. We are proud of our existing relationships with the City and honored to have been selected as a prime and subconsultant for important projects over the years. We look forward to the opportunity to work with the City of Hollywood once again and thank you for your consideration. If you have any questions, please call me at (954) 628-3651 or e-mail me at mkroll@millerlegg.com.

Sincerely,



Michael D. Kroll, RLA, FASLA
Principal-in-Charge

Our Team

Miller Legg

Civil Engineering
Surveying/SUE
Environmental/Permitting
Construction Management
Landscape Architecture

WSP, Inc.

Civil Engineering
Structural Engineering

Baxter Woodman

Civil Engineering
Surveying

Tierra South Florida (MBE)

Geotechnical Engineering

SGM Engineering

Electrical Engineering

Garth Solutions (W/MBE)

Public Involvement



ENGINEERING SERVICES QUALIFICATION STATEMENT
AND SUBMITTAL QUESTIONNAIRE

PROJECT NAME: DESIGN AND CONSTRUCTION ADMINISTRATION
SERVICES FOR HOLLYWOOD BEACH UTILITY
IMPROVEMENTS

PROJECT NO.: 10-5106/18-7098

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

Name: Miller Legg & Associates, Inc.

Mailing Address:

Street/PO

Box 5747 N. Andrews Way

City Fort Lauderdale State FL Zip 33309

Physical Address (if different from above):

Street Same

City _____ State _____ Zip _____

Phone (954) 436 - 7000 Ext _____ Fax (954) 493 - 6539

Primary E-Mail

Address: mkroll@millerlegg.com

Web Site

Address: www.millerlegg.com

Contacts:

1. Name: Glen Harrelson, PE Title: Project Manager

2. Name: Michael Kroll, RLA, FASLA Title: Principal-in-Charge

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:

Florida

Date of
Incorporation: April 1, 1995

State in which
Incorporated: Florida

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

Name and Titles of Principal Officers	Date Elected
<u>Michael Kroll, RLA, FASLA, President</u>	<u>October 5, 2015</u>
<u>Leslie Hernandez, CPA, Treasurer</u>	<u>January 22, 2004</u>
<u>Dylan Larson, PWS, CEP, Secretary</u>	<u>March 19, 2007</u>

C. If a Partnership, State formed:

Date of
Partnership: NA

Type of Partnership (General or
Limited): _____

Names and Addresses of Partners: _____

D. If Joint Venture, State formed:

Date of Joint
Ventureship: NA

Names and Addresses of Joint Venturers: _____

E. If a Sole Proprietorship, State created:

Name and Address of Sole Proprietor: _____

NA

F. If other than above, please describe:

NA

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

None

Please attach the following:

- a. Corporate Organization Chart
- b. Resumes of Principal Staff
- c. Corporate Family Tree - Not Applicable
- d. 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			Permanent Office Staff	Number	Avg. Years With Firm		
		1-5	5-10	10+			1-5	5-10	10+
Administrative	FL & Ft.Laud - 4			4	Clerical /Technicians	FL & Ft. Laud - 18	2	1	15
Project Management	FL - 12 Ft.Laud - 11	1 0	7 7	4 4	Procurement	NA			
Engineers	FL - 6 Ft.Laud - 5	3 3	3 2		Project Control and Estimating	FL & Ft.Laud - 2	1	1	
Design/Drafting	FL - 8 Ft.Laud - 6	4 2	3 3	1 1	Construction Management	FL & Ft. Laud - 1			1
Computer Services	FL & Ft. Laud - 2		1	1	Research and Development	NA			

Local Office Location:

Fort Lauderdale

Personnel in Organization by Discipline.

Discipline	Engineers		Designers Total
	Reg	Total	
Civil	6	9	8
Sanitary			
Structural			
Mechanical			
HVAC			
Process			
Electrical			
Instrumentation			
Industrial			

Discipline (Procurement)	Personnel
Capital Equipment Buyers	<u>NA</u>
Subcontract Administrators	<u> </u>
Bulk Material Buyers	<u> </u>
Inspection/Expediting	<u> </u>
Clerical/Technical Support	<u> </u>

Discipline (Construction Management)	Personnel
Field Superintendents	<u>1</u>
Home Office Management	<u> </u>
Planners (Site, City, Community)	<u> </u>
Architects	<u> </u>
Other	<u> </u>

Maximum Man-Hours Available Per Year:	<u>TBD</u>
Current Estimated Man-Hours Per Year:	<u>TBD</u>

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: AutoCAD Civil 3D

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)**

January 2020. Miller Legg provided to the Hollywood CRA surveying and
SUE services for downtown neighborhood lighting and streetscape
improvements project.

June 2020. Miller Legg is currently providing topographic surveys for two
intersections at Dixie Highway at Fillmore Street and Dixie Highway at
Johnson Street under the above DCRA contract.

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

NA

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
WSP, Inc.	Civil Engineering and Structural Engineering
Baxter & Woodman	Civil Engineering and Surveying Support
SGM (MBE)	Electrical Engineering
Tierra South Florida (MBE)	Geotechnical Engineering
Garth Solutions (W/MBE)	Public Outreach and Public Involvement

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.

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.

NA

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.:

CA7318

Date: Expiration 2/28/2021

Primary

Classification:

Civil Engineering

10. QUALIFICATION FORM PREPARED BY:

Name (print or type): Cara Pasquale

Title: Director of Business Development

Signature: *Cara Pasquale*

Address: 5747 N. Andrews Way, Fort Lauderdale, FL 33309

Telephone Number: (954) 436-7000

THIS SHEET MUST BE SIGNED

RESPONDENT CHECK LIST

IMPORTANT: 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:

Miller Legg & Associates, Inc.

Signature and Title: Cara Pasquale

Cara Pasquale, Director of Business Development

Date:

6/25/2020

PROJECT SUBMITTAL

FROM: Miller Legg & Associates, Inc.
5747 N. Andrews Way
Fort Lauderdale, FL 33309

DATE: 5/25/2020

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

RE: RFQ NO. 10-5106/18-7098

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 – **DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR HOLLYWOOD BEACH UTILITY IMPROVEMENTS**. 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
25th day of JUNE, 2020, in the County
of Broward, in the state of FLORIDA.

Miller Legg & Associates, Inc.
Respondent's Firm or Trade Name

Marina Hannwacker

Corporation, Sole Proprietorship, Partnership (Circle One)



Marina Hannwacker
NOTARY PUBLIC
STATE OF FLORIDA
Comm# GG189607
Expires 3/13/2022

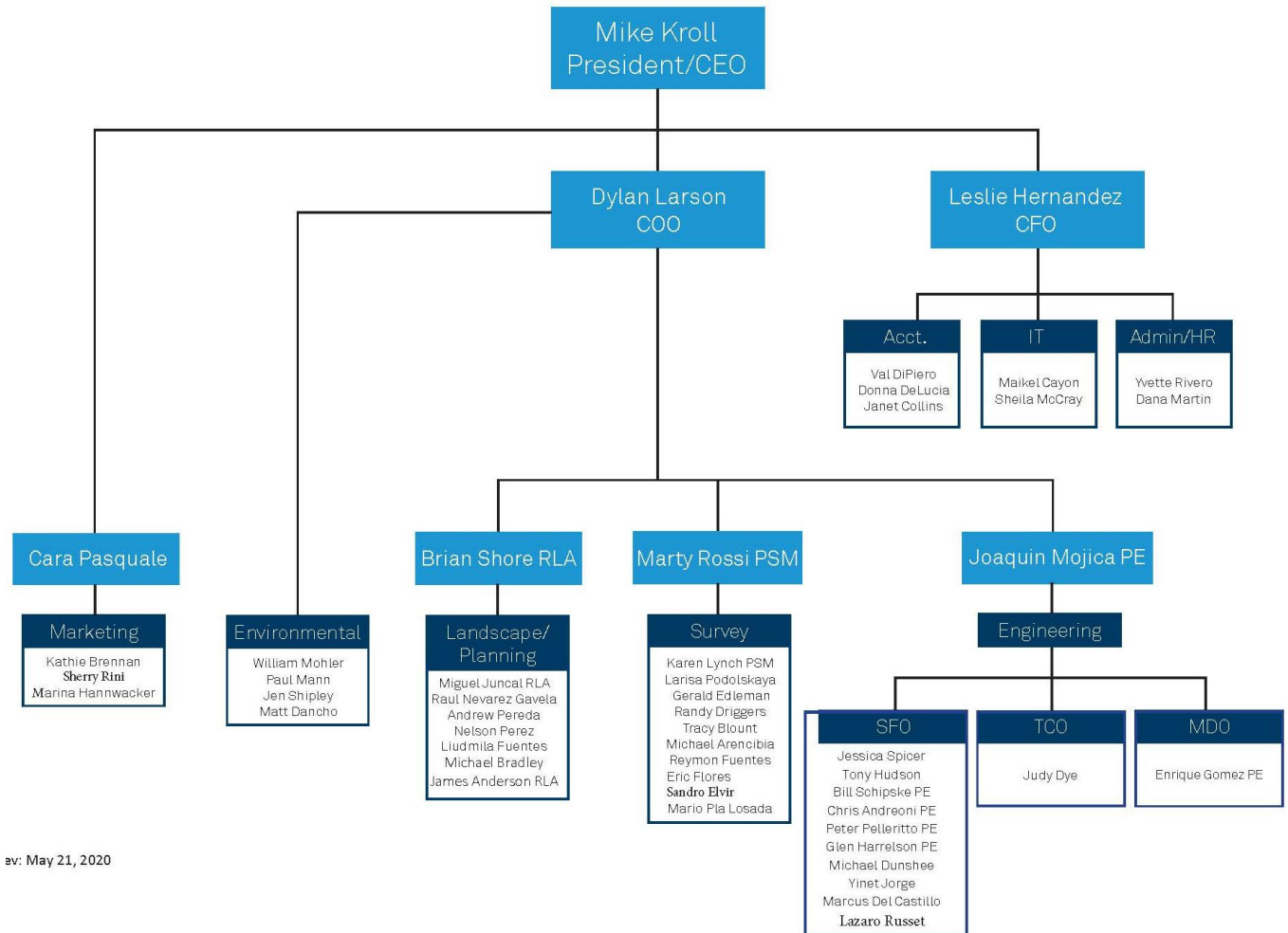
Phone No.: (954) 436-7000

Address 5747 N. Andrews Way

City and State Zip Fort Lauderdale, FL 33309

BY: *Leslie Hernandez*
Leslie Hernandez, CPA
Typed and Written Signature

CFO
Title



av: May 21, 2020



This contract will be managed from Miller Legg's South Florida Headquarters office at **5747 N. Andrews Way** in **Fort Lauderdale**, conveniently located *less than 15 miles, or a 20-minute drive from the City of Hollywood City Hall*. As shown in the Submittal Questionnaire, there are 49 professional and administrative staff members at Miller Legg's Fort Lauderdale office.

Included in the Miller Legg Team are 5 subconsultants as noted below. They each have South Florida offices as noted and will readily support the Team.

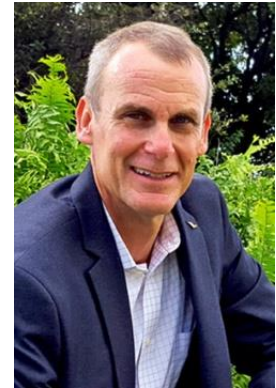
Subconsultants	Discipline	Responsible Office Location
WSP	Civil Engineering and Structural Engineering	Miami
Baxter Woodman	Civil Engineering and Survey Support	Fort Lauderdale
SGM Engineering	MEP Engineering	Fort Lauderdale
Tierra South Florida	Geotechnical Engineering	West Palm Beach
Garth Solutions	Public Involvement	Miramar



Michael Kroll, RLA, FASLA

President / Principal-in-Charge

-  33 years of experience with public and private infrastructure projects in a multi-disciplinary environment
-  Responsible for commitment of staff and resources to all projects undertaken by the firm and this team
-  Supports multiple South Florida large scale infrastructure improvement undertakings as Firm Principal
-  Recognized in the South Florida business and public sector community for active dedication to regional improvement



Years of Experience: 33

Registrations & Certifications:

Registered Landscape Architect, FL, 1989
Registered Landscape Architect, TX, 2009
Fellow American Society of Landscape Architects, 2014

Education:

Bachelor of Landscape Architecture,
Landscape Architecture
University of Florida, 1986
Graduate Studies, Urban and Regional
Planning

Professional Experience:

Mr. Kroll, President of Miller Legg, has been actively involved in projects ranging from large scale habitat restoration to international urban redevelopment projects. His 30+-year career has concentrated on planning, infrastructure, open space, transportation and redevelopment, principally in South Florida. Mr. Kroll's diverse professional experience has led to projects that successfully integrate environmental, planning and landscape architectural services. Under his leadership, Miller Legg develops project solutions that respond to the natural environment, respect the social fabric and create sustainable aesthetic spaces.

Relevant Project Experience:

North Andrews Gardens Neighborhood Improvement Project (NIP) - This 83-acre project located in Broward County consisted of design, modeling, permitting and construction contract administration for the complete replacement and/or installation of water, sewer, drainage, roadway pavement, landscaping and sidewalks. This 50-year-old neighborhood had existing undersized water mains and was served by septic tanks. The water system was constructed of asbestos cement pipe and was located in the rear yards. A new ductile iron distribution system was designed and constructed in the public rights-of-way. The project also included design of a new lift station and sanitary sewer system. The neighborhood was flood prone due to the lack of a drainage system. A new system mainly consisting of exfiltration trenches was designed, permitted and installed.

Monterra Master Water & Sewer Utilities - Miller Legg prepared the master plan, modeling for current and future uses, prepared construction documents and managed the permitting of all main utility systems for this project. Full civil engineering services included the earthwork, drainage, water and sewer, road permitting, paving, and construction administration service assistance. The master utility design for Monterra included a network of five lift stations, 8,700 LF of force main, 29,500 LF of gravity sewer, 43,000 LF of water main for distribution through the spine roads and internal roads to serve the entire development. The drainage master plan included an interconnected lake system with just under 11,000 LF of concrete culvert, the expansion of two CBWCD canals and a master control structure.



City of Hollywood Charnow Park - For this one-acre active park along the Hollywood Broadwalk, Miller Legg provided civil engineering, environmental permitting and construction observation services as a subconsultant to an architectural firm. Miller Legg was responsible for the paving, grading, drainage, water and sewer elements as well as environmental permits required for the renovations to the features of this active park including a water playground, regular playground, four picnic pavilions, torch lighting, and a decorative berm with hardscaping.

City of Hollywood CRA Planning, Landscape Architecture, Civil & Traffic Engineering Consultant - Miller Legg held a two-year contract in 2013 to provide professional planning, landscape architecture, civil and traffic engineering services for a variety of public works projects. Services included: urban planning, landscape architecture, civil and traffic engineering, programming and scheduling, observations, feasibility studies, cost estimates/opinions of probable cost, partial or complete design services, including preparation of construction and bid documents, permitting with all governing agencies, construction contract administration, review of work prepared by other professional consultants, engineering analysis, field tests, laboratory tests, and other miscellaneous planning, landscape architecture, civil and traffic engineering services that were required.

North County Neighborhood Improvement Project (NIP) SW Quad & BP12 Miller Legg was responsible for design of stormwater drainage, water, sanitary sewer, reclaimed water, street pavement, sidewalks, landscaping and signage improvements for this 173 acre area. The project included installation of 5.3 miles of reclaimed water pipe installation resulting in reclaimed water service being provided to 455 homes. This installation consisted of 2 miles of 20" pipe, 0.4 miles of 16" pipe, 2.9 miles of 4" pipe, 7 air release valves; 38 gate and butterfly valves; 12 tons of fittings; as well as roadways and swale were also restored. Miller Legg provided construction documents for the installation of the reclaimed water transmission main from the City of Pompano Beach reuse plant into Bid Package #12 and reclaimed water system within the Bid Package #12 area constructed in the street.

Miami-Dade County WASD Improvement, Upgrades and Expansion of Local Wastewater Pump Stations and Related Facilities Contract - Miller Legg was selected by Miami-Dade County Water and Sewer Department (WASD) for a 7-year engineering design and ancillary services contract associated with the improvement, upgrade and expansion of local County wastewater pump stations and related facilities under WASD's capital improvement program. These services are necessary to renew and replace the existing deteriorated system and/or relocate as necessary to bring local sewage pump stations into compliance with State and Federal regulations as well as accommodate future growth and development. Projects include rehabilitation or replacement of existing pump stations or the construction of new sewage pump stations in the range of 50-2,000 gallons per minute. Complete design services from the Miller Legg team include surveying, utility coordination, planning, modeling, engineering, design, permitting, procurement, inspections, construction management and public outreach services.

School Board of Broward County (SBBC) North Fork Elementary School Building 10 Lateral Sanitary Sewer - In order to provide the North Fork Elementary School Building 10 in Fort Lauderdale with a 332 LF of 8" diameter Gravity Sewer Main Ductile Iron Pipe sanitary sewer connection, Miller Legg was retained to perform civil, surveying and subsurface utility engineering as well as construction administration services. These are required to provide the design plans, permitting and construction services associated with a sanitary sewer lateral connection to an existing gravity sewer system, existing lift station or new lift station.

Nicklaus Children's Hospital (NCH) Campus Infrastructure and Future Master Planning - Miller Legg prepared the Nicklaus Children's Hospital Campus water, sewer and drainage infrastructure Master Plan. The firm analyzed the needs and future improvements required to facilitate the 10-year Facility Master Plan of over 500,000 SF of additional hospital and ancillary uses. The scope of services began with an inventory and assessment report of the existing civil utility infrastructure. Miller Legg subsequently reviewed the proposed campus improvements and prepared a utility infrastructure master plan to address the existing and proposed water distribution, sanitary sewer collection and stormwater management (drainage) systems. A summary of the required permitting process and timeframe was included. These recommendations, narratives, plans and exhibits were incorporated into the Master Plan. The firm also provided boundary & topographic survey and SUE services.



Glen Harrelson, PE

Project Manager

- More than 25 years of project management, contract administration, CEI, cost estimating/scheduling, permitting, water and wastewater management and utilities experience
- Track record as client advocate for delivering projects on time and within budget
- Significant experience as Project Manager and Engineer of Record for large, complex improvement projects



Years of Experience: 25

Registrations & Certifications:

Registered Professional Engineer, FL, 2005

Education:

Bachelor of Science, Civil Engineering
Florida International University, 1994

Professional Experience:

Mr. Harrelson has more than 25 years of design and management experience in utility design, municipal engineering, roadway design, land development and construction management. **He has significant experience leading large and high-profile projects within Broward, Miami-Dade and Palm Beach Counties, which include design, permitting and construction management.** He is highly organized, motivated and technically proficient with engineering designs, engineering programs such as WaterCad,

AutoCad, and many drainage design software programs.

Relevant Project Experience:

Miami-Dade College (MDC) North Water Loop Phase II - As part of the Miami Dade College (MDC) North Campus Water Loop Phase II project, Miller Legg was retained to provide survey and engineering services for the required Design Criteria package and preliminary engineering plans for $\pm$ 4,500 LF of 12" ductile iron pipe fire line and 5,500 LF 12" potable water line. MDC is enhancing the existing water infrastructure by replacement of its internal water/fire main system and creation of a campus-wide loop. The firm's survey services include topographic, as-builts and record drawings. Engineering services include preparation of a 30% engineering plan, a comprehensive Design Criteria report in addition to RFQ evaluation and bidding assistance.

Miami-Dade County WASD Improvement, Upgrades and Expansion of Local Wastewater Pump Stations and Related Facilities Contract - Miller Legg was selected by Miami-Dade County Water and Sewer Department (WASD) for a 7-year engineering design and ancillary services contract associated with the improvement, upgrade and expansion of local County wastewater pump stations and related facilities under WASD's capital improvement program. These services are necessary to renew and replace the existing deteriorated system and/or relocate as necessary to bring local sewage pump stations into compliance with State and Federal regulations as well as accommodate future growth and development. Projects include rehabilitation or replacement of existing pump stations or the construction of new sewage pump stations in the range of 50-2,000 gallons per minute. Scope can include upgrading pump stations from dry well/wet well configurations to standard submersible stations, involving new pumps, piping, wet wells and valve vaults. Complete design services from the Miller Legg team include surveying, utility coordination, planning, modeling, engineering, design, permitting, procurement, inspections, construction management and public outreach services.



Fort Lauderdale Airport South Runway Extension Design Build - The Broward County Aviation Department extended the south runway at Fort Lauderdale Hollywood International Airport. The extension required that the runway be extended over US 1, Perimeter Road and the Florida East Coast Railway. As part of this project, roads and utilities were rerouted accordingly. As a result a new roadway, storm drainage, potable water, fire, sanitary sewer, telecommunications and power system were reconstructed. As the engineer of record for the south runway extension, performed site inspections for the construction of NE 10th Street and Perimeter Road. These roadways were reconstructed and utilities were re-routed based upon the runway alignment. Responsible for the inspection and certification of the installation of new water mains, sanitary sewer mains, fire mains, telecommunications duct banks and power duct banks.

SBBC Oriole Elementary School Fire Main - The firm is providing survey, SUE and civil engineering services as part of the Via Design team for this Oriole Elementary School project. A right-of-way topographic survey was prepared for an off-site water main extension along NW 30th St. in Lauderdale Lakes. Underground utility designation services were provided. Site engineering construction documents for the proposed off-site water main and on-site fire main line will be submitted to SBBC, Broward Co. Water & Wastewater and the City of Lauderdale Lakes. Miller Legg is also supplying construction administration services, record drawings and project closeout.

Seminole Tribe of Florida (STOF) Seminole Park Neighborhood Infrastructure Improvements, Hollywood - Miller Legg is providing engineering design and post-design construction administration services for a neighborhood development site on the Hollywood Seminole Indian Reservation. Services include: boundary and topographic survey, Certified Arborist assessment, tree inventory and assessment, stormwater engineering, water and sewer, NEPA evaluation, environmental assessment and a traffic study, as well as single family and multi-family lot layout, traffic circulation and permitting. Post-design phase services being provided include site demolition observation, site development and construction inspections, contractor pay applications review and approval, shop drawing review and approval, as-built drawings review and approval. This work is being completed under the firm's continuing Professional Engineering Services contract.

West Gate North Neighborhood Redevelopment - Led roadway and drainage design for this neighborhood redevelopment project in West Palm Beach. The development area encompassed approximately 450 acres of residential area and included redevelopment of roadways, potable water, sanitary sewer and drainage. The project utilized adjacent dry retention areas that were purchased by the Community Redevelopment Association in order to provide stormwater storage for the road right of way and neighborhood.

Town of Surfside Master Pump Stations - Assisted with the design, permitting and engineering services during construction for the rehabilitation of the Town's two master lift stations, which receive sewage flow from the entire Town of Surfside.

Cooper City Lift Station and Force Main Hydraulic Analysis - Prepared a master analysis and report for the City of Cooper City to identify all sewer pump stations and force main systems within the City and analyze their current capacities. Identified areas of upgrade necessary for the future development of the Monterra residential development in eastern Cooper City.

Cooper City Master Pump Station No. 1 Rehabilitation - Designed and permitted one of the City's largest sanitary sewer pump stations which was first constructed in the 1950s. Project called for the abandonment of the existing wet well/dry well station and redesign of a new submersible station.



William Schipske, PE

Quality Assurance / Quality Control & MOT

-  Substantial experience across entire span of civil engineering spectrum services as a design engineer
-  Background in both public sector and private sector projects in South Florida involving utility infrastructure
-  Primary QA/QC specialist for large multi-faceted projects
-  Engineer of Record for firm's current City of West Palm Beach projects



Years of Experience: 36

Registrations & Certifications:

Registered Professional Engineer, FL, 1985

Education:

Bachelor of Science, Civil Engineering
Technology
Florida International University, 1981

Professional Experience:

Mr. Schipske has more than three decades of experience as a civil engineer with a focus on land development, design and construction in South Florida. He has worked on multiple commercial, industrial and residential projects involving production and project management across various technical disciplines. In addition, he spent 3 years as a senior engineering and construction manager for an international firm providing camp and logistics construction services at Kandahar Airfield in Afghanistan. Prior to joining Miller Legg, Mr. Schipske was a

founding principal of two engineering firms and has held senior positions at various civil engineering and land development firms in South Florida.

Relevant Project Experience:

City of West Palm Beach Congress Avenue Water Main Relocation - Miller Legg provided civil engineering, construction administration and surveying services for the City of West Palm Beach for the design and general contractor assistance of a water main relocation project on Congress Avenue at the City's "F" Canal. Relocation of the existing 10" water main was required to accommodate a Palm Beach County (County) Roadway Improvement project, which includes replacement of the existing Congress Avenue "F" Canal Bridge with a double 66" RCP culvert system. The existing 10" water main is attached to underside of the existing bridge that will be demolished. In addition, Miller Legg designed a liner to navigate under the City's Canal F to allow for future maintenance requirements, pipe protection during future dredging/maintenance and ease of installation.

Broward College South Campus New Automotive & Marine Facility Civil Design, Pembroke Pines - Miller Legg addressed surface water/stormwater management related impact requirements, as well as updates/modifications to the Surface Water Management System/Stormwater Master Plan and permits modifications currently being processed for the overall Campus through the South Florida Water Management District (SFWMD) and South Broward Drainage District (SBDD). Engineering services included the preparation of paving, grading and drainage plans, details, sections, drainage calculations, etc. as necessary to address the proposed project's site/civil design, permitting and construction requirements. Furthermore, the firm provided landscape architecture conceptual planting plans, including tree location, planting design, as well as construction administration.



Cinemark at Davie - Miller Legg is providing civil, survey, planning and environmental services for the proposed additional development of a commercial shopping center in the Town of Davie. The project involves lake filling and expansion into a FP&L easement for a parking lot and overall redevelopment of the existing site for expanded commercial facilities. The firm's services include due diligence research and investigation, boundary & topographic surveying, sketch & legal, tree inventory, drainage, retention and earthwork review, pre- and post-stormwater analysis and schematic engineering, construction administration, agency permit coordination and environmental site assessments.

City of West Palm Beach 32nd/33rd St. Water Main Improvements - Miller Legg is providing surveying, underground utility locates, geotechnical engineering, civil engineering design and bidding assistance services for this +/- 2,000 LF 8" water main replacement project. The existing water mains are transite, undersized, and have reached the end of their useful life. The Basis of Design report and development of 30% plan scope involves the assessment of water main replacement, sanitary sewer replacement/relocation (from rear yard to street on 2 streets) and evaluation of storm drainage improvements.

City of West Palm Beach Gregory Road Green Streets LID Sanitary Sewer & Stormwater - The City of West Palm Beach requested Miller Legg to provide professional engineering, landscape architecture and surveying services for the design and bidding assistance of a stormwater management and drainage improvements project in an existing residential neighborhood. The firm is also providing sewer and stormwater design services. The project provides opportunities for various Low Impact Development (LID) best management practices to reduce stormwater runoff and nuisance flooding.

Florida Atlantic University (FAU) Schmidt Family Complex - Miller Legg is providing boundary and topographic survey and subsurface utility engineering (SUE) location services, along with engineering design for utilities, pavement, signing and marking, drainage, ADA accessibility, irrigation, LEED assistance, grading, redevelopment, road circulation solutions ,permitting, bidding assistance and construction administration. Permitting services are being provided through the City of Boca Raton Utilities, the Palm Beach County Health Department, the South Florida Water Management District (SFWMD), the Lake Worth Drainage District, and the FAU Building Department. In addition, Miller Legg is providing bidding assistance, construction administration and certification services.

Millwork Sales Industrial and Distribution Facility – Mr. Schipske performed a variety of civil engineering services for this 28-acre 339,000 SF facility in Royal Palm Beach. Services included stormwater management, sanitary sewer connection, FPL connection, and permitting with numerous agencies including City of Royal Palm Beach, SFWMD, PBC Health Dept., PBCOES, PBC Traffic, PBC Utilities, and FDOT.



Peter Pellerito, PE

Pipeline Engineer of Record

- 29 years of experience working on South Florida projects include design of surface water management systems, storm drainage, roadways, design of complex water and wastewater systems
- Primary EOR for firm's Seminole Tribe projects in Hollywood
- Experience in South and West Florida public sector projects



Years of Experience: 29

Registrations & Certifications:

Registered Professional Engineer, FL

Education:

Bachelor of Science, Engineering
University of Florida, 1990
Nassau Community College, 1976

Professional Experience:

Mr. Pellerito has extensive experience and expertise in both small and large-scale municipal and private sector, high-complexity infrastructure projects. Under his leadership and expertise, Peter has successfully led multidisciplinary teams in planning and design on a wide range of civil engineering projects. His project experience encompasses soil and groundwater remediation; water treatment and wastewater pre-treatment systems; water and wastewater pump stations and transmission lines; site planning; earthwork; drainage systems; paving and grading;

erosion control / stormwater pollution prevention; roadway design and specifications. Peter is a registered Professional Engineer, proficient in Civil 3D, TIS analysis, open channel flow modeling, and lift station design.

Relevant Project Experience:

Seminole Tribe of Florida (STOF) Brighton Reservation Flowing Well Housing - Miller Legg is providing conceptual layout and design services for a housing development site on the Brighton Seminole Indian Reservation known as The Flowing Well Housing Development – Phase 1. The project consists of 6,000 LF of force main and 6,000 feet of water main. Services include: environmental phase I environmental assessment, NEPA review, wetlands jurisdictional determination, geotechnical investigation, conceptual engineering plans and permitting. This project is being completed under the firm's Professional Engineering continuing contract.

Seminole Tribe of Florida (STOF) Seminole Park Neighborhood Infrastructure Improvements, Hollywood - Miller Legg is providing engineering design and post-design construction administration services for a neighborhood development site on the Hollywood Seminole Indian Reservation. Services include: boundary and topographic survey, Certified Arborist assessment, tree inventory and assessment, stormwater engineering, water and sewer, NEPA evaluation, environmental assessment and a traffic study, as well as single family and multi-family lot layout, traffic circulation and permitting. Post-design phase services being provided include site demolition observation, site development and construction inspections, contractor pay applications review and approval, shop drawing review and approval, as-built drawings review and approval. This work is being completed under the firm's continuing Professional Engineering Services contract.

Memorial Hospital West Southwest Parking Garage - Miller Legg provided surveying, site development design, permitting and construction administration/observation services for a six (6)-story parking garage with 1,477 spaces on the Memorial Hospital West campus in Pembroke Pines. Services included: subsurface utility engineering (SUE), surveying, site planning, campus-wide master stormwater study/improvements design/plans,



on-site paving and drainage/water and sewer. Miller Legg also provided off-site roadway turn lane modifications and temporary access driveway engineering design/plans, site lighting photometrics, landscape planting and overall campus landscape mitigation design/plans, irrigation system modification design/plans, arborist and construction administration/observation services. Permitting agencies involved were the City of Pembroke Pines, South Broward Drainage District, South Florida Water Management District, FDOT and Broward County. Prior to design work, a topographic survey and campus utility infrastructure were mapped and coordinated with the owner and architectural design team for this expansion project and the enabling master stormwater, roadway modifications and infrastructure improvements.

SR 817/University Drive @ Monterra Boulevard Roadway Improvements - For this major roadway improvement project in Cooper City, Miller Legg was involved in the roadway design, MOT, drainage design, street lighting, signing, pavement parking, landscape architecture, irrigation and permitting with local agencies including FDOT and Broward County, to design this major gateway entrance into Monterra.

City of Cape Coral Utility Expansion - Project Manager and subconsultant to a Construction Manager at Risk upon inception of a multi-phase design of the utility expansion project that provided potable water, gravity sewer, and secondary water in the City of Cape Coral.

Town of Lauderdale-By-the-Sea Poinciana/Bougainvillea Roadway and Parking Improvements - Under the firm's Continuing Services Contract, Miller Legg is providing design and permitting services for parking, roadway and landscape architectural improvements for the Poinciana Street and Bougainvillea Drive area north of Commercial Blvd. to alleviate congestion along the parallel corridor of SR A1A in the Town of Lauderdale-By-The-Sea. Services include: roadway and parking area design, lighting, utility coordination, permitting, landscape, hardscape and irrigation, and pre- and post-construction observation services.

Seminole Tribe of Florida (STOF) Rock Mine Mitigation Area at Big Cypress Reservation - Miller Legg is providing engineering and environmental consulting services to finalize the re-design of a 1,200-acre mitigation area on the Big Cypress Seminole Indian Trust Property. The scope of services includes enhancing the surface water functionality of a 1,200-acre mitigation area by implementing various site improvements that rely on hydrologic modeling. These improvements include construction of a vehicle bearing earthen perimeter berm around the mitigation, a spillway designed to discharge in emergency flood conditions, a control structure using flap gates, and a series of culverts installed on a 4,200 LF segment along the north berm to allow sheet-flow from wetland areas to the north of the mitigation site. Modification of existing USACOE and SFWMD permits are secured to account for additional wetland impacts due to the vehicle bearing earthen berm. This project is being completed under the firm's Professional Engineering Services continuing services contract.

Las Olas Boulevard Improvements CM at Risk - Miller Legg is providing civil engineering, landscape architecture and constructability preconstruction phase services and document review to Skanska USA Building Inc. for the \$50 million Las Olas Boulevard Improvements project in Fort Lauderdale. The project is a partnership between the City of Ft. Lauderdale and the Beach Community Redevelopment Agency (CRA) that will create a new gateway to Ft. Lauderdale's beaches. To create a more pedestrian oriented open space and corridor, the project includes roadway improvements, a 1,200 space parking garage, a 1-acre oceanfront park and a ½-mile Intracoastal waterfront pedestrian promenade. Miller Legg's services include project planning, constructability reviews, attending design and coordination meetings, cost estimating and value engineering. Assistance with MOT plans for construction phasing is also included. This Improvements Construction Management at Risk (CMAR) project is a key component of the Central Beach Master Plan and City of Fort Lauderdale's 2035 Vision.

Bonita Beach Road Phase II - Design included upgrading an existing 2-lane undivided roadway to 4-lane divided roadway within a 100' right-of-way from Kings New to Vanderbilt Road. Other design parameters included two bridge replacements, storm drainage replacement, and parallel potable water and sewer replacement for both Bonita Springs and Collier County utilities. This congestion of utilities coupled with slope stabilization using a geo-stabilization fabric for a bridge encroachment increased the design and construction complexity of the project.



Joaquin Mojica, PE

Design Manager

- Serves as Regional Engineering Manager and oversees multiple projects in Broward and Miami-Dade Counties with water and sanitary sewer elements
- Highly skilled in crucial water and wastewater industry software
- 20 years of broad project design and permitting experience in South and Central Florida, Puerto Rico and the Caribbean
- Former founding principal of civil engineering firm, with considerable experience in scheduling, staff and team management, contract negotiations and budget implementation



Professional Experience:

Years of Experience: 20

Registrations & Certifications:

Registered Professional Engineer, FL, 2010

Education:

Bachelor of Science, Civil Engineering
University of Central Florida, 1997

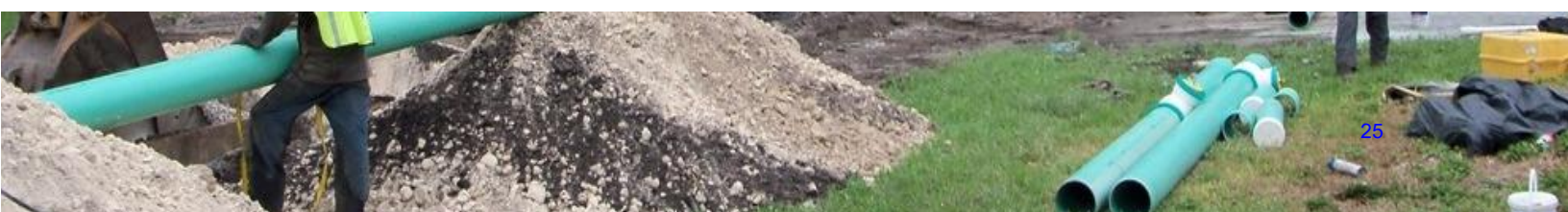
Mr. Mojica has extensive project design and permitting experience in Florida, Puerto Rico and the Caribbean. He has provided civil engineering design and management services to both private and public sector clients. As Regional Engineering Manager, Mr. Mojica's responsibilities include preparation of proposals, negotiation of engineering contracts, client relations, project reporting, scheduling, budgeting, management of technical staff and subconsultants, design, and permitting. He is highly skilled in CAD/Civil 3D, ICPR and POND5 software.

Relevant Project Experience:

Seminole Tribe of Florida Seminole Park Community Water and Sewer, Hollywood - Miller Legg provided a review and inventory of the Hollywood Park community's water and sewer infrastructure, since the STOF is anticipating acquiring this area and replacing the entire infrastructure of water and sewer in three years. A Water and Sewer Condition Assessment was performed, as well as Life Cycle review and operation and maintenance costs for maintaining the existing water and sewer systems. Demolition of the entire existing water and sewer system was selected, with reconstruction of new infrastructure. The infrastructure improvements include installation of 10,000 LF of utilities. A 14" water main directional drill under a FDOT jurisdiction right-of-way was required.

Miami Dade Water and Sewer Department (MDWASD) E15- WASD-02 Pump Station 772 - Miller Legg is currently under contract with the Miami-Dade Water and Sewer Department (M-DWASD) to design Pump Station #772. The design includes upgrading the pump station from a dry well/wet well configuration to a standard submersible station. This pump station is currently located within a residential neighborhood on SW 92nd Avenue in Miami.

City of West Palm Beach Gregory Road Green Streets LID Sanitary Sewer & Stormwater - The City of West Palm Beach requested Miller Legg to provide professional engineering, landscape architecture and surveying services for the design and bidding assistance of a stormwater management and drainage improvements project in an existing residential neighborhood. The firm is also providing sewer and stormwater design services. The project provides opportunities for various Low Impact Development (LID) best management practices to reduce stormwater runoff and nuisance flooding. For instance, LID implementation will be facilitated by the installation



of bioretention in the bumpouts on Gregory Road, and nuisance flooding can be decreased through driveway modifications and speed control devices.

School Board of Broward County (SBBC) North Fork Elementary School Building 10 Lateral Sanitary Sewer - In order to provide the North Fork Elementary School Building 10 in Fort Lauderdale with a 332 LF of 8" diameter Gravity Sewer Main Ductile Iron Pipe sanitary sewer connection, Miller Legg was retained to perform civil, surveying and subsurface utility engineering as well as construction administration services. These are required to provide the design plans, permitting and construction services associated with a sanitary sewer lateral connection to an existing gravity sewer system, existing lift station or new lift station.

Miami-Dade College (MDC) North Water Loop Phase II - As part of the Miami Dade College (MDC) North Campus Water Loop Phase II project, Miller Legg was retained to provide survey and engineering services for the required Design Criteria package and preliminary engineering plans for $\pm$ 4,500 LF of 12' ductile iron pipe fire line and 5,500 LF 12" potable water line. MDC is enhancing the existing water infrastructure by replacement of its internal water/fire main system and creation of a campus-wide loop. The firm's survey services include topographic, as-builts and record drawings. Engineering services include preparation of a 30% engineering plan, a comprehensive Design Criteria report in addition to RFQ evaluation and bidding assistance.

709 Alton Road (Crescent Heights) Miami Beach Redevelopment - Miller Legg provided civil engineering, utility engineering, permitting, construction observation and verification of system testing services for the development of Crescent Heights 709 Alton Road project, a 63,500 SF mixed use development in Miami Beach with Baptist Health as the anchor tenant. Alton Road is a FDOT corridor. Services include grading, paving, drainage, water and sewer systems, drainage design including a pressurized injection well system and injection pumping equipment, utility coordination and permitting. Permitting for the project was coordinated through the City of Miami Beach, Miami-Dade County Department of Environmental Resources Management (DERM), FDOT and FDEP. Water and sewer design included 40 LF of 6-inch of DIP water main service connection, 8"x 4" tapping sleeve and tapping valve and processing of service connection permitting according to MDWASD standards. The sewer design included 40 LF of gravity sewer, and connection to the City of Miami system. Water and sewer design was permitted with City of Miami, WASD, RER and Department of Health.

Nicklaus Children's Hospital (NCH) Campus Infrastructure and Future Master Planning - Miller Legg prepared the Nicklaus Children's Hospital Campus water, sewer and drainage infrastructure Master Plan. The firm analyzed the needs and future improvements required to facilitate the 10-year Facility Master Plan of over 500,000 SF of additional hospital and ancillary uses. The scope of services began with an inventory and assessment report of the existing civil utility infrastructure. Miller Legg subsequently reviewed the proposed campus improvements and prepared a utility infrastructure master plan to address the existing and proposed water distribution, sanitary sewer collection and stormwater management (drainage) systems. A summary of the required permitting process and timeframe was included.

City of Weston Community Center - Miller Legg is providing survey, SUE, civil engineering and landscape architecture design services for the new City of Weston Community Center at Weston Regional Park as part of the Cartaya Architects team. The parcel is being redeveloped from land currently used for sports activities and passive green space. It will comprise an indoor facility of approx. 25,000 sf to accommodate office space and multi-purpose rooms. The planned outdoor facilities will total 6,400 sf, while site work beyond the building will include lawn seating, a 7,500 SF playground, parking and landscaping.

Florida International University (FIU) Lift Stations PSO 428 & 621 Repairs - Miller Legg is assisting Florida International University (FIU) with site engineering design and construction phase services for repairs to two (2) lift stations as required by DERM. Repairs will be made to gravity sewer lines upstream of lift stations on both the Modesto Maidique and Engineering campuses. The lift stations are sanitary sewer basins comprising approx. 1200 LF of sewer mains and 1400 LF of laterals.



Enrique Gomez, PE

Pipeline Project Engineer

- Considerable knowledge and experience in water/wastewater facilities and sewer systems, as-builts, utility coordination, stormwater pollution prevention plans and permitting for public sector
- Experienced in WASD infrastructure projects
- Additional background in and understanding of geomatics and land surveying



Professional Experience:

Years of Experience: 9

Registrations & Certifications:

Registered Professional Engineer, FL
 FDOT Asphaltic Concrete Plant Inspection, FL
 FDOT CTQP Asphalt Paving Technician Level 1, FL
 FDOT Intermediate Maintenance of Traffic, FL, 2011
 Survey Intern, FL

Education:

Bachelor of Science, Civil Engineering
 University of Florida, 2010
 Bachelor of Science, Geomatics
 University of Florida, 2010

Mr. Gomez has worked as a Project Engineer for a variety of clients such as municipalities, higher education and the private sector. His experience includes civil engineering services specifically in the preparation of site plans, paving, grading, and drainage plans, signing and marking plans, water and sewer plans, stormwater pollution prevention plans, and permitting. Mr. Gomez is also a Surveyor in Training and has a working knowledge of boundary surveys, ALTA surveys and as-built surveys.

Relevant Project Experience:

Florida International University (FIU) Modesto Maidique Campus Wellness and Recreation Center Expansion - Miller Legg was the civil engineer consultant for this 25,000 SF expansion of the existing indoor recreation facilities for the FIU Modesto Maidique campus. The project also extended to the creation of outdoor

recreation facilities and gathering spaces. Services provided by the firm included design and permitting for utility improvements, water, sewer, drainage. Permitting was coordinated with WASD, DERM and FDEP. Grading and paving elements associated with the expansion project are also part of the scope of work. In addition, subsurface utility engineering (SUE), construction observation and administration services were provided.

Broward County Water & Wastewater Services (BCWWS) Military Trail at NW 49th Court/Green Road SUE for GIS Mapping – Miller Legg provided water main and force main utility designations and locates. Project included reviewing utility record drawings and GIS information, exposing and bringing to grade covered valves, horizontally designating the water and force mains, recommending for correction valve covers that identify incorrect utility and minor restoration.

School Board of Broward County (SBBC) North Fork Elementary School Building 10 Lateral Sanitary Sewer - In order to provide the North Fork Elementary School Building 10 in Fort Lauderdale with a sanitary sewer connection, Miller Legg was retained to perform civil, surveying and subsurface utility engineering services. These are required to provide the design plans, permitting and construction services associated with a sanitary sewer lateral connection to an existing gravity sewer system, existing lift station or new lift station.



Cushman School Play to Learn Facility Civil Design & Engineering - The Cushman School “Play to Learn” facility is a performing arts theater / gymnasium / multipurpose venue with 24,400 SF of total new building. Demolition of existing outdoor areas and buildings on this 2-acre campus in Miami were required to enable construction of this new facility. Miller Legg performed civil engineering design and permitting services for this project. As part of the civil work, demolition, water, sewer, paving, grading and drainage design for the site were carried out, and relocation of water and sewer infrastructure was required.

Florida International University (FIU) PG 6 Sanitary Sewer Survey - For the FIU Parking Garage No. 6 project, Miller Legg provided sanitary sewer as-built surveys, SUE utility locations, and hard and soft surface test holes. Miller Legg was a subconsultant to Facchina Construction.

Florida International University (FIU) Parking Garage 6 Civil Engineering - The full scope of services included: survey, subsurface utility engineering (SUE), design, permitting, construction observation and closeout for new and realigned spine roads with one additional roundabout (including a utility corridor of telecommunication duct banks, electrical duct banks, chilled water lines, sanitary sewer gravity mains, sanitary sewer force mains, drainage system, water mains, gas mains, and irrigation mains) and sewage lift station.

School Board of Broward County (SBBC) North Fork Elementary School Building 10 Lateral Sanitary Sewer - In order to provide the North Fork Elementary School Building 10 in Fort Lauderdale with a 332 LF of 8” diameter Gravity Sewer Main Ductile Iron Pipe sanitary sewer connection, Miller Legg was retained to perform civil, surveying and subsurface utility engineering as well as construction administration services. These are required to provide the design plans, permitting and construction services associated with a sanitary sewer lateral connection to an existing gravity sewer system, existing lift station or new lift station.

Miami-Dade County Water & Sewer Dept (WASD) 48" Water Transmission Main Downtown Loop Closure - Miami-Dade Water and Sewer Department (WASD) had evaluated potential routes for two new water mains to improve water service in downtown Miami and enhance transmission interconnection capabilities between the North and South service area water systems. The project focuses on the design and installation of 48" and 36" water transmission lines for combined Phases I and II. Phase 1 involves the construction of +/- 4,200 LF of 48" and +/- 300 LF of 30"DIP water transmission main; Phase II involves the construction of +/- 2300 LF of 36" DIP water transmission main. Miller Legg provided topographic survey, utility locates and engineering support services.

Miami-Dade County Water & Sewer Department (WASD) Shenandoah Water Main Replacement & Service Conversion - This project was initiated by Miami-Dade Co. Water & Sewer Department to replace existing undersized and deteriorated water mains in order to improve system pressure and provide fire flow protection, and for water service conversions (transfer of services from the rear to the front of properties) in the City of Miami's Shenandoah Area (Phase B). The replacement system, with an estimated 45,000 LF of installed 8-inch ductile iron and 1,200 LF of 6-inch ductile iron water main pipe in addition to an estimated 660 water service conversions, is targeted to have a minimum 80-year design life. Miller Legg was responsible for field engineering and survey services which included all pre-construction topographic mapping services.

Nicklaus Children's Hospital (NCH) Campus Infrastructure and Future Master Planning - Miller Legg prepared the Nicklaus Children's Hospital Campus water, sewer and drainage infrastructure Master Plan. The firm analyzed the needs and future improvements required to facilitate the 10-year Facility Master Plan of over 500,000 SF of additional hospital and ancillary uses. The scope of services began with an inventory and assessment report of the existing civil utility infrastructure. Miller Legg subsequently reviewed the proposed campus improvements and prepared a utility infrastructure master plan to address the existing and proposed water distribution, sanitary sewer collection and stormwater management (drainage) systems. engineering services during this project.



Christopher Andreoni, PE

Project Engineer

- 6 years solid experience in site planning, paving, grading, drainage, water & sewer, stormwater pollution prevention and signing and marking for South Florida public and private clients
- Additional background in and understanding of materials testing and geotechnical engineering



Professional Experience:

Years of Experience: 6

Registrations & Certifications:

Registered Professional Engineer, FL, 2017

Education:

Bachelor of Science, Civil Engineering
University of Central Florida, 2012

Mr. Andreoni is a Project Engineer working for a variety of clients such as municipalities, higher education and the private sector. His experience includes civil engineering services specifically in the preparation of site plans, paving, grading, and drainage plans, signing and marking plans, water and sewer plans, stormwater pollution prevention plans, and permitting. Prior to joining Miller Legg, he worked as a Project Manager/Engineer and Staff Engineer at materials testing and inspection firms in South Florida.

Relevant Project Experience:

City of West Palm Beach Gregory Road Green Streets LID Sanitary Sewer & Stormwater - The City of West Palm Beach requested Miller Legg to provide professional engineering, landscape architecture and surveying services for the design and bidding assistance of a stormwater management and drainage improvements project in an existing residential neighborhood. The firm is also providing sewer and stormwater design services. The project provides opportunities for various Low Impact Development (LID) best management practices to reduce stormwater runoff and nuisance flooding.

Seminole Tribe of Florida (STOF) Brighton Reservation Flowing Well Housing - Miller Legg is providing conceptual layout and design services for a housing development site on the Brighton Seminole Indian Reservation known as The Flowing Well Housing Development – Phase 1. Services include: environmental phase I environmental assessment, NEPA review, wetlands jurisdictional determination, geotechnical investigation, conceptual engineering plans and permitting.

Florida Atlantic University (FAU) Schmidt Family Complex - Miller Legg is providing boundary and topographic survey and subsurface utility engineering (SUE) location services, along with engineering design for utilities, pavement, signing and marking, drainage, ADA accessibility, irrigation, LEED assistance, grading, redevelopment, road circulation solutions ,permitting, bidding assistance and construction administration. Permitting services are being provided through the City of Boca Raton Utilities, the Palm Beach County Health Department, the South Florida Water Management District (SFWMD), the Lake Worth Drainage District, and the FAU Building Department. In addition, Miller Legg is providing bidding assistance, construction administration and certification services.

Memorial Hospital West Graduate Medical Education Building - The Memorial Hospital West Graduate Medical Education building is a new 30,000 SF 2-story medical education facility. Miller Legg provided site planning, survey, subsurface utility coordination, civil engineering, landscape architecture, lighting design and



construction administration services on the project. Prior to design work, topographic survey and campus utility infrastructure was mapped and coordinated with the owner and architectural design team for this expansion project and the enabling infrastructure improvements for this Pembroke Pines campus project.

School Board of Broward County (SBBC) North Fork Elementary School Building 10 Lateral Sanitary Sewer - In order to provide the North Fork Elementary School Building 10 in Fort Lauderdale with a 332 LF of 8" diameter Gravity Sewer Main Ductile Iron Pipe sanitary sewer connection, Miller Legg was retained to perform civil, surveying and subsurface utility engineering as well as construction administration services. These are required to provide the design plans, permitting and construction services associated with a sanitary sewer lateral connection to an existing gravity sewer system, existing lift station or new lift station.

Broward College South Campus New Automotive & Marine Facility Civil Design, Pembroke Pines - At the South Campus Automotive Facility, Miller Legg addressed surface water/storm water management related impact requirements, as well as updates/modifications to the Surface Water Management System/Stormwater Master Plan and permits modifications currently being processed for the overall Campus through the South Florida Water Management District (SFWMD) and South Broward Drainage District (SBDD). Engineering services included the preparation of paving, grading and drainage plans, details, sections, drainage calculations, etc. as necessary to address the proposed project's site/civil design, permitting and construction requirements.

Seminole Tribe of Florida (STOF) Seminole Park Neighborhood Infrastructure Improvements, Hollywood - Miller Legg is providing engineering design services for a neighborhood development site on the Hollywood Seminole Indian Reservation. Services include: boundary and topographic survey, Certified Arborist assessment, tree inventory and assessment, stormwater engineering, water and sewer, NEPA evaluation, environmental assessment and a traffic study, as well as single family and multi-family lot layout, traffic circulation and permitting.

City of West Palm Beach 32nd/33rd St. Water Main Improvements - Miller Legg is providing surveying, underground utility locates, geotechnical engineering, civil engineering design and bidding assistance services for this +/- 2,000 LF 8" water main replacement project. The existing water mains are transite, undersized, and have reached the end of their useful life. The Basis of Design report and development of 30% plan scope involves the assessment of water main replacement, sanitary sewer replacement/relocation (from rear yard to street on 2 streets) and evaluation of storm drainage improvements.

School Board of Broward County (SBBC) North Fork Elementary School Building 10 Lateral Sanitary Sewer - In order to provide the North Fork Elementary School Building 10 in Fort Lauderdale with a sanitary sewer connection, Miller Legg was retained to perform civil, surveying and subsurface utility engineering services. These are required to provide the design plans, permitting and construction services associated with a sanitary sewer lateral connection to an existing gravity sewer system, existing lift station or new lift station.

City of West Palm Beach Congress Avenue Water Main Relocation - Miller Legg provided civil engineering, construction administration and surveying services for the City of West Palm Beach for the design and general contractor assistance of a water main relocation project on Congress Avenue at the City's "F" Canal. Relocation of the existing 10" water main was required to accommodate a Palm Beach County (County) Roadway Improvement project, which includes replacement of the existing Congress Avenue "F" Canal Bridge with a double 66" RCP culvert system. The existing 10" water main is attached to underside of the existing bridge that will be demolished. In addition, Miller Legg designed a liner to navigate under the City's Canal F to allow for future maintenance requirements, pipe protection during future dredging/maintenance and ease of installation.



Anthony Hudson

Construction Manager

- Lengthy career experience in South Florida neighborhood utility infrastructure construction inspection and administration
- Well versed in clearing, excavations, earthwork and hydraulic facilities
- Daily involvement in RFIs, shop drawings, bid analysis and familiarity with final estimate process, punchlist and final certification
- Oversees safety plans on various firm contracts



Years of Experience: 38

Registrations & Certifications:

Registered Professional Engineer, JA, 1991
FDOT Intermediate Maintenance of Traffic, FL, 2013

Education:

Master of Business Administration, Business and Finance
Florida Atlantic University, 2004
Management Studies
Jamaica Institute of Management, Kingston, Jamaica, 1994
Bachelor of Science, Mechanical Engineering
University of the West Indies, Trinidad, 1981

Professional Experience:

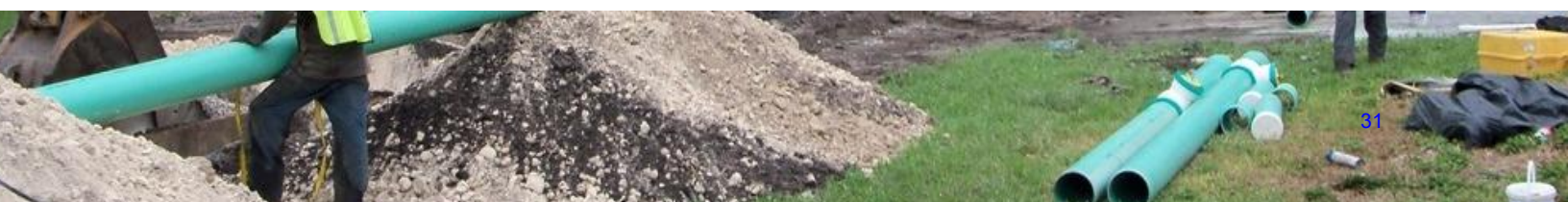
Mr. Hudson is a Construction Specialist for the firm. His experience includes work with both public and private sector projects providing constructability reviews and ensuring that contractor's work is performed in accordance with approved plans, specifications and local standards. In addition, he performs field tests, inspects underground utility installation, reviews as-builts and shop drawings, and resolves resident issues related to neighborhood construction. Prior to joining Miller Legg, he was a Project Manager and Mechanical and Plumbing Inspector for numerous other consulting firms in South Florida and a Mechanical Engineer for the oil refinery in Jamaica.

Relevant Project Experience:

North County SW Quad & BP12 - Miller Legg was responsible for design of stormwater drainage, water, sanitary sewer, reclaimed

water, street pavement, sidewalks, landscaping and signage improvements for this 173-acre area. The project included installation of 5.3 miles of reclaimed water pipe installation resulting in reclaimed water service being provided to 455 homes. This installation consisted of 2 miles of 20" pipe, 0.4 miles of 16" pipe, 2.9 miles of 4" pipe, 7 air release valves; 38 gate and butterfly valves; 12 tons of fittings; as well as roadways and swale were also restored. Miller Legg provided construction documents for the installation of the reclaimed water transmission main from the City of Pompano Beach reuse plant into Bid Package #12 and reclaimed water system within the Bid Package #12 area constructed in the street.

Seminole Tribe of Florida Seminole Park Community Water and Sewer - Miller Legg provided a review and inventory of the Hollywood Park community's water and sewer infrastructure, since the STOF is anticipating acquiring this area and replacing the entire infrastructure of water and sewer in three years. A Water and Sewer Condition Assessment was performed, as well as Life Cycle review and operation and maintenance costs for maintaining the existing water and sewer systems. Demolition of the entire existing water and sewer system was selected, with reconstruction of new infrastructure. The infrastructure improvements include installation of 10,000 LF of utilities. A 14" water main directional drill under a FDOT jurisdiction right-of-way was required.



Broward College (BC) Water Use Permit Support - Miller Legg has been assisting Broward College with water use permits for all campuses since 2006. The firm provides supporting documentation, such as calibration data and calculation submittals, to the South Florida Water Management District (SFWMD) for compliance with existing water use permits. The firm assists the College with ongoing compliance, reporting requirements, expiration date monitoring and record maintenance for the existing water use permits.

North County Neighborhood Improvement Project - Southeast Quadrant - The southeast quadrant of a 2,900-acre project located in the City of Pompano Beach that consisted of water, sewer, drainage, urban and rural roadway pavement, and landscaping services. Project first included a Basis of Design Report (BODR) for the entire 2,900-acre project area that evaluated the existing conditions and provided recommendations for improvements, and actual project design and administration of construction for this quadrant. This multi-year project involved stormwater, water and sewer system modeling, permitting and design of the water, sewer, drainage, and roadway improvements, public awareness, preparation of contract and bid documents, field monitoring, surveying, landscaping designs, and entrance feature designs. Surveying services for this project included: horizontal and vertical global positioning systems (GPS) control networks for aerial photography, research and field surveys to establish approximately 105 miles of existing rights-of-way, and horizontal and vertical locations of existing improvements within the rights-of-way. During the contract administration of the southeast quadrant of the project, the County required complete construction of this portion on a fast-track schedule. Due to scheduling efficiencies and effective project management, Miller Legg delivered the project well ahead of schedule and below budget, resulting in a savings of almost \$2 million to the County.

Seminole Tribe of Florida (STOF) Brighton Reservation Force Main Installation - The project consisted of design for installation of approximately 10,000 LF (2.1 miles) of new sewer force main at the Brighton Reservation. This sewer force main improvement allows community sewer service to serve additional customers with grinder stations. The hydraulic analysis required for the sizing of the force main included evaluation of additional infrastructure required and analysis of the capacity of the existing infrastructure to receive the new sewer service area. A new lift station was also designed. All infrastructure crossing the county road required installation of sleeves by horizontal directional drilling. Horizontal directional drilling was also required along two segments where wetland impacts were to be avoided. Services included engineering, surveying and SUE designations.

Seminole Tribe of Florida (STOF) Brighton Public Safety & Administration Complex - The Public Safety and Administration Complex included a fire station, police station, administrative offices and an emergency operations center. This Public Safety Facility is located on an 8.6 acre parcel in Okeechobee. Miller Legg provided civil engineering services for on-site and off-site design permitting and construction including paving, pavement markings and signs, drainage, water, fire and sewer improvements.

Florida International University (FIU) PG 6 Sanitary Sewer Survey - For this project, Miller Legg provided sanitary sewer as-built surveys, SUE utility locations, and hard and soft surface test holes. Miller Legg was a subconsultant to Facchina Construction.

Miami-Dade Water and Sewer Department (WASD) 36" Force Main Survey - Miller Legg prepared full ROW and topographic survey along NW 107th Avenue from NW 25th Street to south of Fontainebleau Boulevard in Miami, approximately 8400 LF. A portion of this survey is adjacent to the Miami International Mall and crosses beneath SR 836. The survey was prepared to establish horizontal and vertical control, set benchmarks and monument recovery to establish the ROW along the entire corridor, for future design/construction of a new 36" force main.

Miami Dade Water and Sewer Department (MDWASD) E15- WASD-02 Pump Station 772 - Miller Legg is currently under contract with the Miami-Dade Water and Sewer Department (M-DWASD) to design Pump Station #772. The design includes upgrading the pump station from a dry well/wet well configuration to a standard submersible station. This pump station is currently located within a residential neighborhood on SW 92nd Avenue in Miami.



Dylan Larson, CEP, SPWS

Contract Manager / Project Controls
Construction Administration Specialty – Environmental Inspection

- ✱ Lengthy Broward Co. experience on projects with heavy environmental management plans, inspections, analysis, assessments and permitting
- ✱ Heavily involved in Broward Co. Climate Change Task Force since its inception and brings vast knowledge of best sustainable practices
- ✱ As Chief Operating Officer, handles daily operations of the firm and brings significant experience managing complex contracts as well as overseeing multi-disciplinary teams



Years of Experience: 25

Registrations & Certifications:

Senior Professional Wetland Scientist, 2020
Certified Landscape Inspector, FL, 2013
Authorized Gopher Tortoise Agent, FL, 2012
Wetland Delineation Certification, 1995
Certified Environmental Professional, 2004
PADI Certified Rescue Diver, 2003

Education:

Bachelor of Science, Biology and Business
Administration
University of Wisconsin - Stevens Point,
1994
Master of Business Administration
Nova Southeastern University, 1998

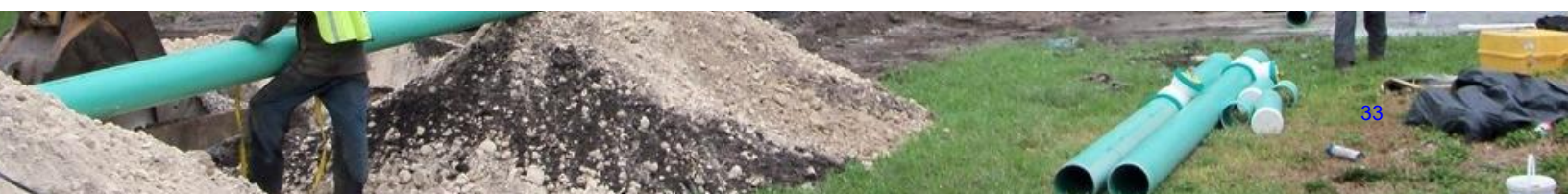
Professional Experience:

As a Principal of the Firm, Dylan has established himself as a valuable leader and team member on a variety of the firm's projects that have involved environmental and permitting issues. Specific responsibilities include: wetland jurisdictional determination, coastal concerns, dredge and fill permitting, wetland mitigation design, mitigation monitoring, recommendations for maintenance procedures, coordination and oversight of environmental GIS applications, and assistance with plan preparations and mitigation. As a member of the Broward County Climate Change Task Force for over 10 years, Dylan Larson is well aware of the data and approaches being implemented by the County and the Regional Compact consisting of Monroe, Miami-Dade, Broward and Palm Beach Counties.

Relevant Project Experience:

City of West Palm Beach 32nd/33rd St. Water Main Improvements - Miller Legg is providing surveying, underground utility locates, geotechnical engineering, civil engineering design and bidding assistance services for a +/- 2,000 LF 8" water main replacement project on 32nd Street and 33rd Street from Floral Avenue to N. Flagler Drive and on N. Flagler Drive from 32nd Street to 35th Street in the historic Northwood Shores district. The existing water mains are transite, undersized, and have reached the end of their useful life. The Basis of Design report and development of 30% plan scope involves the assessment of water main replacement, sanitary sewer replacement/relocation (from rear yard to street on 2 streets) and evaluation of storm drainage improvements. The project is located approx. 6,850 ft. north of Palm Beach Lakes Blvd. on the west side of N. Flagler Drive.

Seminole Tribe of Florida Seminole Park Community Water and Sewer - Miller Legg provided a review and inventory of the Hollywood Park community's water and sewer infrastructure, since the STOF is anticipating acquiring this area and replacing the entire infrastructure of water and sewer in three years. A Water and Sewer



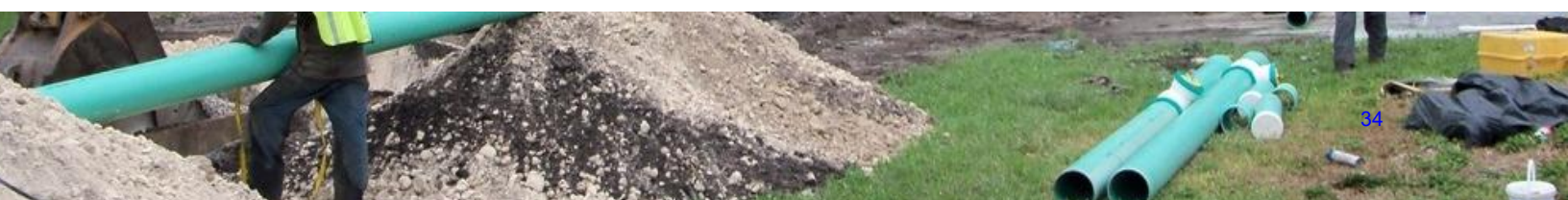
Condition Assessment was performed, as well as Life Cycle review and operation and maintenance costs for maintaining the existing water and sewer systems. Demolition of the entire existing water and sewer system was selected, with reconstruction of new infrastructure. The infrastructure improvements include installation of 10,000 LF of utilities. A 14" water main directional drill under a FDOT jurisdiction right-of-way was required.

Palm Beach County Water Utilities Department FPL Pipeline - Miller Legg provided wetland jurisdictional determination, environmental permitting and mitigation analysis for this 18-mile long Palm Beach County FPL reclaimed water line to run from Jog Road just north of Okeechobee Boulevard west to the Rinker rock mining operation. Environmental services provided include: wetland delineation, mitigation analysis, threatened and endangered species assessment, gopher tortoise assessment, permitting, and relocation, woodstork biomass analysis, snail kite survey, environmental permitting and monitoring.

Monterra Master Water & Sewer Utilities - This 526-acre parcel was one of the last large remaining tracts of vacant unincorporated land in southwest Broward County. The project involved the development of a residential community that includes approximately 1,800 units including multi-family, townhomes, and single-family units. In addition, the development includes a Town Center that will provide limited commercial, restaurant, retail uses, and several outparcels for future development. Miller Legg is providing a variety of design and consulting services which include land surveying, planning services (annexation into the City of Cooper City), land use plan amendment, platting and site planning, environmental services such as wetland determination, wildlife surveying, permitting, mitigation negotiation and construction services, and traffic engineering. Full civil engineering services included the following: establishment of a community development district (CDD), earthwork, drainage, water and sewer, road permitting, paving, and construction administration service assistance. The master utility design for Monterra included a network of five lift stations, 8,700 LF of force main, 29,500 LF of gravity sewer, 43,000 LF of water main for distribution through the spine roads and internal roads to serve the entire development. The drainage master plan included an interconnected lake system with just under 11,000 LF of concrete culvert, the expansion of two CBWCD canals and a master control structure. Miller Legg prepared the master plan, modeling for current and future uses, prepared construction documents and managed the permitting of all main utility systems for this project.

City of West Palm Beach Gregory Road Green Streets LID Sanitary Sewer & Stormwater - The City of West Palm Beach requested Miller Legg to provide professional engineering, landscape architecture and surveying services for the design and bidding assistance of a stormwater management and drainage improvements project in an existing residential neighborhood. The firm is also providing sewer and stormwater design services. The project provides opportunities for various Low Impact Development (LID) best management practices to reduce stormwater runoff and nuisance flooding. For instance, LID implementation will be facilitated by the installation of bioretention in the bumpouts on Gregory Road, and nuisance flooding can be decreased through driveway modifications and speed control devices. The project is located along Gregory Road and Gregory Place between S. Olive Avenue and S. Flagler Drive. This project is being completed under the firm's multi-year General Engineering Services contract.

Miami-Dade County Water & Sewer Dept (WASD) 48" Water Transmission Main Downtown Loop Closure - Miami-Dade Water and Sewer Department (WASD) had evaluated potential routes for two new water mains to improve water service in downtown Miami and enhance transmission interconnection capabilities between the North (Hialeah/Preston) and South (Alexander Orr) service area water systems. The resulting Miami Downtown Loop Closure Water Main Pipeline Design Build project focuses on the design and installation of 48" and 36" water transmission lines for combined Phases I and II. Phase 1 involves the construction of +/- 4,200 LF of 48" and +/- 300 LF of 30" DIP water transmission main; Phase II involves the construction of +/- 2300 LF of 36" DIP water transmission main. Miller Legg provided topographic survey, utility locates and engineering support services as part of the Ric-Man Construction/WSP team.



Jeffrey Marcus, Ph. D

Technical Advisor / Sustainability/Sea Level Rise

- Expert on flooding adaptation measures to cope with growing threat of Sea Level Rise, impact on stormwater treatment infrastructure, roads and bridges.
- 35 years background in environmental assessment and regulatory compliance in South Florida
- Lengthy consulting experience in FDOT Districts 4 and 6 with focus on environmental permitting and solid understanding of environmental regulations



Professional Experience:

Years of Experience: 35

Education:

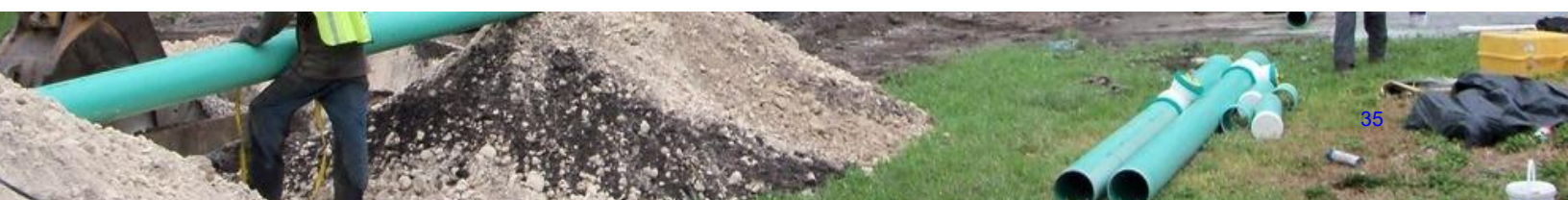
Bachelor of Arts, Biology
University of Colorado, 1975
Ph.D. Ecophysiology and Ecology
University of Lancaster, England, 1978

Dr. Marcus has over 35 years of experience in environmental assessment and regulatory compliance in South Florida. He has a broad and well diversified background in transportation related impact analysis as required by NEPA and FHWA regulations. His areas of expertise include freshwater and marine ecology, wetland restoration and enhancement, and the preparation of environmental assessments and impact statements; particularly in subtropical and tropical habitats. Dr.

Marcus has conducted and overseen a myriad of biological surveys, endangered species impact assessments, wetlands delineations, ecological risk assessments, and has prepared a wide variety of permit applications at the federal, state and local levels. He has overseen many contamination evaluations (CSERs) and has supervised groundwater and sediment contamination assessments throughout the United States. Dr. Marcus served as Environmental Administrator in District 6 and has overseen numerous noise and air studies that were of major importance to improvements on expressways including I-95, SR 826, and SR 836, SR 874, and the Florida Turnpike. He is considered a subject matter expert in NEPA and coastal restoration. He is published on the impacts of oil and dispersants on mangroves, corals, and seagrasses. In recent years, he has focused attention on flooding adaptation measures to the growing threat of Sea Level Rise and its impact on roads, bridges, and stormwater treatment infrastructure. Dr. Marcus has presented his work at many conferences throughout the United States including several at the International Conference on Ecology and Transportation (ICOET): most recently in North Carolina on wildlife crossings along the 18-mile stretch.

Relevant Project Experience:

Districtwide Environmental Data & Report Consultant Contract, Miami-Dade & Monroe Counties, FDOT District 6 - Development of the NEPA documents (AN's, CSER's, air & noise studies, wetland reports, re-evaluations), to the development of presentations and videos (Return to Nature), to expert witness testimony at the state and federal level for the US-1 South 2-Lane Safety Project. During this period, hundreds of task orders were successfully completed. Dr. Marcus has a solid understanding of the PD&E process, ETDM, Class of Action and has an excellent relationship with regulators at Miami-Dade County DERM, SFWMD, FDEP, NOAA Fisheries, USFWS, and USACE. Dr. Marcus has a solid understanding of FDOT needs and has proven to be a problem solver for the Department for over 25 years. Dr. Marcus served as Contract Manager between 1991 and 2010. During this period, 100's of task orders was successfully completed under the direction of Barbara Culhane and Marjorie Bixby. He continued to serve as Sr. Technical Advisor between 2010 and 2018 when the contract became more focused on document review, in-house support and project scheduling.



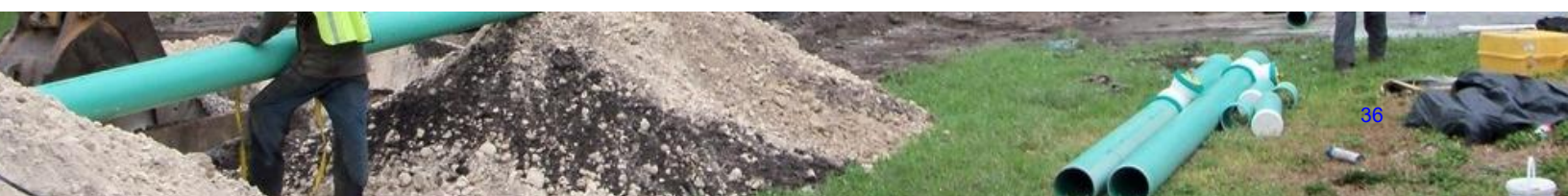
Districtwide Permits Consultant, Miami-Dade & Monroe Counties, FDOT District 6 - Senior Advisor operating as an extension of FDOT's Staff and responsible for performing environmental permitting services for District 6 including preparation of federal and state permit applications; agency coordination; evaluating design plans for potential impacts; wetland assessments and delineations; upland and hammock assessments; protected species surveys and evaluations; mitigation plan design; and coordination with FDOT staff and designers. His responsibilities included overall contract oversight and administration, coordination and QA/QC.

Stormwater and Drainage Permits, City of Miami Beach - Dr. Marcus worked very closely with the City of Miami Beach on a variety of stormwater and drainage permits that were part of an innovative city-wide program to move from a gravity-based system to pump stations and outfalls. The work also included raising seawalls and roads. Many projects were in conjunction with FDOT and included drainage improvements to Alton Road, Sunset Harbor, and Indian Creek Drive. These projects included water quality and water quantity evaluation; and numerous permits from Miami-Dade RER, SFWMD, and the US Army Corps of Engineers. Specific projects included the pump stations and outfalls on 6th Street, 10th Street and 14th Street along Alton Road and another three pump stations in the low-lying areas of Sunset Harbor and Indian Creek. Environmental work included benthic surveys, water quality testing, living shorelines and community involvement as they relate to Sea Level Rise. Dr. Marcus was responsible for agency coordination, scientific studies, and for obtaining the permits that were critical to the success of the overall program between 2014 and 2018.

Project Development and Environment Study for the Widening of the Homestead Extension of the Florida Turnpike (HEFT) from SR 874 to SR 836, Miami-Dade County, FL, Turnpike Enterprise - Dr. Marcus worked as the Environmental Project Manager for the development of the support environmental documents and the corresponding SEIR for this PD&E Study of the 9.5 mile section of the HEFT, expanding it from six to ten lanes and evaluating both mixed cash and all electronic tolling options.

Districtwide Mitigation and Environmental Services Support, FDOT District 4 - Project Manager responsible for performing environmental services which include: permitting of mitigation sites, planning and construction activities for the purpose of meeting permit requirements or correcting mitigation site deficiencies, exotic species control and removal in the Department's right of way, relocation of endangered, threatened, and rare flora and fauna, and monitoring of the Department's construction projects to assure compliance with environmental permit conditions and commitments. More than 200 projects were successfully completed. 2010-2018.

Cat-Ex Projects in District 4 including: Las Olas Bridges, Segments of SR 80, and I-95 from Stirling to Oakland Boulevard - Dr. Marcus was the lead environmental consultant responsible for the development of the Categorical Exclusion and the environmental supporting documents including the CSER, the WER, and the ESBA. Projects were completed on schedule. The environmental documents had minimum comments.



Martin Rossi, PSM

Senior Surveyor / SUE

-  Current and recent Surveying experience for Hollywood CRA
-  Has performed numerous pipeline and pump station project surveys for Broward Co. WWS and Miami-Dade WASD
-  Directs all ML's survey, mapping technicians and field crew supervision for utilities and engineering projects
-  39+ years of Broward Co. work experience and extremely familiar with County and municipality permitting process and requirements



Years of Experience: 39

Registrations & Certifications:

Registered Professional Surveyor &
Mapper, FL, 1998

Professional & Civic Activities:

Past Vice President, Florida Surveying &
Mapping Society, Broward Chapter

Professional Experience:

Mr. Rossi is a Senior Project Surveyor with more than three decades of surveying and subsurface utility engineering (SUE) experience. His principal areas of experience include surveys such as boundary, topographic, ALTA/ACSM land title surveys, quantity, environmental and wetland, condominium, construction layout, as-built, right-of-way, specific purpose and subdivisions and platting, as well as SUE. He currently manages the survey department and the survey field crews in South Florida.

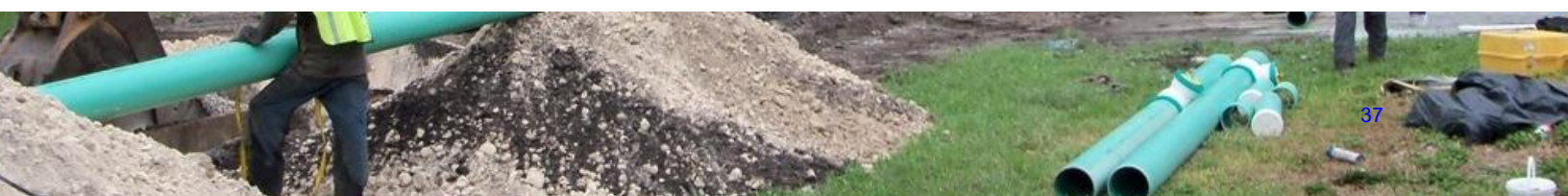
Relevant Project Experience:

Hollywood DCRA Downtown Neighborhood Lighting and Streetscape Improvements – Miller Legg is currently providing surveying and SUE services to the Hollywood CRA for the downtown neighborhood lighting and streetscape improvements project. Currently the firm is providing topographic surveys for Dixie Highway at Fillmore Street and Dixie Highway at Johnson Street.

City of Miramar Tropical Valley Neighborhood Improvement Project - An 80-acre residential and industrial infrastructure improvement project in Miramar. Services provided included: design for replacement of the existing water distribution system, installation of a gravity sewer system, three sewage lift stations and offsite force main, retrofitting of drainage systems and roadways, storm water modeling, field investigations to determine drainage issues, public meetings to address citizen concerns, construction cost estimating to assist with budgeting, permitting, and construction services for the City of Miramar.

Florida International University (FIU) PG 6 Sanitary Sewer Survey - For the FIU Parking Garage No. 6 project, Miller Legg provided sanitary sewer as-built surveys, SUE utility locations, and hard and soft surface test holes.

City of Miami Beach 54" Redundant Force Main Survey - The survey and subsurface utility investigation prepared by Miller Legg was included as part of the Design Criteria Package prepared by AECOM. Miller Legg provided right-of-way (ROW) and topographic surveys as well as utility designating services to the City of Miami Beach for this 54" redundant force main project. Coordination with the City of Miami Beach and AECOM was required to identify Pit locations for the proposed installation of the 54" force main. Subsurface investigation related to existing utilities was conducted in order to identify the most effective route for the force main installation. Extensive subsurface utility investigation was conducted at each of the pit locations and included as part of the Design Criteria Package.



City of Miramar Tropical Valley Neighborhood Improvement Project - An 80-acre residential and industrial infrastructure improvement project in Miramar. Services provided included: design for replacement of the existing water distribution system, installation of a gravity sewer system, three sewage lift stations and offsite force main, retrofitting of drainage systems and roadways, stormwater modeling, field investigations to determine drainage issues, public meetings to address citizen concerns, construction cost estimating to assist with budgeting, permitting, and construction services for the City of Miramar.

Miami Dade Water and Sewer (WASD) 72" Sanitary Sewer Force Main Survey - Miller Legg performed a topographic survey for the replacement / rehabilitation of a 72-inch sanitary sewage force main along NE/NW 159th Street between NW 17th Avenue and NE 10th Avenue. The survey covered 14 entry / exit pit areas. Miller Legg established a horizontal datum on the State Plane Coordinate System, and vertical datum to coincide with current information existing on the project. An approximate right-of-way was also established through the entire corridor to assist in determining the limits of the survey work to be performed, and to confirm that the construction would remain within the rights-of-way. Followed standards established by the Miami-Dade Water and Sewer Department as well as strict guidelines for layering within the deliverable CADD file were observed.

North Springs Improvement District (NSID) Concentrate Force Main Survey/SUE - Miller Legg provided surveying and SUE services for this force main project. NSID provides water treatment, wastewater collection and stormwater management to almost 40,000 residents in the Cities of Coral Springs and Parkland. Services consisted of SUE locate services, topographic and tree location surveys, a boundary investigation to determine a clear route for the proposed force main from the water treatment site and sketch and legal descriptions to obtain easements for construction.

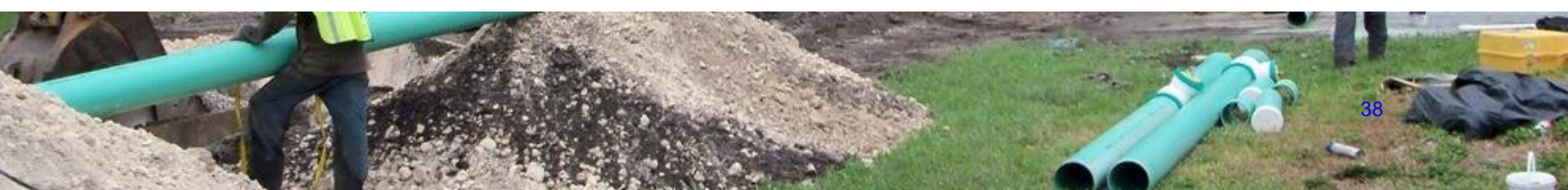
Miami-Dade County Water & Sewer Department (WASD) Shenandoah Water Main Replacement & Service Conversion - This project was initiated by Miami-Dade Co. Water & Sewer Department to replace existing undersized and deteriorated water mains in order to improve system pressure and provide fire flow protection, and for water service conversions (transfer of services from the rear to the front of properties) in the City of Miami's Shenandoah Area (Phase B). The replacement system, with an estimated 45,000 LF of installed 8-inch ductile iron and 1,200 LF of 6-inch ductile iron water main pipe in addition to an estimated 660 water service conversions, is targeted to have a minimum 80-year design life. As part of the Lanzo Construction/CES Consultants team, Miller Legg is responsible for field engineering and survey services.

Seminole Tribe of Florida (STOF) Brighton Reservation Force Main Installation - The project consisted of design for installation of approximately 10,000 LF (2.1 miles) of new sewer force main at the Brighton Seminole Indian Reservation. Services provided include engineering, surveying and SUE designations.

Florida International University (FIU) PG 6 Sanitary Sewer Survey - For the FIU Parking Garage No. 6 project, Miller Legg provided sanitary sewer as-built surveys, SUE utility locations, and hard and soft surface test holes.

Davie Water & Wastewater Treatment Plant - Miller Legg provided civil engineering design services/permitting, surveying and subsurface utility engineering (SUE) services for the installation of four new raw water wells and approximately 4,000 linear feet of raw water mains connecting the wells to the new Town of Davie Water Treatment Plant. Miller Legg also provided design surveys and as-builts for all aspects of the project.

Miami-Dade Co. Water & Sewer Dept (WASD) 8" Ductile Iron Water Main NE 68th St. - This Miami-Dade Water and Sewer Department (WASD) system upgrade program focuses on rehabilitation or replacement or for new water distribution and sewage collection and transmission facilities with pipe diameters less than 36 inches in diameter. This project scope involved providing construction documents for the installation of a 1,340 LF of 8" ductile iron water main in NE 68th St from Biscayne Blvd. to NE 7th Ct. and included surveying, pipeline design, permitting and limited construction support. Miller Legg was responsible for topographic and boundary survey services; utility locates and engineering support services as part of the 300 Engineering team.



Karen Lynch, PSM

Senior Surveyor



- 📍 Current and recent Surveying experience for Hollywood CRA
- 📍 Surveying/Mapping for large diameter water mains and force mains in Broward and Miami-Dade Counties
- 📍 Project Surveyor for North County NIP and North Andrews NIP as well as MDWASD's Pump Station Improvement Program Projects
- 📍 40+ years Broward Co. surveying experience with primary responsibility for firm's 20+ year School Board survey contract

Years of Experience: 41

Registrations & Certifications:

Registered Professional Surveyor & Mapper, FL, 1998

Education:

*Associates Degree, Liberal Arts
University of Florida, 1977*

Professional Experience:

Ms. Lynch has extensive South Florida survey project management experience in several different public sector environments such as roadways and streetscapes, educational facilities, parks and recreation, and healthcare and medical office complexes. She also has wide-ranging experience in private sector surveying, including residential projects as well as commercial and industrial facilities.

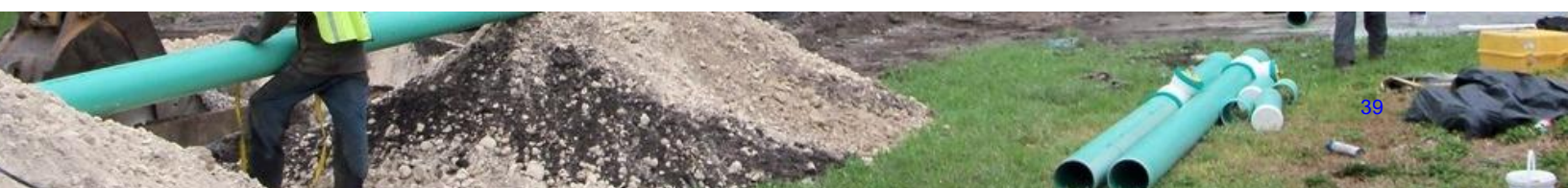
Relevant Project Experience:

Hollywood DCRA Downtown Neighborhood Lighting and Streetscape Improvements – Miller Legg is currently providing surveying and SUE services to the Hollywood CRA for the downtown neighborhood lighting and streetscape improvements project. Currently the firm is providing topographic surveys for Dixie Highway at Fillmore Street and Dixie Highway at Johnson Street.

Broward County Aviation Department (BCAD) Fort Lauderdale-Hollywood International Airport Utility Atlas Update & GIS - Miller Legg completed work on a project locating underground utilities at Ft. Lauderdale-Hollywood International Airport (FLL). Our subsurface utility engineering (SUE) crews utilized geophysical prospecting techniques in conjunction with kinematic Global Positioning Systems (GPS) and traditional ground surveying techniques to mark, identify, and locate known underground utilities provided in the new FLL Utility Atlas Plans. Miller Legg provided a utility sweep for unknown utilities within the project area. The purpose of the underground utility investigation and survey is to update the new Utility Atlas within and adjacent to the Airport in support of the South Runway Expansion and Construction project. AutoCAD files depicting the field collected locations were converted to Federal Aviation Administration compliant GIS geodatabase format. Utility attribute information such as owner, material, size, direction, and depth were included in the GIS.

City of Miami Little Havana Community Center Surveying - Miller Legg provided a boundary and topographic survey for the City of Miami of the Little Havana Community Center. Based on the legal description, the Miller Legg survey showed aboveground boundary encroachments and evidence of any utilities, interior improvements, the size and description of any trees over 3" caliper, flood zone information, the location and widths of rights-of-way and easements.

City of Coral Springs Municipal Complex Survey - Under the firm's continuing services contract with the City of Coral Springs, Miller Legg performed multiple surveying services in association with the development of the City's new municipal complex. The survey services included boundary and



topographic surveys, tree inventory as well as utility locations, soils boring and exfiltration test location stake-outs. Additional survey work delivered included sketch and descriptions for existing easements and canal rights-of-ways

Davie Water & Wastewater Treatment Plant - Miller Legg provided civil engineering design services/permitting, surveying and subsurface utility engineering (SUE) services for the installation of four new raw water wells and approximately 4,000 linear feet of raw water mains connecting the wells to the new Town of Davie Water Treatment Plant. An early phase of the project required research into the best location for the installation of the raw water mains as well as full investigation into the existing utilities including designation of them in the field followed by vacuum test hole locations to determine depth of utility. Field location of existing utilities was critical on these types of projects and ultimately resulted in fewer change orders and delays due to unknown utilities being discovered during construction. Miller Legg also provided design surveys and as-builts for all aspects of the project. Miller Legg was a subconsultant to AECOM.

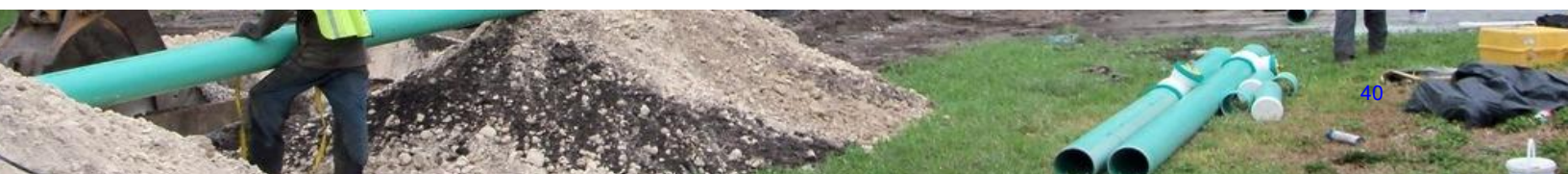
Miami Dade Water and Sewer (WASD) 72" Sanitary Sewer Force Main Survey - Miller Legg performed a topographic survey for the replacement / rehabilitation of a 72-inch sanitary sewage force main along NE/NW 159th Street between NW 17th Avenue and NE 10th Avenue. The survey covered 14 entry / exit pit areas. Miller Legg established a horizontal datum on the State Plane Coordinate System, and vertical datum to coincide with current information existing on the project. An approximate right-of-way was also established through the entire corridor to assist in determining the limits of the survey work to be performed, and to confirm that the construction would remain within the rights-of-way. Followed standards established by the Miami-Dade Water and Sewer Department as well as strict guidelines for layering within the deliverable CADD file were observed.

Seminole Tribe of Florida (STOF) Subsurface Utility Engineering (SUE) Services - Miller Legg provides subsurface utility engineering services to the Seminole Tribe of Florida on a continuing basis. The scope of work on past assignments has included utility investigations for active and abandoned utilities, utility designation for conductive and non-conductive utilities, coordination with Utility Agency Owners (UAOs), utility test holes, location services, and surveying services. The contract encompasses the Seminole Reservations at Hollywood, Big Cypress, and Brighton, with assignments received and executed on a task work order basis.

Miami Dade Water and Sewer Department (MDWASD) E15- WASD-02 Pump Station 772 - Miller Legg is currently under contract with the Miami-Dade Water and Sewer Department (M-DWASD) to design Pump Station #772. The design includes upgrading the pump station from a dry well/wet well configuration to a standard submersible station. This pump station is currently located within a residential neighborhood on SW 92nd Avenue in Miami.

NCH Pinecrest Outpatient Center Sanitary Sewer Lateral Connection - Miller Legg is providing civil engineering coordination and permitting services in response to the Nicklaus Children's Hospital request to assist with Miami-Dade Water & Sewer Department (WASD) water connection directive and sewer construction services for an Outpatient Facility located at the Suniland Shopping Center on SW 112 Road, Miami.

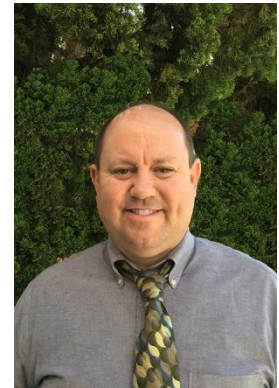
Miami-Dade County Water & Sewer Dept (WASD) 8" Ductile Iron Water Main NE 68th St. - This Miami-Dade Water and Sewer Department (WASD) system upgrade program focuses on rehabilitation or replacement or for new water distribution and sewage collection and transmission facilities with pipe diameters less than 36 inches in diameter. This project scope involved providing construction documents for the installation of a 1,340 LF of 8" ductile iron water main in NE 68th St from Biscayne Blvd. to NE 7th Ct. and included surveying, pipeline design, permitting and limited construction support. Miller Legg was responsible for topographic and boundary survey services, utility locates and engineering support services.



Brian Shore, RLA

Technical Advisor / Landscape Architecture

- 19 years landscape architectural design and landscape construction services for a variety of public and private projects
- Landscape Architecture Department Manager with extensive experience on FDOT roadway and drainage projects
- Managed tree survey, preservation and relocation with adherence to permit conditions and county local codes associated with Fort Lauderdale/Hollywood International Airport runway construction



Professional Experience:

As a Senior Landscape Architect, Mr. Shore has significant experience in landscape architectural design and landscape construction services for a variety of public and private projects. Specialties include landscape, hardscape, and irrigation design services for streetscape and roadway projects including the Florida Department of Transportation (FDOT), all aspects of active and passive park design, health-care campuses, and environmental wetland habitat creation. Other experience includes various residential and commercial projects.

Years of Experience: 19

Registrations & Certifications:

Registered Landscape Architect, FL, 2005
FDOT Intermediate Maintenance of Traffic, FL, 2013

Education:

Bachelor of Science, Landscape Architecture

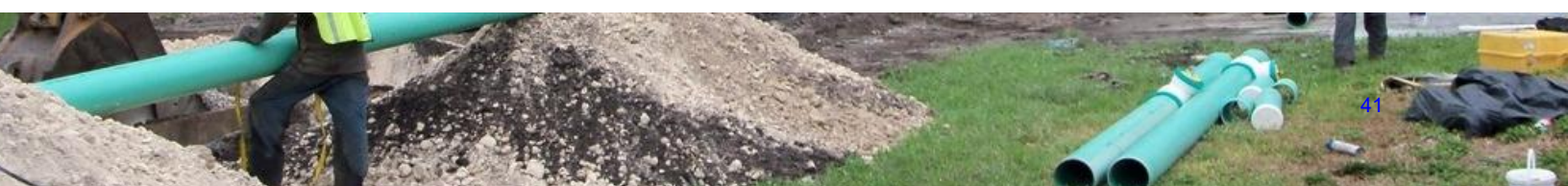
Relevant Project Experience:

City of Miramar Miramar Parkway Redevelopment - This redevelopment and streetscape project included a two-mile, two-block urban section of the Miramar Parkway corridor adjacent to SR 7/US 441. Miller Legg designed the landscape and irrigation improvements for Florida Department of Transportation (FDOT) along this corridor north and south of

Miramar Parkway. In addition, certified arborist services were provided for a tree inventory and quality evaluation. The proposed streetscape improvements included enhancement of the pedestrian corridor to encourage safe pedestrian traffic for adjacent commercial and office uses. The design also called for consolidated parking areas rather than replacing backout parking in front of businesses for the safety of both the pedestrian and automobile traffic and to improve the street operation and the aesthetics of the streetscape.

City of Miramar Roads Landscape Improvements - The City of Miramar desired landscape improvements to be performed on sections of Miramar Parkway, Miramar Boulevard and Red Road in addition to some smaller roadway locations. Miller Legg provided sustainable landscape architecture services as follows: data collection, site and tree inventories, conceptual planting and irrigation design, final planting and irrigation plans, tree permitting and coordination, opinion of probable cost, coordination meetings with the City of Miramar and with the affected community, construction administration and field reviews. The firm also assisted the City with documents required for FDOT landscape grant for Red Road.

Broward County Aviation Department (BCAD) Fort Lauderdale-Hollywood International Airport South Runway Hilton Hotel Demolition Tree Survey & Relocation Hilton Demolition - Miller Legg and its Certified Arborists conducted a comprehensive tree survey/inventory on all 700 trees located at the prior Hilton hotel property in Dania Beach. Using this data Miller Legg acquired the necessary City and County permits to remove trees that



were within a 30-foot buffer of the Hilton Hotel, which was scheduled for demolition as it was a man-made obstruction based on FAA guidelines and the opening of the new Fort Lauderdale-Hollywood Airport runway 10L. The firm coordinated with the client, demolition experts and contractor on construction methodologies for tree preservation, protection and adherence to permit conditions and county and local tree preservation codes. Miller Legg also conducted a multi-week observation of the Hilton Hotel demolition in order to ensure the trees permitted to remain on site were constantly protected from large scale demolition equipment. In addition, Miller Legg provided observation during construction for permit compliance in addition to the tree relocation process on site with accompanying field reports of activity.

Broward College South Campus New Automotive & Marine Facility Civil Design, Pembroke Pines - At the South Campus Automotive Facility, Miller Legg addressed surface water/storm water management related impact requirements, as well as updates/modifications to the Surface Water Management System/Stormwater Master Plan and permits modifications currently being processed for the overall Campus through the South Florida Water Management District (SFWMD) and South Broward Drainage District (SBDD). Engineering services included the preparation of paving, grading and drainage plans, details, sections, drainage calculations, etc. as necessary to address the proposed project's site/civil design, permitting and construction requirements.

City of Cocoa Beach CRA Minutemen Causeway - Miller Legg's solutions for the Minutemen Causeway project was a holistic design approach to improve the stormwater / drainage issues, while invigorating the area's economy by creating a pedestrian-oriented beachfront promenade and streetscapes. The project consisted of significant landscape beautification and geometric modifications to the corridor to promote a pedestrian-friendly environment and to stimulate economic development. In conjunction with the redevelopment, the project included low-impact stormwater facilities to meet the Total Maximum Daily Load reduction requirements, as outlined within the Indian River Lagoon Basin Management Action Plan. These stormwater improvements included pervious paver sidewalks and parallel parking, bio-swales with native vegetation, and underground stormwater infiltration facilities with nutrient absorption materials. The entire project was a City pilot program for Low Impact Design (LID) and Best Management Practices (BMP) for stormwater management. Utilizing this innovative approach, this project was able to secure significant funding from the State.

City of Coconut Creek Copans Road from Hammock Blvd. to Florida's Turnpike - Miller Legg was a prime consultant for design development of the medians within this 1.6-mile roadway corridor in conjunction with a City beautification enhancement project and provided sustainable landscape architecture, hardscape, irrigation, traffic control and surveying services.

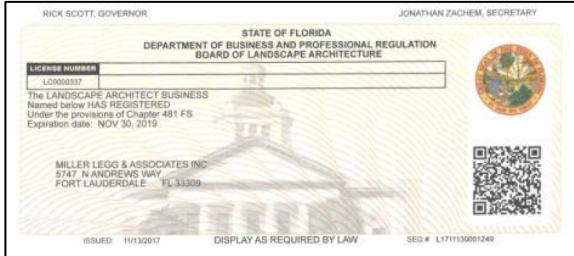
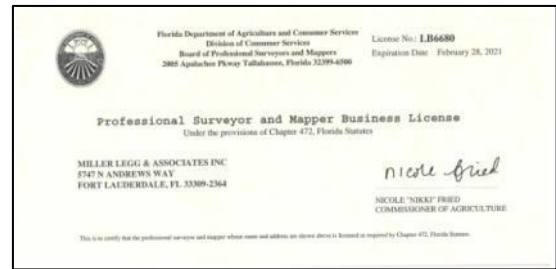
Florida Department of Transportation (FDOT) District 4 Andrews Avenue Expedited Tree Permitting - Under Miller Legg's multi-year Districtwide Landscape Design contract, the firm provided expedited tree permitting services along a one-mile segment of off-system roadway, Andrews Avenue from Atlantic Boulevard to north of Copans Road, in the City of Pompano Beach.

Florida Department of Transportation (FDOT) District 6 Biscayne Blvd. Way Drainage and Roadway Improvements - In conjunction with extensive drainage and roadway improvements, Miller Legg assisted A&P Transportation Engineering to create landscape and hardscape harmonization and improvement plans for a network of three urban roadways within Downtown Miami. This project was completed under a multi-year Districtwide Misc. PE Design contract.

Florida Department of Transportation (FDOT) District 6 Brickell Avenue Roadway and Pedestrian Enhancements - As part of a safety improvement project, Miller Legg assisted A&P Transportation Engineering to produce landscape and hardscape improvement plans for a 3-block area within the urban roadways of Downtown Miami including pedestrian enhancements such as wider sidewalks and crosswalk improvements. This project was completed under a multi-year Districtwide Misc. PE Design contract.



MILLER LEGG LICENSES AND CERTIFICATION



2019 - 2020
BROWARD COUNTY LOCAL BUSINESS TAX RECEIPT
115 S. Andrews Ave., Rm. A-100, Ft. Lauderdale, FL 33301-1895 - 954-831-4000
VALID OCTOBER 1, 2019 THROUGH SEPTEMBER 30, 2020

DBA: MILLER LEGG & ASSOCIATES INC
Business Name: MILLER LEGG & ASSOCIATES INC
Owner Name: MILLER LEGG & ASSOCIATES INC
Business Location: 5747 N ANDREWS WAY FT. LAUDERDALE
Business Phone:
Receipt #: 315-178
Business Type: FURNITURE (EXEMPTED CODE)
Business Opened: 08/19/1996
State/County/Cert/Reg: SB0007318
Exemption Code:

Signature	Number of Machines:	For Vending Business Only	Vending Type:	Total Paid
Tax Amount	Transfer Fee	NSF Fee	Penalty	Price Years
\$7.50	0.00	0.00	0.00	0.00

Receipt: BWN-18-00189773
Paid 09/12/2019 37.50

2019 - 2020
BROWARD COUNTY LOCAL BUSINESS TAX RECEIPT
115 S. Andrews Ave., Rm. A-100, Ft. Lauderdale, FL 33301-1895 - 954-831-4000
VALID OCTOBER 1, 2019 THROUGH SEPTEMBER 30, 2020

DBA: MILLER LEGG & ASSOCIATES INC
Business Name: MILLER LEGG & ASSOCIATES INC
Owner Name: MILLER LEGG & ASSOCIATES INC
Business Location: 5747 N ANDREWS WAY FT. LAUDERDALE
Business Phone:
Receipt #: 319-1169
Business Type: ALL OTHERS (STATE SECRETARY)
Business Opened: 08/19/1996
State/County/Cert/Reg: LB 0006680
Exemption Code:

Signature	Number of Machines:	For Vending Business Only	Vending Type:	Total Paid
Tax Amount	Transfer Fee	NSF Fee	Penalty	Price Years
\$7.50	0.00	0.00	0.00	0.00

Receipt: BWN-18-00189773
Paid 09/12/2019 37.50

2019 - 2020
BROWARD COUNTY LOCAL BUSINESS TAX RECEIPT
115 S. Andrews Ave., Rm. A-100, Ft. Lauderdale, FL 33301-1895 - 954-831-4000
VALID OCTOBER 1, 2019 THROUGH SEPTEMBER 30, 2020

DBA: MILLER LEGG & ASSOCIATES INC
Business Name: MILLER LEGG & ASSOCIATES INC
Owner Name: MILLER LEGG & ASSOCIATES INC
Business Location: 5747 N ANDREWS WAY FT. LAUDERDALE
Business Phone:
Receipt #: 319-1747
Business Type: ALL OTHERS (UNLICENSED)
Business Opened: 01/20/1999
State/County/Cert/Reg: LB 0009337
Exemption Code:

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Tax Amount	Transfer Fee	NSF Fee	Penalty	Price Years
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Receipt: BWN-18-00189773
Paid 09/12/2019 45.00

**State of Florida
Department of State**

I certify from the records of this office that MILLER, LEGG & ASSOCIATES, INC. is a corporation organized under the laws of the State of Florida, filed on March 15, 1995.

The document number of this corporation is P95000021117.

I further certify that said corporation has paid all fees due this office through December 31, 2020, that its most recent annual report/uniform business report was filed on January 13, 2020, and that its status is active.

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

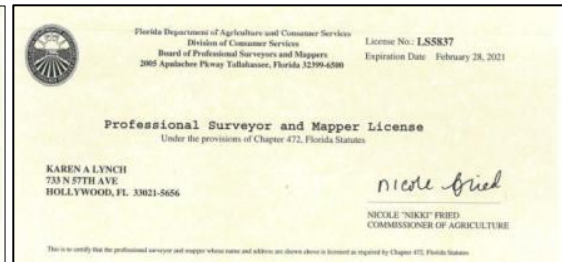
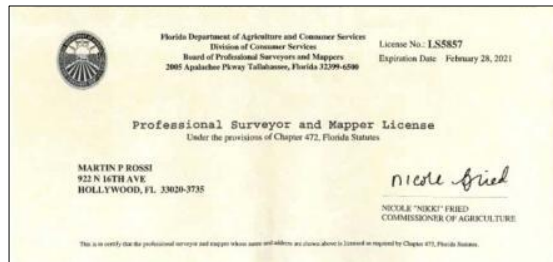
Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Thirtieth day of January, 2020


Randy A. Ponder
Secretary of State

Tracking Number: 858880345CC
To authenticate this certificate visit the following site, enter this number, and then follow the instructions displayed.
<https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication>



MILLER LEGG LICENSES AND CERTIFICATION



MILLER LEGG LICENSES AND CERTIFICATION



SERVICES

ENGINEERING

Streets & Highway Design
Master Planning & Engineering
Cost Estimating
Floodplain Analysis
Municipal Engineering
Parks & Recreation Design
Pavement Marking & Signage Design
Water Management Design & Permitting
Site Development Plans
Grading & Drainage Design & Permitting
Water & Sewer Design & Permitting
Pump Station Design & Permitting
Street Lighting Design
Engineering Reports & Evaluations
Earthwork Calculations
Contract Administration
Expert Witness Testimony
Plans Review

TRANSPORTATION ENGINEERING & PLANNING

Traffic Signal Design
Access Management and Circulation Design
Conceptual Design & Alternates Analysis
Maintenance of Traffic Design
Traffic Operations Design
School Flashers Design
Geometric Intersection Roadway Design
Pedestrian / Bicycle Pathways Design
Operational and Safety Studies
Corridor Planning Analysis
Site Evaluation / Due Diligence Analysis
Land Use Plan Amendments / DRIs
Neighborhood Traffic Calming Design
Parking Utilization and Operational Studies
Traffic Concurrence and Growth Management Traffic

ENVIRONMENTAL ENGINEERING

Regulatory Compliance Evaluations
Environmental Permit Processing

PLANNING

Land Planning
Community Planning
Parks and Recreation Planning & Design
Site Planning Design & Processing Comprehensive Planning
Development Plans Review
Development of Regional Impact Studies
Land Use Plan Amendments
Rezoning Applications
Concurrency Studies
Due Diligence Studies
Plat Preparation & Processing
Community Relations
Grant Applications/Writing

LANDSCAPE ARCHITECTURE

Landscape Planning & Design
Hardscape & Feature Design
Greenway Design
Streetscape Design
Urban Revitalization
Planting Design
Irrigation Design
Signage Design
Graphic Design & Presentation
Crime Prevention Through Environmental Design
Recreation Facilities Design
Habitat Restoration

ENVIRONMENTAL CONSULTING SERVICES

Consulting Arborist Services
Wetlands Investigations & Delineations
Jurisdictional Determinations
Threatened & Endangered Species Assessments & Permitting
Habitat Assessment & Restoration Planning
Environmental Due Diligence
Management Plans
NPDES Compliance
Stream Restoration
Water Quality Monitoring & Compliance
Wildlife Surveys
Seagrass & Coral Reef Surveys
Mitigation Feasibility Studies
Mitigation Design, Planning & Construction Observation
Mitigation Banking
Value Ecological Engineering
Cost Evaluation & Scheduling
Environmental Permit Processing
Mitigation Monitoring & Compliance
Protected Upland & Tree Permitting
Ecosystem Analysis
Floodplain Analysis & Reevaluation
Uniform Mitigation Assessment Method (UMAM)

SURVEYING

Subsurface Utility Engineering
Land Surveys
Boundary Surveys
Land Title Surveys
Route Surveys
Right-of-Way Surveys
Design & Control Surveys
Construction Layout
Planning & Platting
Topographic Surveys
Tree Surveys
Hydrographic Surveys
As-Built Surveys
Quantity (Earthwork) Surveys
Condominium Surveys
Land Descriptions
Title Document Analysis
Plot Plans
Expert Witness Testimony
GPS Data Collection
GPS Control Networks

GEOGRAPHIC INFORMATION SYSTEMS

Feasibility & Implementation Studies
Municipal Asset Management
GPS Data Collection & System Design
GIS/GPS Integration
GIS Database Design
Environmental Modeling
Wetland Delineation & Modeling
Remote Sensing Application
Data Conversion & Processing
Map Production

CONSTRUCTION SERVICES

Client Representation
Construction Management
Scheduling
Contract Administration
Construction Monitoring
Construction Management Services (CMS)
CMS - Pipeline
CMS - Roadway
CMS - Land Development
CMS - Pump Station
CMS - Sewer/Drainage
CMS - Excavation & Fill



LANDSCAPE ARCHITECTURE

Miller Legg's Landscape Architects have created quality spaces through functional designs, site-sensitive planning, and aesthetic enhancements for residential developments, recreational amenities, commercial facilities, urban centers and transportation corridors.



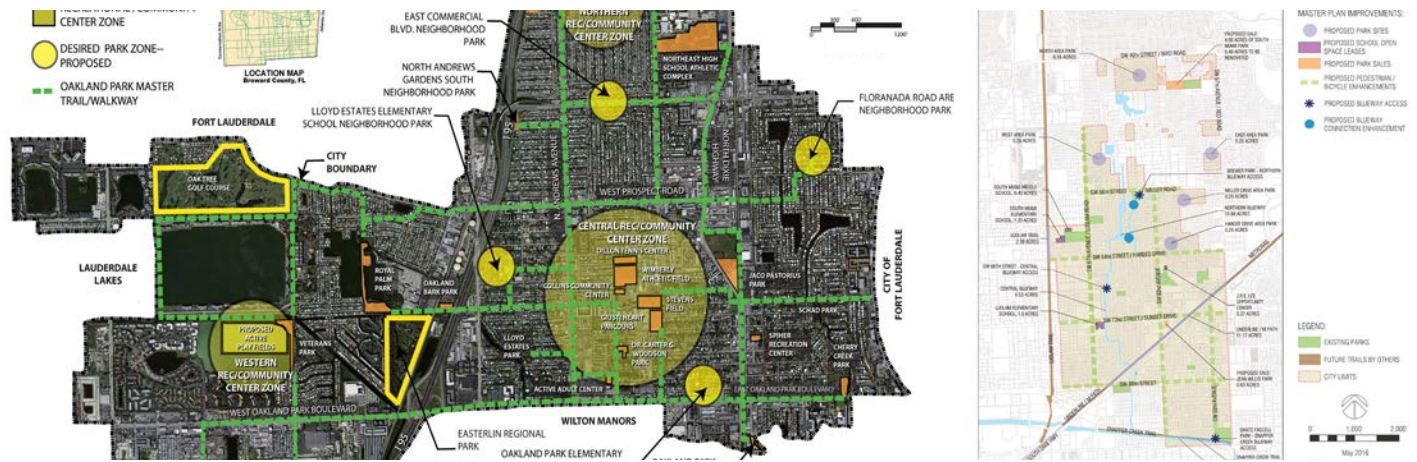
Although economically productive, commercial developments, enhanced transportation corridors, livable communities, and sustainable ecosystems are vastly different. The design process used to develop and implement these projects is the same. Miller Legg has been successful in the design of these and other landscape architectural projects for both public and private sector clients.

Miller Legg's landscape architecture staff consists of registered landscape architects, graphic designers, technicians, irrigation specialists and field personnel. Utilizing this team design approach, the firm has received numerous regional and local landscape architecture design awards for a variety of projects.

LANDSCAPE ARCHITECTURE

Landscape Planning & Design
 Hardscape & Feature Design
 Greenway Design Streetscape
 Design
 Urban Revitalization Planting
 Design
 Irrigation Design
 Signage Design
 Graphic Design & Presentation
 Crime Prevention Through
 Environmental Design Recreation
 Facilities Design
 Habitat Restoration





PLANNING

Balance between aesthetics, economics, and environmental concerns is the result of successful land planning. It is during this formative stage that potential is realized, and vision takes shape. Our planning services include assisting in development plan permitting, comprehensive planning, planning studies, and prescribing land use designs, as well as strategies for obtaining their approvals.

The planning staff of Miller Legg consists of experienced professionals dedicated to translating your goals into economically sound, environmentally responsible, and visually creative projects. Our experience with local, county, regional and state planning agencies, together with our in-depth knowledge of environmental and site engineering, results in a streamlined design process and expedited permit approvals for you.

PLANNING

Land Planning

Community Planning

Parks and Recreation Planning & Design

Site Planning Design & Processing

Comprehensive Planning

Development Plans Review

Development of Regional Impact Studies

Land Use Plan Amendments

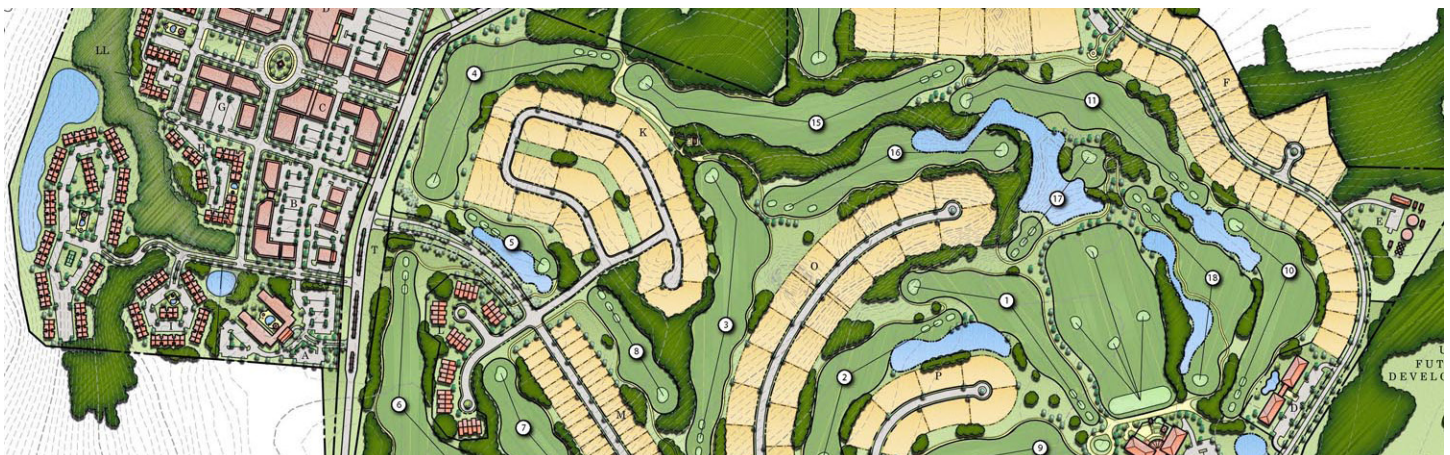
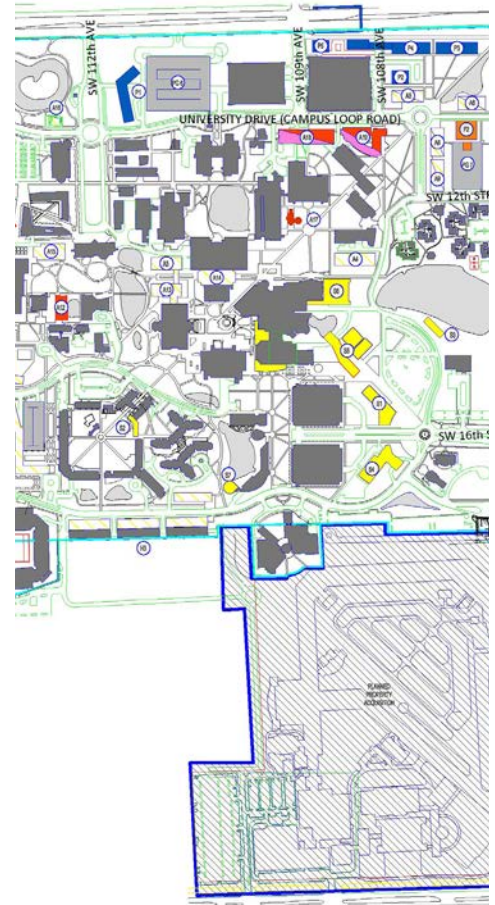
Rezoning Applications

Concurrency Studies

Due Diligence Studies

Plat Preparation & Processing

Community Relations





ENGINEERING

Engineering is a key element in land development. Utilizing a firm with a vast amount of consulting experience in Florida and one that has thorough knowledge of site engineering requirements from local, county, regional and state agencies, can prove to be the key to one's success. We want our clients to think of us as an extension of their own offices.



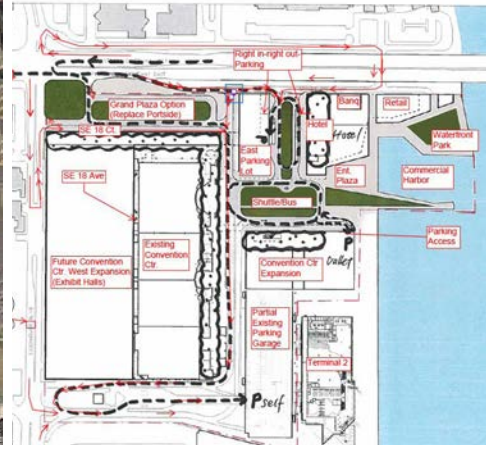
Miller Legg's professionals are here to serve your consulting engineering needs in areas such as studies, design and permitting of streets and roadways, traffic, water management, pavements, drainage, water and sewer systems and pump stations, construction services and contract administration, just to name a few. Projects schools, institutions, streets and highways, parks and other public-sector facilities.

The firm has extensive computer capabilities and Computer Aided Drafting and Design (CADD) personnel able to efficiently generate clearly detailed and precise engineering plans.

ENGINEERING

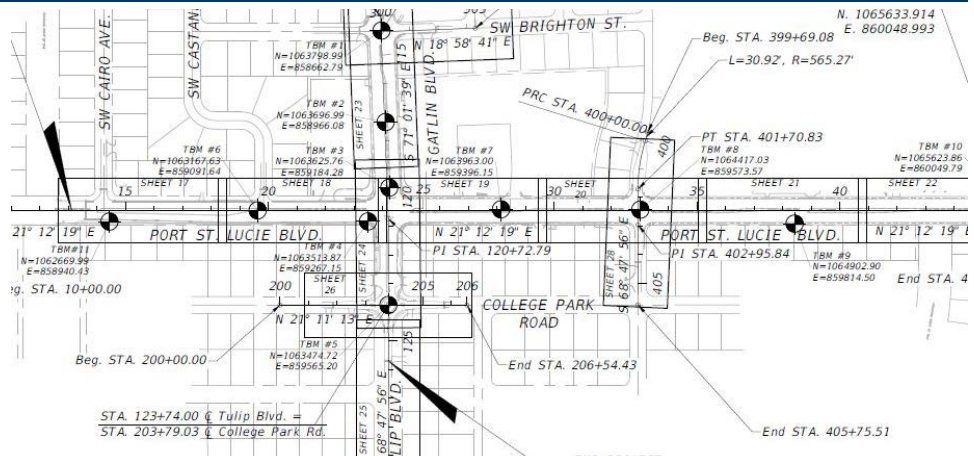
Streets and Highway Design
 Master Planning and Engineering
 Cost Estimating
 Value Engineering
 Municipal Engineering
 Parks & Recreational Design
 Pavement Marking and Signage Design
 Water Management Design and Permitting
 Site Development Plans
 Grading & Drainage Design and Permitting
 Water and Sewer Design and Permitting
 Pump Station Design and Permitting
 Street Lighting Design
 Engineering Reports & Evaluations
 Earthwork Calculations
 Floodplain Analysis
 Contract Administration
 Expert Witness Testimony
 Plans Review





TRAFFIC AND TRANSPORTATION ENGINEERING

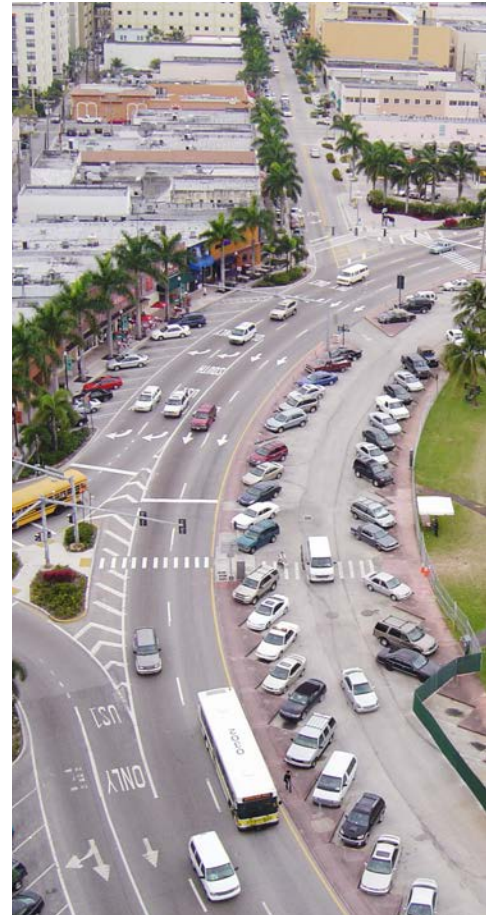
Safe and efficient transportation systems are fundamental to the economic vitality of our State and are a key element in the planning and implementation of every land development project. We provide a wide range of services to both corporate and governmental clients related to the planning, study, design and implementation of transportation system needs for our communities.



Miller Legg's professionals can assist you in the areas of traffic impact analysis for new development, access management and permitting, traffic operations analysis and design, corridor planning analysis, neighborhood traffic calming studies and design, signalization design, comprehensive planning, and parking utilization studies. We pride ourselves on innovative approaches to solve the complex transportation challenges faced by our clients.

TRAFFIC AND TRANSPORTATION ENGINEERING

Traffic Impact Analysis
 Intersection Operations Analysis
 Traffic Signal Design
 Access Management and Circulation Design
 Transportation Regional Modeling
 Conceptual Design & Alternates Analysis
 Maintenance of Traffic Design
 Traffic Operations Design
 School Flashers Design
 Geometric Intersection Roadway Design
 Pedestrian / Bicycle Pathways Design
 Operational and Safety Studies
 Corridor Planning Analysis
 Site Evaluation / Due Diligence Analysis
 Land Use Plan Amendments / DRIs
 Neighborhood Traffic Calming Design
 Parking Utilization and Operational Studies
 Traffic Concurrency and Growth Management
 Traffic Congestion Analysis and Design





ENVIRONMENTAL SERVICES

Meeting the regulatory challenges presented by current federal, state and local environmental agencies requires specialized knowledge and skillful negotiation. Utilizing a consulting firm with a vast amount of experience in governmental permitting will provide substantial added value to your project.

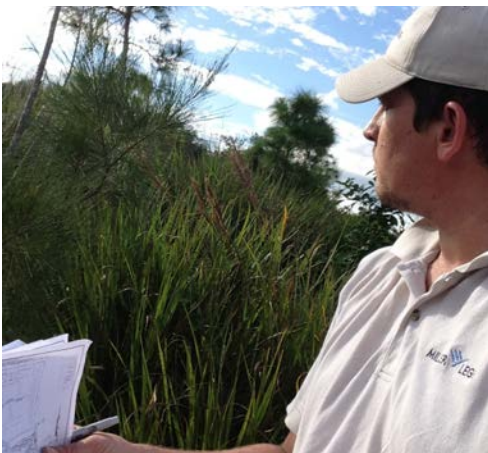


Miller Legg, in partnership with our clients, skillfully finds solutions to the wetlands environmental permitting maze. By utilizing the best management practices and providing problem solving and negotiating expertise, we meet the goals and objectives of both public and private sector clients.

Our environmental professionals have comprehensive experience in wetland delineations, wildlife surveys, mitigation feasibility studies, environmental assessments and audits, mitigation design, planning and construction observation, value engineering, cost evaluation and scheduling, and environmental permitting for both public and private-sector clients.

ENVIRONMENTAL SERVICES

Wetlands Investigations & Delineations
Jurisdictional Determinations
Wildlife Surveys
Seagrass & Coral Reef Surveys
Mitigation Feasibility Studies
Mitigation Design, Planning & Construction Observation
Mitigation Banking
Value Ecological Engineering
Cost Evaluation and Scheduling
Environmental Permit Processing
Mitigation Monitoring and Compliance
Upland Tree Permitting
Ecosystem Analysis
Floodplain Analysis





SURVEYING AND MAPPING

Traveling the most efficient route takes knowing where you are, as well as where you are going. An accurate start on your journey will assure a timely arrival at your destination. Our extensive platting, surveying and mapping capabilities and state-of-the-art resources can provide a clear path to the natural and built environment.



Miller Legg employs the use of total stations and an electronic data collection system to gather field survey data. In addition, we have extensive experience with Global Positioning Systems (GPS) technology, using both static and Real Time Kinematic (RTK) for our survey projects. This information is then downloaded into our Local Area Network (LAN), which can be accessed through our Wide Area Network (WAN), and processed through our sophisticated coordinate geometry applications. Our state-of-the-art resources also provide us with the ability to transform this data into integrated, interactive mapping databases called Geographic Information Systems (GIS).

The firm has extensive state-of-the-art computer equipment and Computer Aided Drafting and Design (CADD) personnel able to generate clearly detailed and precise development plans.

SURVEYING AND MAPPING

Subsurface Utility Engineering

Land Surveys

Boundary Surveys

Land Title Surveys

Route Surveys

Right-of-Way Surveys

Design and Control Surveys

Construction Layout

Planning and Platting

Topographic Surveys

Tree Surveys

Hydrographic Surveys

As-Built Surveys

Quantity (Earthwork) Surveys

Condominium Surveys

Land Descriptions

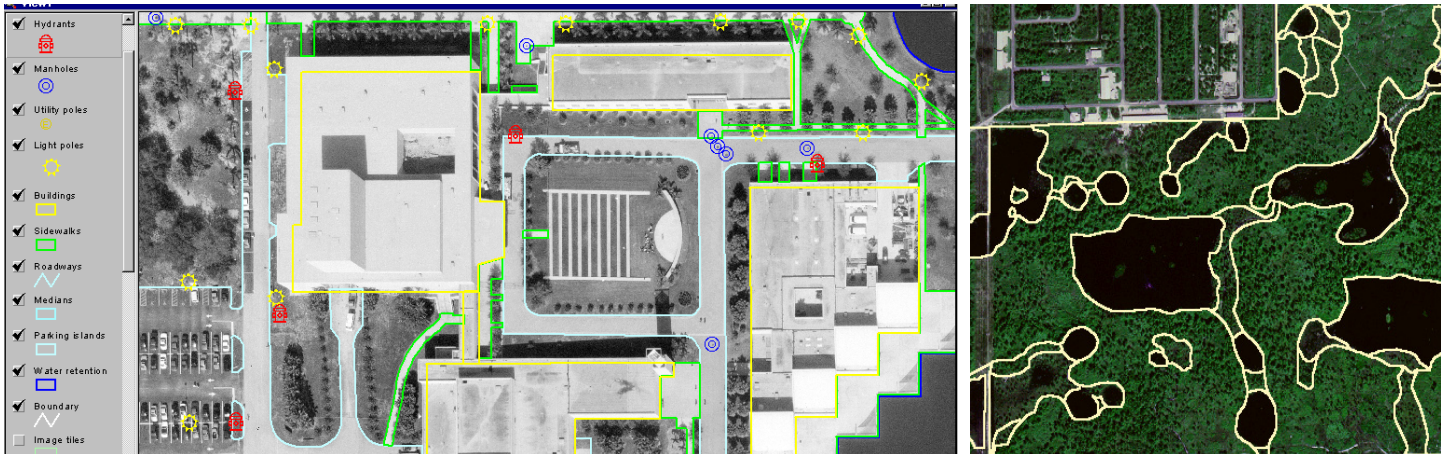
Title Document Analysis

Plot Plans

Expert Witness Testimony

GPS Data Collection





GEOGRAPHIC INFORMATION SYSTEMS

Geographic Information Systems (GIS) are computer-based systems used to store and manipulate geographic (spatial) information. GIS technology provides a better understanding of the “big picture” through consolidation, organization and visualization of spatial data. Successful GIS implementation requires careful planning, foresight and a thorough knowledge of GIS hardware and software solutions. Our GIS department offers the tools and services required to make your GIS project successful.



Miller Legg’s GIS professionals are experienced in GIS consulting, base mapping, design and implementation. Our team offers a wide variety of services including municipal asset management, environmental modeling, database maintenance and design, Global Positioning System (GPS) data collection, and map production. Working closely with you, together we determine your needs and develop a specific solution.

Our GIS and environmental professionals bring their combined experience to meet your modeling, wetland delineation, vegetation mapping, and land use classification needs. We also meet the varied precision agriculture needs of farmers and agricultural consultants with boundary mapping, crop assessment, variable rate application mapping, automated data collection, monitoring, and customized programming services.

Bringing GIS to your organization is a manageable, complex process and requires experienced, highly skilled professionals. Partnering with Miller Legg will ensure the success and value of your GIS investment.

IMPROVING COMMUNITIES. CREATING ENVIRONMENTS.

GEOGRAPHIC INFORMATION SYSTEMS

Feasibility and Implementation Studies

Municipal Asset Management

GPS Data Collection & System

Design GIS/GPS Integration

GIS Database Design

Environmental Modeling

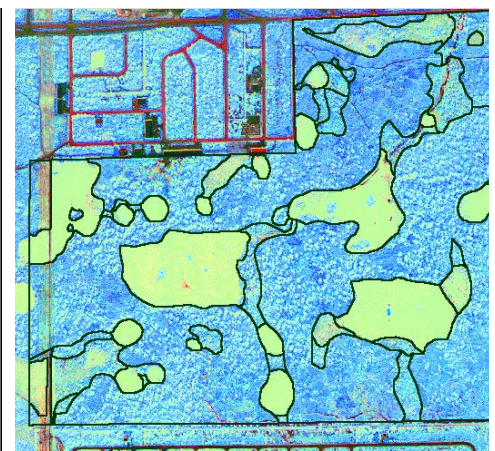
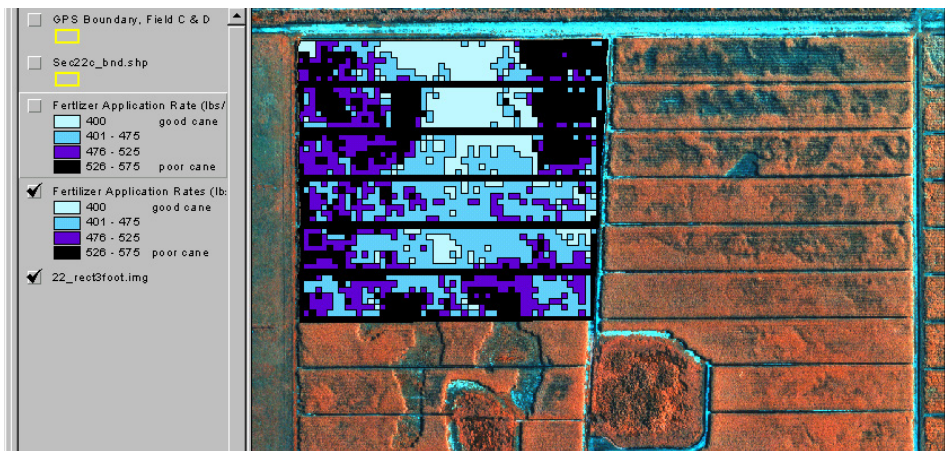
Wetland Delineation & Modeling

Precision Agriculture Solutions

Remote Sensing Application

Data Conversion & Processing

Map Production



Financial Information

Miller Legg is a privately owned and operated organization and our financial statements are not readily available to the public. We ask that the financial information attached in a separate unbound envelope REMAIN CONFIDENTIAL and not be disclosed to the public as per Florida Statutes Section 119.071(1)c.



As you will see in our project details and references below with similar nature, scope and duration, Miller Legg has extensive experience collaborating successfully as a prime firm with numerous agencies throughout South Florida. In addition, we have included significant relevant project experience and references from our two key subconsultants, WSP and Baxter Woodman.

Reliability and client satisfaction are the cornerstones of the way the Miller Legg Team conducts business. The Team has a strong reputation for providing clients with PERs, designs, permits, and construction documents that have the highest quality, therefore minimizing claims, supplemental agreements and construction delays.

The Miller Legg Team has worked successfully with local municipalities, BCWWS, BCEPGM, M-D County WASD, FDOT, MDX, Florida Turnpike Enterprise, MD-PWD and RER - DERM.

Miller Legg is well-respected for successfully delivering quality projects on time and within budget, while exceeding the satisfaction and expectation of its clients.



Miami-Dade Co. WASD Improvement, Upgrades and Expansion of Local Wastewater Pump Stations and Related Facilities

Miller Legg was selected by Miami-Dade County Water and Sewer Department (WASD) for a 7-year engineering design and ancillary services contract associated with the improvement, upgrade and expansion of local County wastewater pump stations

Role: Prime Consultant

Scope: Surveying, civil, design, utility coordination, permitting, procurement, inspections, construction, public outreach

Contract Value: \$1,500,00

Contract Start: 8/2017 / Anticipated Completion: 8/2024

Owner Contact: Juan Curiel / ☎ 786-552-8399

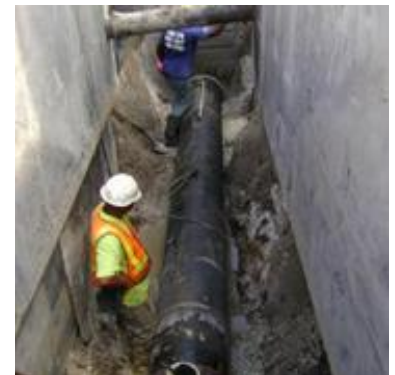
✉ Juan.curiel@miamidade.gov

Miami-Dade County WASD

111 NW 1st Street, Miami, FL 33128

Change Orders: None / Turnaround Time: 48 hours

and related facilities under WASD's capital improvement program. These services are necessary to renew and replace the existing deteriorated system and/or relocate as necessary to bring local sewage pump stations into compliance with State and Federal regulations as well as accommodate future growth and development. Projects include rehabilitation or replacement of existing pump stations or the construction of new sewage pump stations in the range of 50-2,000 gallons per minute. Scope includes upgrading pump stations from dry well/wet well configurations to standard submersible stations, involving new pumps, piping, wet wells and valve vaults. Miller Legg has so far worked on **five (5) pump station projects** under this contract.



City of West Palm Beach 32nd Street and 33rd Street Utility Improvements

Surveying, underground utility locates, geotechnical engineering, civil engineering design and bidding assistance services for a 2,700 LF water and 2,000 LF gravity sewer 8" water main replacement project on 32nd Street and 33rd Street from Floral Avenue to N. Flagler Drive and on N. Flagler Drive from 32nd Street to 35th Street in the historic Northwood Shores district. The existing water mains are transite, undersized, and have reached the end of their useful life. The Basis of Design report and development of 30% plan scope involved the assessment of water main replacement, sanitary sewer replacement/relocation (from rear yard to street on 2 streets) and evaluation of storm drainage improvements. The project is located approx. 6,850 ft. north of Palm Beach Lakes Blvd. on the west side of N. Flagler Drive. Public outreach with affected residents was undertaken and their concerns documented in advance of the construction phase.

Role: Prime Consultant
Scope: Civil, Surveying, Permitting, Public Outreach
Contract Value: \$328,608
Contract Start: 5/2017 / Completed: 8/2019
Contact: Edna Bonelli, PE / ☎ 561-494-1157
✉ ebonelli@wpb.org
City of West Palm Beach
401 Clematis Street, West Palm Beach, FL 33401
Change Orders: None / Turnaround Time: 48 hours



Miami Dade College North Campus Water Loop Civil & Survey

As part of the Miami Dade College (MDC) North Campus Water Loop Phase II project, Miller Legg was retained to provide survey and engineering services for the required Design Criteria package and preliminary engineering plans for ± 4,500 LF of 12" ductile iron pipe fire line and 5,500 LF of 12" potable water line. MDC is enhancing the existing water infrastructure by replacement of its internal water/fire main system and creation of a campus-wide loop. The firm's survey services cover topographic, as-builts and record drawings. Engineering services include preparation of a 30% engineering plan, a comprehensive Design Criteria report in addition to RFQ evaluation and bidding assistance. Miller Legg is also providing final construction plans for the project. This scope includes an updated topographic survey, underground utility designation and vacuum excavation services, engineering design, permitting and engineering services during construction for 17,000 LF of water and fire main.

Role: Prime Consultant
Scope: Civil, Survey, LA, Construction Administration
Contract Value: \$200,300
Contract Start: 7/2018 / Anticipated Completion: 2021
Contact: Eneida Perez-Mendez ☎ 305-237-2852
✉ eperezme@mdc.edu
Miami Dade College
11011 SW 104 Street, Miami, FL 33176
Change Orders: None / Turnaround Time: 48 hours





Seminole Tribe of Florida Seminole Park Neighborhood Infrastructure Improvements

Role: Prime Consultant
 Scope: Civil, Survey, Environmental, Traffic, Construction Administration
 Contract Value: \$ 1,013,286
 Contract Start: 1/2018 / Anticipated Completion: 12/2020
 Contact: Fabian Lefler ☎ 954-894-1060 x 10902
 ✉ fabianlefler@semtribe.com
 Seminole Tribe of Florida
 6300 Stirling Road, Hollywood, FL 33024
 Change Orders: None / Turnaround Time: 48 hours

Miller Legg is providing engineering design and post-design construction administration services for a neighborhood development site on the Hollywood Seminole Indian Reservation. Services include: boundary and topographic survey, Certified Arborist assessment,



tree inventory and assessment, stormwater engineering, water and sewer, NEPA evaluation, environmental assessment and a traffic study, as well as single family and multi-family lot layout, traffic circulation and permitting. Post-design phase services being provided include site demolition observation, site development and construction inspections, contractor pay applications review and approval, shop drawing review and approval, as-built drawings review and approval. The firm had previously conducted a review and inventory of the neighborhood water and sewer infrastructure.



Miami-Dade Co. WASD Pump Station Improvement Project Improvement Program

Miller Legg has provided survey and subsurface utility engineering services as well as engineering services related to utility field coordination and pump station layout field verification for **12 pump stations under this contract**. Projects involved demolition of existing and installation of new pump stations. In order to meet the WASD requirements under the program, survey services included sanitary sewer right of way corridor identification, topographic, property boundary and legal descriptions. Under a consent decree with the Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP), each pump station must be certified as capable of meeting a nominal average pump operating time. Pump stations exceeding the criteria must have a Remedial Action Plan (RAP) in place to allow future building permits to be issued for connections to the WCTS upstream of that station.

Role: Subconsultant
 Scope: Surveying, SUE, Utility Engineering
 Contract Value: \$150,000
 Contract Start: 6/2014 / Completed: 6/2020
 Contact: Gustavo Silva ☎ 954-613-4353
 ✉ gsilva@cesconsult.com
 CES Consultants
 880 SW 145th Avenue, Suite 106, Pembroke Pines, FL 33027
 Change Orders: None / Turnaround Time: 48 hours





WEST PALM BEACH

City of West Palm Beach Congress Avenue Water Main Relocation

Miller Legg provided civil engineering, construction administration and surveying services for the City of West Palm Beach for the design and general contractor assistance of a water main relocation project on Congress Avenue at the City's "F" Canal. Relocation of the existing 10" water main was required to accommodate a Palm Beach County (County) Roadway

Improvement project, which included replacement of the existing Congress Avenue "F" Canal Bridge with a double 66" RCP culvert system. Of the 300 LF of 12" water main, 26 LF is sleeved under a Lake Worth Drainage District canal. The existing 10" water main is attached to the underside of the existing bridge that will be demolished. In addition, Miller Legg designed a steel sleeve to navigate under the City's Canal F to allow for future maintenance requirements, pipe protection during future dredging/maintenance and ease of installation. Construction phase services included 3 times weekly site inspections, construction document clarification, change order response, shop drawing and sample review and approval, special inspections or testing, contractor pay application review, completion document review.

Role: Prime Consultant
 Scope: Civil, Surveying, Construction Administration
 Contract Value: \$ 85,334
 Contract Start: 4/2017 / Completed: 6/2018
 Contact: Edna Bonelli, PE / ☎ 561-494-1157
 ✉ ebonelli@wpb.org
 City of West Palm Beach
 401 Clematis Street, West Palm Beach, FL 33401
 Change Orders: None / Turnaround Time: 48 hours



Monterra Water & Sewer Utilities

Role: Prime Consultant
 Scope: Full suite of civil engineering services including paving, drainage, grading, water and sewer, construction services, as well as traffic engineering, surveying and environmental services
 Contract Value: \$ 1,266,585
 Contract Start: 4/2004 / Completed: 1/2015
 Contact: James Wright ☎ 786-453-3013
 ✉ jwright@cchomes.com
 CC Homes
 2020 San Lorenzo Avenue, Suite 200, Coral Gables, FL 33134
 Change Orders: None / Turnaround Time: 48 hours

Full civil engineering services for this 526-acre residential community in Cooper City included establishment of a CDD, drainage, earthwork, water and sewer, road permitting, paving, and construction administration. The master utility design for Monterra included a

network of 5 lift stations, 29,500 LF of gravity sewer, 8,700 LF of force main, and 43,000 LF of water main. The Drainage Master Plan included an interconnected lake system with just under 11,000 LF of concrete culvert, the expansion of two CBWCD canals and a master control structure. Miller Legg prepared the master plan, modeling for current and future uses, prepared construction documents and managed the permitting of all main utility systems for this project.

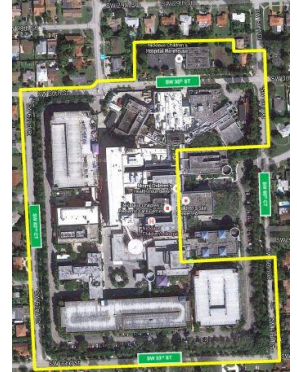


Design Phase II continued with Miller Legg providing additional design and consulting services which include, but were not limited to: land surveying, planning services, environmental services, permitting, construction services, traffic engineering, civil engineering services and construction assistance.

Nicklaus Children's Hospital Campus Utility Infrastructure and Master Plan

Miller Legg prepared the Nicklaus Children's Hospital Campus water, sewer and drainage infrastructure Master Plan. The firm analyzed the needs and future improvements required to facilitate the 10-year Facility Master Plan of over 500,000 SF of additional hospital and ancillary uses. The scope of services began with an inventory and assessment report of the existing civil utility infrastructure. Miller Legg subsequently reviewed the proposed campus improvements and prepared a utility infrastructure master plan to address the existing and proposed water distribution, sanitary sewer collection and stormwater management (drainage) systems. A summary of the required permitting process and timeframe was included. These recommendations, narratives, plans and exhibits were incorporated into the Master Plan. The firm also provided boundary & topographic survey and subsurface utility engineering services during this project.

Role: Prime Consultant
 Scope: Civil, Survey
 Contract Value: \$ 176,400
 Contract Start: 6/2016 / Completed: 9/2017
 Contact: Lourdes San Pedro ☎ 305-662-8226
 ✉ lourdes.sanpedro@mch.com
 Nicklaus Children's Hospital
 3100 SW 62nd Avenue, Miami, FL 33155
 Change Orders: None / Turnaround Time: 48 hours



Florida International University Biscayne Bay Campus Lift Station

Miller Legg is providing site engineering design and construction phase services for sewer assessment/planning and design of a new lift station as a result of the existing lift station deficiency in required pressure for current and future campus conditions. The project is located at the FIU Biscayne Bay Campus in North Miami. The firm is evaluating whether the current infrastructure and lift station capacity (including pumps, work pressure, location) is sufficient to facilitate anticipated future campus improvements. Permitting will be coordinated with Miami-Dade County Public Works Department, Waste Management Department and the City of North Miami. Design services will be followed by construction observation of pump installation, underground piping and site civil improvements and closeout services. Landscape design was also provided to screen the pump station from the parking lot and surrounding view points.

Role: Prime Consultant
 Scope: Infrastructure Assessment, Design, Construction Observation
 Contract Value: \$ 171,170
 Contract Start: 10/2018 / Anticipated Completion: 12/2020
 Contact: Ivan Macchi ☎ 305-348-4036
 ✉ macchii@fiu.edu
 Florida International University
 11200 SW 8 Street, Miami, FL 33199
 Change Orders: One / Turnaround Time: 48 hours





PROJECT EXPERIENCE TIME AND BUDGET ANALYSIS

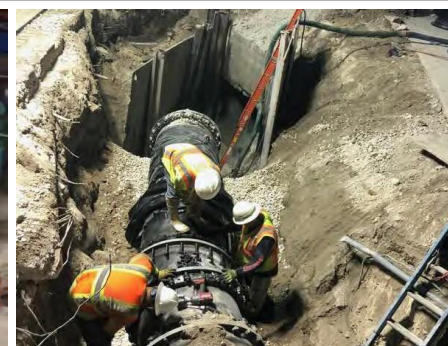
Project Name	Contract Start Date	Contract End Date	Estimated Costs	Actual Costs
Miami-Dade Co. WAST Improvement, Upgrades and Expansion of Local Wastewater Pump Stations and Related Facilities	August-17	August-24	\$ 1,500,000	ongoing
City of West Palm Beach 32nd Street and 33rd Street Utility Improvements	March-17	August-19	\$ 1,290,000	under construction
Miami Dade College North Campus Water Loop Civil & Survey	July-18	July-21	\$ 4,496,515	ongoing
Seminole Tribe of Florida Seminole Park Neighborhood Infrastructure Improvements	January-18	December-20	\$ 10,900,000	under construction
Miami-Dade Co. WAST Pump Station Improvement Project Improvement Program	June-14	June-20	\$ 74,429 fees	NA
City of West Palm Beach Congress Avenue Water Main Relocation	April-17	June-18	\$ 400,000	\$ 400,000
Monterra Water & Sewer Utilities	April-04	January-15	\$ 1,266,585 fees	NA
Nicklaus Children's Hospital Campus Utility Infrastructure and Master Plan	June-16	September-17	\$ 176,400 fees	NA
Florida International University Biscayne Bay Campus Lift Station	October-18	December-20	\$ 850,000	under construction
City of West Palm Beach Gregory Road Green Streets LID Sanitary Sewer & Stormwater	August-17	August-19	\$ 284,688	\$ 299,709



FIRM'S PAST EXPERIENCE

48-Inch Water Main at Downtown Miami “The Loop”

Miami, FL



The City of Miami’s Downtown Loop Central Business Area is predominantly serviced by undersized water mains. These pipes have long exceeded their design life. For this two-phase, 48-inch water main project, WSP provided the Design for the design-build services for the interconnection of the Hialeah/Preston (North service area) and Alexander Orr (South service area) water systems. Phase One consisted of a proposed 4,000-linear-foot,

48-inch water transmission main located along NW 1st Place from NW 17th Street to NW 12th Street and a 30-inch water transmission main located west of All Aboard Florida passenger station to NW 1st Court. Phase Two consists of a proposed 1,200 linear feet, 36-inch water transmission main along 5th Street from approximately NW 1st Avenue to the east side of Biscayne Boulevard.

Principal Elements/Special Features: The design approach focused on providing the required facilities in the most cost effective means possible, while safely minimizing the impacts to the area and its stakeholders. The design included a microtunnel approximately 180 feet under the FEC railroad at NW and 12th Street. Launch and retrieval shafts have been positioned so that each is accessible for ease of operation and safety of the workers, motorists and pedestrians and to route traffic safely around the work area. The locations of the shafts were defined to allow hauling operations to be conducted with minimum impact. This project also entailed designing around a large mix of existing utilities within a small corridor.

Team Member

WSP (Lead Designer, Design-Build)

Date of Services

July 2018 - July 2019

Project Status

This project is complete.

Project Budget

Original Budget:\$9,309,864 Final Cost: \$9,031,199

Client / Point of Contact Familiar with Project

Miami-Dade Water & Sewer Department Carlos Baro
3071 SW 38th Avenue
Miami, FL 33146
(P) (786) 552-4366
(E) Carlos.Baro@miamidade.gov

Government Cut Utility Relocation Project

Miami, Florida

The major driving force for replacement of the 54-inch force sanitary force main crossing under Government Cut and 20-inch water main crossing under Fisherman's Channel is the U.S. Army Corps of Engineers' (USACE's) Miami Harbor Government Cut Federal Navigation project. This USACE project is required to deepen the navigation channel into PortMiami. The deepening of the navigation channel requires that the existing 54-inch sanitary sewage pre-stressed composite concrete pipeline and 20-inch ductile iron water main be replaced in advance of the USACE Miami Harbor project. The existing 54-inch sanitary force main is a critical pipeline transmitting all sewage collected from Miami Beach, Surfside, Bal Harbor, North Bay Village and from the existing pump station (PS 170) on Fisher Island to the Central District Wastewater Treatment Plant (CDWWTP) for treatment and disposal. Any interruption of flow through this pipeline would cause raw wastewater discharges offshore (via an existing 48-inch emergency overflow in Miami Beach on 54th Street) and result in significant economic and environmental damage to the region.

WSP provided construction management services for the relocation of the 24-inch water main and 54-inch to 60-inch force main under Government Cut using horizontal directional drilling and microtunneling construction methods. The firm also provided review of design submittals, as well as coordination of all field inspections for compliance with design documents, applicable standards and contract conditions.

Principal Elements/Special Features:

- The project involved work in environmentally and socially sensitive areas under difficult site/ground conditions
- Involved numerous stakeholders with competing interests
- Project completed under risk of catastrophic failure of existing system



Team Member

WSP (performed CEI)

Date of Services

October 2013 - February 2016

Project Status

This project is complete. New line was placed without incident.

Project Budget

Original Budget: \$22,543,550.26 Final
Cost: \$9,613,480.64
Deductive change order was issued to the Contractor for reduction in quantities

Client / Point of Contact Familiar with Project

Miami-Dade Water & Sewer Department
I. Gary Clarke
3071 SW 38th Avenue
Miami, Florida 33146
(P) (786) 268-5126
(E) gycrk@miamidade.gov

City of Miami Beach, KB-52 Stormwater Pump Station at 19th Street

Miami, Florida



Work under this project comprises the design, permitting and construction of a new 80 million gallon per day (MGD) stormwater pump station and ancillary site infrastructure and discharge facilities. In addition to the pump station components and electrical infrastructure to power the station, construction-related services also include site preparation, earthwork, dewatering, storm drainage infrastructure installation, parking reconstruction, utility adjustments, landscaping and seawall modifications on the south side of the Collins Canal between Convention Center Drive and Meridian Avenue.

The scope of work included cofferdams design and implementation for 30-foot-deep shafts for the pump station and treatment units. These shafts are similar in footprint and depth to the microtunneling shafts required in this solicitation

The project included design and construction of a deep (30-foot) stormwater pump station, including a 45- by 50- by 30-foot-deep watertight cofferdam to accommodate the pump station trash rack, treatment units, four 20,000 Gpm submersible variable speed flyat pumps contained within precast structures to combat flooding events at the new convention center and surrounding areas.

Principal Elements/Special Features:

- Project included four 32-inch pumps discharge pressurized pipes
- Project included deep cofferdam, 40 feet by 50 feet at 30 feet deep, similar in size to large microtunnel shafts
- Dewatering permits for excavation of the shafts
- Work performed in a crowded urban environment

Team Member

WSP (Lead Designer, Design-Build)

Date of Services

January 2018 - November 2018

Project Status

This project is complete.

Project Budget

Original Budget: \$6,332,390 Final Cost: \$7,516,549

Client / Point of Contact Familiar with Project

City of Miami Beach
Sabrina Baglieri
1700 Convention Center Drive
Miami Beach, Florida 33139 (P)
(786) 383-9319
(E) SabrinaBaglieri@miamibeachfl.gov

42-Inch Water Main to PortMiami

Miami, Florida



WSP is responsible for the design of a proposed 42-inch transmission main that will interconnect with a future 36-inch stub-out (Downtown Loop Project) located at the intersection between Biscayne Boulevard (SR 5/US-1) and North West 5th Street and PortMiami. The proposed transmission main takes into consideration future system expansion and improvements identified in PortMiami's Master Plan.

This project consists of furnishing and installing approximately 9,740 linear feet of 42-inch ductile iron pipe and fittings; a 42-inch mechanical joint resilient seated wedge gate valve; a venturi meter, including valve and fittings, manhole frame and cover, valve box, quick disconnect and concrete support slab; and making an inline connection to a proposed 36-inch water main at Biscayne Boulevard. It entails approximately 260 linear feet of microtunneling under existing FEC railroad right-of-way with steel casing, drill shafts and proposed area of construction, and approximately 4,600 linear feet of twin 30-inch HDPE HDD subaqueous channel crossing along Biscayne Bay from Bayside to PortMiami (approximately 2,000 linear feet HDPE/each)

Principal Elements/Special Features:

Microtunneling trenchless crossing for the FEC railway at PortMiami. Size of the casing 60-inch, carrier pipe 42-inches; 2.1.3 - full trenchless crossing instrumentation (inclinometer, piezometer, vibration monitor) of the deep shafts and jacking operation

Team Member

WSP (Designer)

Date of Services

March 2018 - December 2019

Project Status

This project is complete

Project Budget

Original Budget: \$21,000,000 Final Cost: TBD (in progress)

Client / Point of Contact Familiar with Project

Miami-Dade Water & Sewer Department
Eduardo Luis
3071 SW 38th Avenue
Miami, Florida 33146
(P) (786) 552-8837
(E) Eduardo.luis@miamidade.gov

12-inch Force Main Dual Crossing to Port of Miami

Miami, Florida



In 2015, PortMiami contracted WSP to provide professional civil engineering design and construction administration services for upgrades to PortMiami's Master Sanitary Sewage Pump Station No. 9141 and replacement of the existing 8-inch cast iron pipe force main with 1,800 linear feet of a dual 12-inch HDPE DR-9 pipe crossing underneath the Biscayne Bay. One of the force mains served as the future connection for the Southwest Corner Commercial Development. The dual HDPE alignment that crossed the waterway between Dodge Island and the mainland were designed to be south of the Bascule Bridge below the Biscayne Bay Bottom using Horizontal Directional Drilling (HDD) method of construction. The remaining portions of the replacement force main along Dodge Island and the mainland were designed using a combination of open-cut and trenchless methods of construction.

Principal Elements/Special Features:

- Horizontal Directional Drilling (HDD)
- Dual Crossing Under Biscayne Bay Bottom
- Compound Curve Dual Force Main using dual 12-inch HDPE DR-9

Team Member

WSP (Designer)

Date of Services

2019

Project Status

This project is complete

Project Budget

Original Budget: \$2,840,000

Final Cost: \$2,900,000

Client / Point of Contact Familiar with Project

Miami-Dade County PortMiami - Capital Development

Victor Gutierrez, PE

1015 North America Way, 2nd Floor

Miami, Florida 33132

(P) (305) 347-4802

(E) Victor.Gutierrez@miamidade

CITY OF POMPANO BEACH, FL

KENDALL LAKE NEIGHBORHOOD DRAINAGE IMPROVEMENTS

The City of Pompano Beach is implementing projects associated with the Stormwater Master Plan as prepared by Chen-Moore & Associates. As part of the Master Plan, Study Area 7 - Kendall Lake Neighborhood was identified as an area which experiences roadway flooding; and the existing lake does not have a positive outfall connection. The neighborhood is located on either side of NW 3rd Avenue between NW 21st Street and NW 16th Street.

Baxter & Woodman reviewed the assumptions made and the study data in the Stormwater Master Plan as it relates to the Kendall Lake Neighborhood; reviewed the improvement recommendations made for pipe size upgrades, for exfiltration trench or some combination of the two; reviewed up to four (4) possible positive lake discharge options; re-ran the stormwater modeling utilizing the Stormwater Management Model (SWMM) computer program; provided the results and our recommendations to the City for stormwater improvements to the Kendall Lake Neighborhood in preliminary design report (PDR). The purpose of the project was to review and refine the previous modeling efforts, provide recommendations for a positive drainage outfall from the lake and provide our preliminary design for improvements to the Kendall Lake Neighborhood drainage system. Topographical survey and geotechnical analysis was completed in the project area as part of this Scope of Services.

The stormwater design effort has been divided into two phases. Phase I will include the review of the Stormwater Master Plan assumptions and recommendations and Phase II will include modeling efforts for the purposes of sizing and cost estimating of proposed improvement options. The preliminary design report has been completed along with the engineering design for the improvements.

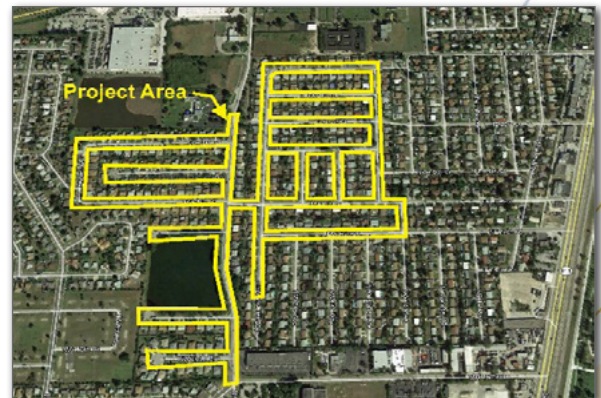
The construction cost is estimated at \$3,450,000.

HIGHLIGHTS:

STATUS: Permitting

REFERENCE:

Ms. Tammy Good
Engineer Project Manager
City of Pompano Beach
1201 N.E. 5th Avenue
Pompano Beach, Florida 33060
(954) 786-5512
Tammy.Good1@copbfl.com



CITY OF POMPANO BEACH, FL

GATEWAY DRIVE DRAINAGE IMPROVEMENTS

The City of Pompano Beach is implementing projects associated with the Stormwater Master Plan as prepared by Chen-Moore & Associates. As part of the Master Plan, Study Area 6 – Gateway Drive was identified as an area which has little existing drainage and reported problems with widespread and extended roadway ponding. The commercial and industrial area is bounded by West McNab Road to the south, by Powerline Road to the East, by SW v36th Avenue to the west and by the SFWMD C-14 Canal to the north. Broward County Water Control District #4 (BCWCD#4) owns and maintains an existing canal that runs north-south in the center of the Gateway Drive area and along the east side of an existing lake. The stormwater model recommends exfiltration trench along many of the side streets and along Gateway Drive. Also recommended are stormwater inlets and piping with a positive discharge outfall to the BCWCD#4 Canal.

Baxter & Woodman reviewed the assumptions made and the study data in the Stormwater Master Plan as it relates to the Gateway Drive area; reviewed the improvement recommendations made for the proposed exfiltration trench and piping with positive outfall discharge; re-ran the stormwater modeling utilizing the Stormwater Management Model (SWMM) computer program; provided the results and our recommendations to the City for stormwater improvements to the Gateway Drive area in preliminary design report and electronic (GIS) formats. The purpose of the project was to review and refine the previous modeling efforts and provide a preliminary design for improvements to the Gateway Drive drainage system that will maximize the effectiveness of the exfiltration trench; provide for the best use of less expensive swales where appropriate; and interconnect proposed drainage pipe and inlet improvements with a positive drainage outfall. Topographical survey and geotechnical analysis were completed in the project area as part of this work effort.

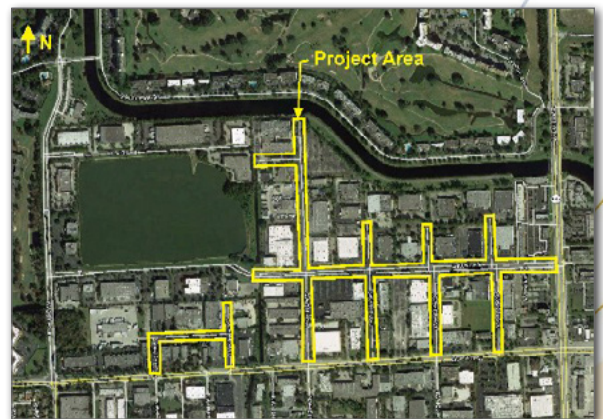
The project design has been completed and is in for permit approval. The estimated construction cost for the project is \$3.7M.

HIGHLIGHTS:

STATUS: Permitting

REFERENCE:

Ms. Tammy Good
Engineer Project Manager II
City of Pompano Beach
1201 N.E. 5th Avenue
Pompano Beach, Florida 33060
(954) 786-5512
Tammy.Good1@copbfl.com



CITY OF POMPANO BEACH, FLORIDA

ESQUIRE LAKE STORMWATER IMPROVEMENTS

The City of Pompano Beach selected Baxter & Woodman to prepare a Drainage Preliminary Design Report for the Esquire Lake Neighborhood. The Drainage Preliminary Design Report provided the recommended improvements to the Esquire Lake Neighborhood in order to address roadway flooding and standing water issues after rainfall events in the neighborhood. The Esquire Lake Neighborhood project limits is bounded on the east by Powerline Road, on the west by NW 27th Avenue, on the south by NW 6th Street, and the north by Martin Luther King Boulevard.

Alternative 3B was the recommended drainage alternative since it provides the most overall benefit in terms of roadway flooding. The design of the proposed improvement included installation of new drainage facilities 18"-42" (piping, catch basins, manholes, exfiltration trench, outfalls, etc.) swale grading and sodding, roadway reconstruction and pavement resurfacing, clearing and grubbing, dewatering, MOT, pavement markings and signage, compliance with permit conditions, testing and all restoration work. The project included installation of 42" diameter drainage pipe within a 12-foot wide drainage easement running between homes. This required careful coordination and monitoring of the construction efforts to ensure a successful installation, to limit the City's liability and to limit impacts to the adjacent homeowners.

Baxter & Woodman provided engineering design, permitting, bidding, public relations, State Revolving Loan documentation, and construction administration services for this project. The project was completed with a construction cost of \$2,829,223.34

HIGHLIGHTS:

DESIGN COMPLETED: 2018

CONSTRUCTION COMPLETED: 2020

REFERENCE: Ms. Tammy Good
CIP Manager

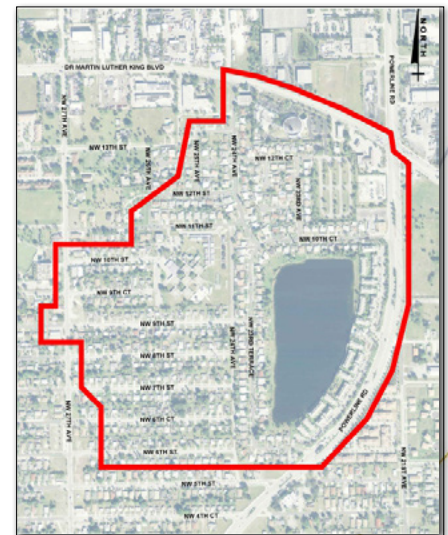
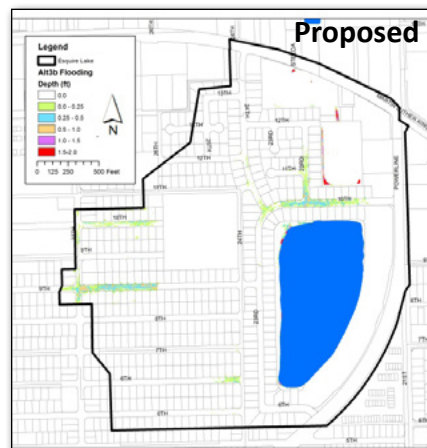
City of Pompano Beach

1201 N.E. 5th Avenue

Pompano Beach, FL 33060

(954) 786-5512

(954) 786-4028 (Fax)



CITY OF DELRAY BEACH, FLORIDA

RECLAIMED WATER EXPANSION AREA 12C

The City of Delray Beach has adopted a Reclaimed Water Master Plan (RWMP), prepared by Baxter & Woodman in October 2003, which identifies future areas of service for the City's expanding reclaimed water system.

Baxter & Woodman provided engineering design and construction administration services and full-time inspection services (40 hrs/week) for construction of the City's Reclaimed Water Area 12C project. The project area consists of installation of 5,500 LF of 10-inch reclaimed water main and 4,400 LF of 4-inch reclaimed water main along the streets of Lewis Cove, Brooks Lane, White Drive, Rhodes Villa Avenue, Del Haven Drive and S.R. A.1.A.



(from Linton Blvd. to Casuarina Rd.)



HIGHLIGHTS:

SERVICES:

- Construction administration services
- Engineering design services
- Full-time inspection services
- Installation of reclaimed water main

COMPLETED: 2018

CONSTRUCTION COST: \$4.1M

Construction was completed in 2018 with a construction cost of \$4,146,271.

CITY OF DELRAY BEACH, FL

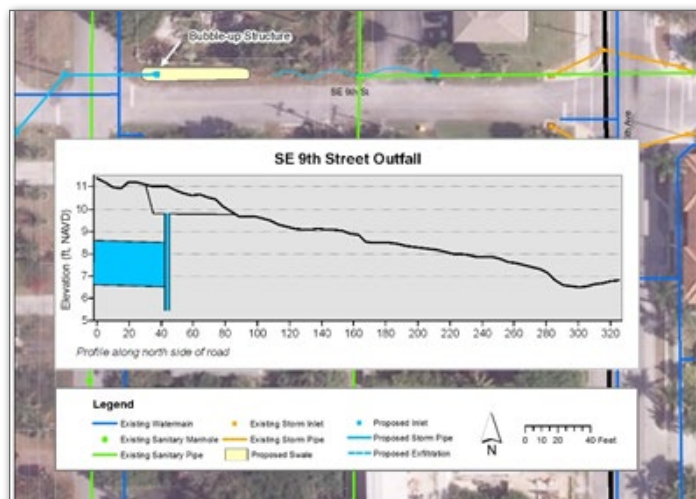
OSCEOLA NEIGHBORHOOD IMPROVEMENTS

The City of Delray Beach contracted with Baxter & Woodman to improve the roadways and infrastructure within the Osceola Neighborhood including approximately five miles of roads and alleyways within an older established area of the City. The project is located on a coastal ridge characterized with well drained soils. However, development of streets and homes have altered the natural drainage patterns and resulted in several areas of trapped runoff.

Drainage problems were identified by performing a GIS ponding assessment of LiDAR information and by performing hydrologic and hydraulic modeling using Inter-connected Ponding Routing (ICPR4) model. The results compared favorably with residents' accounts.

The City directed Baxter & Woodman to minimize the use of swales within the project area because of residents' penchant to park along the road and fill in the swales. The City also requested that new drainage infrastructure be minimized to save costs. Baxter & Woodman responded by taking advantage of the geology and topography of the area and designing exfiltration systems located in key areas intended to eliminate flooding, provide water quality, and restore flow patterns by utilizing bubble-up structures where pre-development runoff normally discharged.

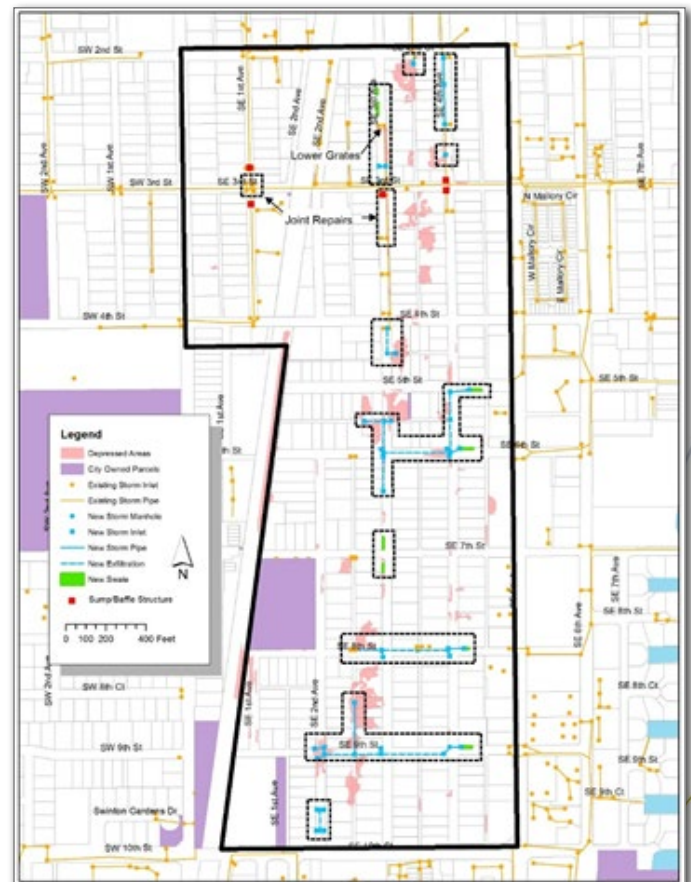
The design was completed in 2019.



HIGHLIGHTS:

- Road and alleyway improvements
- Drainage problems identified with GIS ponding assessment
- Hydrologic and hydraulic modeling
- Design of exfiltration systems

UNDER CONSTRUCTION
COMPLETION: 2019 (Design)



TOWN OF LAKE PARK, FL

LAKESHORE DRIVE DRAINAGE SYSTEM IMPROVEMENTS

The Town of Lake Park contracted with Baxter & Woodman to provide engineering services for the design of drainage and other related improvements on Lakeshore Drive starting from the entrance of the Lake Park Marina north 3,220 feet to Castlewood Drive. Lake Shore Drive is prone to frequent flooding with road elevations ranging from 2.0 to 3.2 feet, NAVD. A drainage system was designed to reduce flooding caused by storms and sea level rise by using a stormwater pumping station to pump water up to a dry bioswale that will overflow into the Intracoastal waterway. Services include:

- Survey
- Drainage System Design
 - ICPR4 Modeling
 - Level of Service Assessment
 - Sea Level Rise Evaluation
 - Pipe and Pump Station Sizing
 - Water Quality Improvements
 - Pollution Control Device
 - Dry Detention in Park
- Other Utilities
 - Coordination with Seacoast Utilities
 - Watermain and Sanitary Evaluation
- Roadway Design
 - Roadway Replacement/Mill and Overlay
 - US 1 Corridor Coordination
 - Sidewalks and Bike Paths
 - Landscaping and Irrigation
 - Lighting
- Permitting
 - ERP and Dewatering - SFWMD
 - Submerged Lands - COE
 - PBCHD
 - Building Department
- Public Outreach
- Construction Services

In conjunction with the drainage improvements, Baxter & Woodman also provided design and permitting services to Seacoast Utility Authority for the replacement of 550 LF of gravity sanitary sewer and over 4,000 LF of 6"/8" DIP water main and associated water services and fire hydrants along this project alignment.

HIGHLIGHTS:

- Roadway Improvements
- Stormwater Pumping Station
- Bike Path
- Permitting
- Utilities Coordination
- Public Outreach

COMPLETED: 2019 (Design)



Figure 1-1: Project Location Map

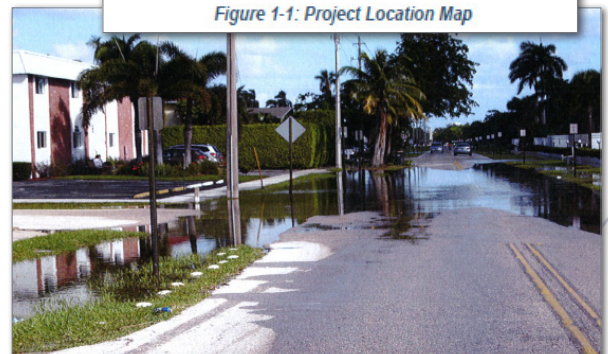


Photo 2-4: King tide flooding at Lake Shore Drive and Date Palm Drive (Oct 2016) looking north

LOXAHATCHEE RIVER DISTRICT, FLORIDA

WHISPERING TRAILS GRAVITY SEWER SYSTEM

The Loxahatchee River Environmental Control District (District) identified the Whispering Trails neighborhood as part of an assessment program that will provide collection system gravity sanitary sewer services for this area, so that the outdated septic systems could be taken out of service. The conventional gravity sewer system collects the wastewater and conveys it to a new lift station located within a new roundabout at the intersection of Wood Lake Road/Trails End Terrace.

The lift station force main piping then pumps the wastewater to the 4-inch force main located at the intersection of Wood Lake Road and Loxahatchee River Road. 181 residential units were sewered under this project. Over 1,600 LF of new force main piping was installed, as well as over 11,000 LF of gravity sewer piping. The project included total road reconstruction throughout the neighborhood per Palm Beach County Roadway Standards.

The construction cost for this project was \$4.36M.

HIGHLIGHTS:

SERVICES:

- 180+ residential units sewered
- 1,600+ LF of new force main piping installed
- 11,000+ LF of gravity sewer piping installed
- Total road reconstruction

COMPLETED: 2020



Projects with City of Hollywood

1. North Beach Power Pole Installation- 12/09/2014- North Beach- Mechanical & Electrical engineering design services for installation of 12 pole mounted CCTV cameras along N. Surf Road from Forrest St. to Perry St.
2. Hollywood Beach Community Center- 02/09/2015- 131 S. Ocean Dr (A1A)- Mechanical & Electrical Engineering design services for the replacement of 5 water service heat pumps at the Hollywood Beach Community Center

Similar Projects

FIU BBC Lift Station Upgrade

Project Title: FIU BBC Lift Station Upgrade

Description of Project: Provide MEP drawings to accommodate lift station renovation

Client reference: Miller Legg

Broward College South Campus Lift Station

Project Title: Broward College South Satellite Chiller Plant

Description of Project: SGM is the Commissioning Authority for design and construction services for a brand-new Satellite Chiller Plant at the Broward College, South Campus as the prime contractor. This New Satellite Chiller Plant includes a primary-secondary chilled water plant of approximately 7,500 square feet which will tie into the existing campus loop to operate in parallel with the existing main chiller plant. The plant design incorporates the use of two 750-ton water cooled chillers with expandable bays ready to install future chillers, cooling towers, and pumps. SGM will also commission and test water distribution piping for the new science building, aviation building, and bookstore with provisions to extend to other facilities creating chilled water loop distribution system campus wide.

Client reference: Broward College, Deborah Czubkowski <dczubkow@broward.edu> (954) 201-6900

IPIC Lift Station

Project Title: iPic – Delray Beach

Description of Project: Provided MEP-FP design for new iPic theater located in Delray beach. Lift station was provided and MEP drawings provided to accommodate. 4th + 5th Delray is a mixed-use development including world-class iPic Theaters complex, Class A office space, retail shops and a 326-space parking garage. The 529-seat iPic Theater has eight screens and 42,689 sq. ft. of corporate office space. Movie-goers may indulge the ultimate viewing experience, complete with private seating pods and unobtrusive table service. The building features a distinctive white web skin and a canopy over the deck, while the interior design features numerous works of art, creating a unique and inspiring environment. As the Engineer of Record, SGM was excited to provide mechanical, electrical, plumbing and fire protection services for this project.

Client reference: PGAL Architects, Bruno Phillips <BPhillips@pgal.com> (561) 988 4002



Expand the Box

Experience on local,
Broward County
infrastructure
improvement
program.

***Public Outreach
Document Control
Administration***



North County Neighborhood Improvement Project

Broward County, FL

Project Description

A 2,900-acre project located in Broward County that consisted of master planning, design and construction contract administration for water, sewer, drainage, roadway pavement, landscaping, sidewalks, and street scaping improvements.

This multi year project involved storm water and sewer system modeling, permitting and design of the water, sewer, drainage, and roadway improvements, surveying, public awareness, preparation of contract and bid documents, and field monitoring.

Garth Scope of Work

GSI provided a dedicated, staff that supported the project management team in various capacities including project administrative support, document control and public outreach. GSI's key responsibilities on the program include but are not limited to:

- Documentation and reporting
- Addressing resident concerns
- Coordinating public communication notifications
- Reporting and other general support services
- Assisting with coordinating stakeholder meetings





Expand the Box

***Public Meeting
Coordination***

Event Logistics

***Community
Relations***



Broward County Aviation Department Master Plan Study

Broward County, FL

Project Description

Broward County Aviation Department (BCAD) is in the process of updating the Master Plan Study for the Fort Lauderdale–Hollywood International Airport and North Perry Airport to ensure that future aviation needs are met. The Master Plan will provide a cohesive and cost-effective plan for building new facilities, roads and utilities at both of these airports.

The Master Plan Study includes a series of public workshops intended to solicit public input regarding the preliminary Master Plan recommendations. Public workshop objectives include providing updates on the Fort Lauderdale–Hollywood International Airport and North Perry Airport Master Plans, demonstrating the airport's current and future aeronautical needs and integrating stakeholder feedback into the master planning process.

Scope of Work

GSI coordinates the public meetings intended to solicit public input regarding North Perry Airport Master Plan recommendations. GSI's key responsibilities for the study include but are not limited to:

- Community Outreach
- Event Planning
- Communications Support
- Staff Augmentation



Expand the Box

Date: 2017 to Present

Location: Fort Lauderdale, FL

Client/Prime: Skanska

Owner: City of Fort Lauderdale

Public Outreach & Communications Experience on a Major Local Infrastructure Project!

Public Meetings
Website
E-Newsletter



Las Olas Corridor Improvements (Las Olas Beach Park) Public Outreach and Marketing & Communication Case Study Fort Lauderdale, FL

Project Description

The \$49M Las Olas Corridor Improvements (Las Olas Beach Park Project) consists of the design and construction of two new waterfront parks on Fort Lauderdale Beach along with a state-of-the-art parking facility, a tree lined promenade, landscape and streetscape enhancements and pedestrian connections in Fort Lauderdale, FL.

Garth Scope of Work

GSI provided a dedicated, staff that supported the project management team in various capacities including public outreach, project administrative support, and document control.

GSI's key responsibilities on the program included but were not limited to

- Creating the communications material for the project
- Addressing resident concerns
- Coordinating public communication notifications
- Reporting and other general support services.



Expand the Box

Date: 2010 to 2013

Location: Davie, FL

Client/Prime: AECOM

Owner: Town of Davie

Public Outreach & Communications Experience on a Major Local Infrastructure Project!

Public Meetings
Website
E-Newsletter



Town of Davie Water Reclamation Facility Public Outreach and Marketing & Communication Case Study Davie, FL

Project Description

The \$135MM Town of Davie Water and Waste Water System Upgrade project consists of the design and construction of a new Water Treatment Facility and a Water Reclamation Facility in Davie, Florida. The facility is a carefully designed, secure, odor controlled site with low level lighting located close to Nova Southeastern University and the University of Florida. The reclaimed water is utilized for irrigation purposes in the adjacent university campuses and golf courses while reducing the use of potable water consumption. Distribution lines, collection lines and lift stations were also upgraded and rerouted to connect to new treatment facilities. Substantial completion was realized in the fourth quarter of 2013.

Garth Scope of Work

GSI was hired to develop and lead the public outreach, marketing & communications campaign.

- Managed and disseminated information to a diverse group of stakeholders both public and private
- Designed & created communication materials including: logo, newsletters, websites, mailers and meeting notices
- Conducted public meetings with local homeowners, businesses and private meetings with vested stakeholders
- Documented and managed all public outreach correspondence



Werner Reinefeld, PE

Director, Water Resources Engineer

CAREER SUMMARY

Werner Reinefeld has more than three decades of experience in the fields of civil and infrastructure engineering, project management, design construction, computer aided design, and land development. His experience includes work in the areas of earthworks, road systems, hydrological and hydraulic systems and modeling, water and wastewater facilities, sewer systems, stormwater and drainage, utility coordination, oil-contaminated water remediation, energy efficiency audits, permitting feasibility studies, proposal preparation, and land development projects.

PROFESSIONAL EXPERIENCE

Miami-Dade Water and Sewer Department Capital Improvement Project Design Services, 60-Inch Force Main Design, Miami, Florida: deputy project manager for the design of this force main project. WSP designed 13,000 linear feet of 60-inch force main pipe to interconnect with an existing 72-inch force main located at the intersection between Biscayne Boulevard (SR-5/US-1) and Northeast 151st Street and run west along the proposed corridor to the intersection of Northeast 163rd Street and Northeast 8th Avenue. The transmission main takes into consideration future system expansion and improvements identified in the Port of Miami's Master Plan.

19th Street Pump Station, Miami Beach, Florida: lead design engineer for the construction of the 19th Street pump station which was part of the overall plan for a citywide stormwater improvement system to reduce flooding for residents of Miami Beach near the Convention Center. Provided the design, permitting, and construction management of the new 80-million gallons per day stormwater pump station, ancillary site infrastructure, and discharge facilities. Included site preparation, earthwork, dewatering, storm drainage infrastructure installation, parking reconstruction, utility adjustments, landscaping, and seawall modifications on the south side of the Collins Canal between Convention Center Drive and Meridian Avenue. WSP provided engineering design, permitting, and surveying services for a stormwater pump station. The scope of work also included utility locations, landscape architecture, and geotechnical services.

Miami Downtown Loop Design-Build Project, Miami, Florida: engineer-of-record for the installation of a 48-inch diameter water main. A critical challenge was working in a highly-urbanized area and in public right-of-way. Construction in downtown Miami was affected by vehicular and pedestrian traffic and will contend with numerous congested utilities occupying the streets and rights-of-way. WSP was responsible for the planning, design, permitting and construction services associated with the construction of a new 30-, 36-, and 48-inch water main. This project provided interconnection of the Hialeah/Preston and Alexander Orr water transmission systems to form a loop closure.



Years of experience

34

Education

B.S., Civil Engineering,
Central University of
Venezuela

Professional qualifications

Professional Engineer:
Florida (63042)



Before joining WSP, Werner's experience included:

60-inch Force Main Design, Miami, Florida: deputy project manager for the design of three miles of 60-inch force main. The scope of work included preparation of the basis of design report; alternative routes; construction materials and methods; and construction cost estimates. Coordinated the preparation of the construction documents, technical specifications, and permits for federal, state and county regulatory agencies; collaborated with local governments, property owners, and stakeholders. Provided construction support.

60-inch Force Main Installation Basis of Design Report, Miami, Florida: project manager for the basis of design report for installation of a 60-inch force main from a pump station to Southwest 88th Street to increase hydraulic flow in the system and reduce pressure. Analyzed three alternatives by comparing construction cost, public impact, schedule, pipe material, constructability, hydraulic impact, traffic impact, maintenance and accessibility, permitting, and easement acquisition. Hydraulic modeling was prepared to confirm results. Recommendations were provided and approved.

72-inch Raw Water Main, Miami, Florida: design team project manager for this five-mile, 72-inch raw water main project. The scope of work included preparation of the basis of design report; 30-, 60- and 90-percent submittals; construction documents; technical specifications; permitting; and construction support. The pipeline ran from the west side of the Florida Turnpike Northwest 72nd Avenue and serves as a redundant pipeline to the existing 96-inch raw water pipe running along the NW 74th Street corridor and reduces potential risk.

American Airlines Cargo Building No. 713, Miami, Florida: project engineer responsible for design services for building demolitions, relocation of existing utilities, vehicle parking areas, stormwater engineering, water and sewer connections, and permitting. The scope of services also included the evaluation of existing water utility services and spare capacity. The project included a project development study on landside and airside access for the west side cargo area at Miami International Airport.

Biscayne Landing Utility Impact Study, North Miami, Florida: engineer-of-record for the utility impact study of a 180-acre development at the former Munisport facility. The complex included more than 1.2 million square feet of retail space, a 200-room hotel, 3,200 residential units, and 40 acres of parks and open space.

Cedar Woods Homes Subdivision, Miami-Dade County, Florida: project engineer responsible for paving, grading and drainage design for a 50-acre subdivision located between Southwest 138th Avenue to Southwest 162nd Avenue and Southwest 254th Street to Southwest 257th Street. This project involved public right-of-way considerations.

Cumberland Farms Convenient Store and Gas Stations, West Palm Beach, Florida: engineer-of-record for several convenient stores and gas stations for Gulf/Cumberland Farms in Palm Beach and Indian River Counties. The scopes of services included environmental resource permits; paving, grading, and drainage design, plan and profile of water and sewer; pavement marking; signage plans; and all required permits.

Drainage Improvements NW 54th Street and NW 56th Street, Doral, Florida: engineer-of-record for the completion of drainage improvements and relocations associated with a new 72-inch reclaimed water main. The project involved the installation of a new 72-inch raw water main along Northwest 58th Street and Northwest 54th Street, between Northwest 87th Avenue to Northwest 72nd Avenue. Due to the size of the proposed water main, utilities were relocated, and design provided for drainage system and road improvements.

Dianys Arocho-Salgado, PE, ENV SP

Senior Lead Water Resources Engineer

CAREER SUMMARY

Dianys Arocho is a water resources engineer with over fourteen years of experience in various fields of civil engineering, including, hydraulic modeling, planning, design and construction. She has work in Mexico, Puerto Rico and USA. Her experience in different stages of engineering projects allows her to visualize and analyze projects from early planning stages to construction.

Dianys' s area of expertise includes water resources, sanitary sewer and water distributions systems and GIS database managements. Also, she had developed and review standard engineering plans of sanitary sewer and water distribution. She has performed hydrologic and hydraulic modeling of various river systems. Likewise, she has assisted in the design and of several sustainable engineering projects, including drainage, utilities resilience, green roofs and energy consumption analysis for transportation infrastructure.

Dianys is efficient, organized professional committed to deliver high quality services and surpass client expectations. She also has excellent skills in technical computer programs like: AutoCAD Civil 3D, Arc View, HEC-HMS, HEC-RAS, CALINE4, BC-Cal, Info Works ICM, ICPR4 and Info Water

PROFESSIONAL EXPERIENCE

Miami -Dade Water and Sewer Department, Project NL-1A Project Manager of the design team of a 3-mile 60in Forcemain in Miami Dade.

Miami-Dade Water and Sewer Department Capital Improvement Project Design Services, Miami, Florida: Hydraulic modeler, projection of wastewater flow based on population and historical flow, infiltration, and inflow data for more than 900 Water and Sewer Department pump stations. Data management and hydraulic model simulations of different scenarios countywide for Infrastructure projects using Infoworks.

JFK Redevelopment, Utilities Resilience Design, New York Sanitary Sewer and Water Distribution System Lead for Resilience Design. Assist utility designers to incorporate resilience measures on the design and determine Design Flood Elevations.

South Florida Water Management District General Engineering Services, West Palm Beach, Florida: technical engineering support to construction management team. The project is part of the Comprehensive Everglades Restoration Plan, consisting of 32 miles of levees and 63 structures including culverts, spillway, and weirs in a total area of 7000 acres. The South Florida Water Management District (SFWMD) selected WSP to provide complete, multi-disciplinary engineering services to any of its design, scientific, operations or maintenance features. Under this contract, WSP assisted virtually any SFWMD department, facility, project or operation, from planning through engineering and design and construction-related services. The following major project was continued through multiple agreements.



Years of experience

14

Education

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

Professional qualifications

Professional Engineer:
Florida (81116)

Envision Sustainability
Professional: Florida (18600)



Barriada Figueroa Sewer Investigation and Mapping Assessment Pilot Project, San Juan, Puerto Rico: quality control and data manager, database quality control of manhole and pipe assessment with Pipeline Assessment Certification Program and Manhole Assessment and Certification Program National Steel and Shipbuilding Company Standards. geographic information systems database management and geographic information system analysis. The project was part of the Puerto Rico Aqueduct and Sewer Authority Consent Decree with Environmental Protection Agency.

Bolivar/Old San Juan Hydraulic Characterization of Sanitary Sewers, San Juan, Puerto Rico: quality control and data manager, database quality control of manhole and pipe assessment with Pipeline Assessment and Certification Program and Manhole Assessment and Certification Program National Steel and Shipbuilding Company Standards. Geographic information systems database management and analysis. The project was part of the Puerto Rico Aqueduct and Sewer Authority Consent Decree with Environmental Protection Agency.

Environmental Impact Statement Cidra Corridor, Cidra, San Juan: engineer and conceptual design of the five new road alternatives under study using civil 3D design software in compliance with Puerto Rico Highway and Transportation Authority standards. Managing of data used to perform the road alternatives analysis and preliminary hydraulic analysis of water crossings along road alternatives using HEC-RAS.

Mall of San Juan, San Juan, Puerto Rico: engineer, assist in the site design of water distribution, fire protection and sanitary system utilities. Develop and review of standard engineering plans.

Puerto Nuevo Regional Wastewater Treatment Plant Flow Monitoring, San Juan, Puerto Rico: flow monitoring manager. Daily data review of installed flow monitors and rain gages. Coordination with field crews for data verification.

Recovery of the Magdalena River Navigation, Colombia: hydraulic modeler, hydrologic study of Magdalena River Watershed and hydraulic model of approximately 250 kilometer of river using Corps of Engineers HEC-RAS.

Sinkhole Inventory for the North Coast Aquifer of Puerto Rico for Department of Natural and Environmental Resources, Puerto Rico: engineer responsible to locate urban sinkholes using light detection and ranging information and geographic information systems analysis. Delimitate watersheds for each sinkhole using ArcView software.

City of Miami, I395 Underdeck Conceptual Design Drainage Engineer of a 33 Ac underdeck park. Duties includes conceptual recommendation of sustainable and green infrastructure and analysis of drainage system to comply with current regulations.

Texas High Speed Rail Conceptual Design (2019). Drainage Engineer. Create the conceptual drainage design for five TMF and MOW facilities.

West of Hudson Replacement and Renewal of Under-grade Bridges, NY. H/H Modeler, for various culverts and bridges using 2D HEC-RAS, HEC-HMS and HY8. All crossings must comply with the American Railway Engineering and Maintenance Association Standards.

Hydraulic Analysis of Various Bridges Throughout the County Of Orange, NY H/H Modeler, for various bridges using HEC-RAS, to review FEMA compliance for proposed bridge improvements

Jose Custodio Hernandez, PE

Lead Water Resources Engineer

CAREER SUMMARY

Jose Custodio is a lead water resources engineer at WSP. He is a licensed professional engineer registered in the states of Florida and Puerto Rico, with a background in civil and environmental engineering. Jose's experience includes planning, design, procurement and construction management and inspection of several Capital Improvements Program projects for the City of Fort Lauderdale and for the Puerto Rico Aqueduct and Sewer Authority.

Prior to joining WSP, Jose served as a project manager for the City of Fort Lauderdale Public Works Department where he monitored and directed complex public works projects including the oversight of the bidding process, contractor selection, establishment of design and construction standards for projects, project planning and scheduling, supervising the construction of projects from design through completion and project close-out to ensure quality and compliance with program standards.

Jose also served as a project/staff engineer for several engineering consulting firms and was responsible for project management services for both water and wastewater related projects in the planning and design and bidding phase.

PROFESSIONAL EXPERIENCE

Before joining WSP, Jose's project experience with other engineering consulting firms included:

Emergency Repair – 30-Inch Force Main A-Repump Station to GTL Wastewater Treatment Plant Design-Build Project, Fort Lauderdale, Florida: project manager responsible for managing the construction of the project through final completion and close-out to comply with the FDEP Consent Order deadline and avoiding penalty fees to the City. Project consisted of the repairs/rehabilitation of approximately 20,000 linear feet of 30-inch diameter force main located along the Fort Lauderdale Downtown area. In addition to the typical open-cut installation, various trenchless methods were used like horizontal directional drilling and swagelining (compression fit HDPE lining). The construction cost of the project was \$15,500,000.

East Las Olas Boulevard 12-Inch Force Main Replacement, Fort Lauderdale, Florida: project manager responsible for managing the construction of the project through final completion and close-out to comply with the FDEP Consent Order deadline and avoiding penalty fees to the City. Project consisted of the replacement of approximately 2,300 linear feet of 12-inch diameter force main with a 16-inch diameter HDPE force main located along the East Las Olas corridor connecting the beach and downtown area. Along with the open-cut installation, the trenchless method of pipe bursting was used for this project to avoid major impacts on this area of high tourism. The construction cost of the project was \$1,350,000.



Years of experience

10

Education

M.E., Civil Engineering,
Polytechnic University of
Puerto Rico

Professional qualifications

Professional Engineer:
Florida (81080)



Croissant Park Neighborhood Small Water Mains Improvements, Fort Lauderdale, Florida: project manager responsible of managing the design, bidding and construction phase of the project through final completion and close-out. Project consisted of the replacement of aging and undersized infrastructure (approximately 16,000 linear feet of two, four and six-inch diameter cast iron water mains) with an eight-inch diameter HDPE water main, replacement of fire hydrants, 375 service connections and relocation of water meters located in private property within the neighborhood. The installation methods used were open-cut trench for the tie-ins to existing system, and a combination of pre-chlorinated pipe bursting and horizontal directional drilling for the new water main. The construction cost of the project is \$2,600,000.

Fort Lauderdale Executive Airport South Perimeter Loop Road, Fort Lauderdale, Florida: engineer of record responsible for the design plans preparation, technical specifications and cost estimate, preparation of the bidding documents and construction management. Project consisted in the construction of an approximately 1,400 linear foot long asphalt perimeter road along the southeastern end of Runway 31. The construction cost of the project was \$375,000.

Sanitary Sewer System for the San Carlos Community, Dorado, Puerto Rico: project manager responsible for the field investigation of the existing sanitary sewer infrastructure, evaluation of different alternatives, selection and recommendation of the best alternative, in addition to design management and bidding support. Project consisted in the design and construction of a sanitary sewer system for approximately 296 housing units and the extension of the Dorado trunk sewer to the entrance of the community. The estimated construction cost of the project was \$4,250,000. Project was funded through USEPA State Revolving Fund (SRF) and coordination with agency was necessary to coordinate design reviews, bidding coordination and there were additional supplemental conditions that Contractor had to follow as required by the funding agency.

Arecibo Wastewater Treatment Plant (10 MGD) Assessment Report, Arecibo, Puerto Rico: project manager responsible for the preparation of the Assessment Report. Performed inspections to identify the operating conditions of the WWTP's components, evaluated and recommended the necessary improvements to enhance the overall reliability and performance of the WWTP as requested by the Environmental Protection Agency (EPA). The report was needed as requirement for evaluation of possible funding sources.

Water Resources Management Plan, San Juan, Puerto Rico: staff engineer responsible to evaluate different alternatives to increase the water storage capacity of the Carraízo reservoir (60 MGD safe yield) which serves the metropolitan area of Puerto Rico; assessed and recommended the best alternative to increase the storage capacity of the reservoir; estimated Implementation Cost of the selected alternative; responsible of the evaluation of a desalination plant to address future drought periods in Puerto Rico.

Assets Condition Evaluation, Islandwide, Puerto Rico: staff engineer that performed inspections and condition reports of eight dams, twelve water treatment plants and eight wastewater treatment plants for the PRASA's Asset Condition Report. The evaluation of the facilities consisted of the condition of its water and solids treatment facilities in terms of operation, maintenance, compliance and general conditions.



Roger Khouri, PE

STRUCTURAL ENGINEERING

Roger Khouri is a senior structural engineer with more than three decades of experience in the structural design of hydraulic and underground structures, bridges and buildings. As a project manager and the engineer of record on many design projects, he has been involved in all phases of design from the conceptual to the final design of bridges as well as the design of pump stations with cofferdams design and jack and bore installations system for local agencies in Miami-Dade County including FDOT and various cities.

REPRESENTATIVE PROJECT EXPERIENCE

KB-52 Design-Build Stormwater Pump Station at 19th Street, Miami Beach, Florida: structural engineer of record for the design of the pump station's underground concrete drainage structures as part of an overall plan for a stormwater improvement system throughout the City of Miami Beach that will reduce flooding for residents of Miami Beach and more specifically for the neighborhoods near the Convention Center. The project will directly address the impacts of sea level rise and flooding issues, a major concern in South Florida. As part of a design-build team, WSP is providing design, permitting and construction of the new stormwater pump station and ancillary site infrastructure and discharge facilities.

I-95 Express Lanes Segment Phase 3B-1 Design-Build, FDOT District Four, Broward County, Florida: supervising engineer for the design of the superstructure of the bridge replacement over the Hillsboro Canal to accommodate the proposed express lanes on this 4.792-mile project that includes converting the existing high occupancy vehicle (HOV) lanes to managed lanes and widening that will result in two tolled express lanes in each direction. Other project improvements include guardrail, barrier wall, attenuators, shoulder gutters, drainage, bridge widenings, bridge replacement, bridge maintenance repairs, temporary and permanent retaining walls, noise walls, sign structures, portable traffic monitoring sites, toll gantry and associated infrastructure including toll equipment building, ITS, signing and pavement markings, express lane markers, lighting, ramp (metering) signals, utility relocation, landscape relocation, and any additional items required to provide a complete highway system.

SR 9/SR 817/NW 27th Avenue Premium Transit PD&E Study, Florida Department of Transportation (FDOT) District Six, Miami, Florida: structural engineer for the 10-mile-long elevated light rail alternative and the at-grade alternative with elevated crossings over Palmetto, the railroad track south of Ali Baba Avenue and at the interface with the existing Metrorail at 75th street. The study focuses on providing multimodal street improvements to accommodate premium transit service along the arterials within the project limits. Premium transit modes considered and evaluated include bus rapid transit (BRT), light rail transit (LRT) and heavy rail transit (HRT/Metrorail) on exclusive lanes/guideways.

FIRM

WSP

YEARS OF EXPERIENCE

35

EDUCATION

M.S., Structural Engineering,
Florida International
University

B.S., Civil Engineering,
ESIB - Ecole Superieure
D'Ingenieurs de Beyrouth,
Beirut, Lebanon

PROFESSIONAL REGISTRATIONS

Professional Engineer:
Florida (47745)

Miscellaneous Districtwide Professional Engineering services, FDOT District Six, Miami, Florida: engineer of record for the design of various mast arms, sign structures and light pole foundations for the task work order oriented contract.

Before joining WSP, Roger's project experience with other engineering consulting firms included:

Port of Miami Tunnel Project, Miami, Florida: lead engineer for above ground structures. The project involved the design of a tunnel connecting Watson Island to the Port of Miami Dodge Island. In addition to the tunnel, the project involved widening the 2,500-foot-long Mac Arthur twin bridge connecting Miami to Watson Island as well as design of a two-span AASHTO girder bridge on Dodge Island, two pump stations at the lowest point of the tunnel, retaining wall and U-walls with cut and cover sections at the tunnel portal entrance. Roger supervised and coordinated the work between the different disciplines, provided technical support, and managed schedule and budget.

SR 836 between 17th Avenue and I-95, Miami, Florida: lead structures engineer for the preparation of the design-build request for proposals (RFP) package for Miami-Dade Expressway as part of a general engineering contract. The project involves widening existing SR 836 east- and west-bound bridges and adding the east and the west elevated bridge connectors between 12th Avenue and I-95. Responsibilities included preparing bridges layouts; coordinating the structural work between the different disciplines, sub-consultants and with the client; providing technical support; and managing schedule and budget.

SR 874 and Killian Improvement, Miami-Dade Expressway Authority, Miami, Florida: engineer of record for the design of new and widening of existing bridges. The project entailed the design of a two-span steel plate girder bridge, the design of an AASHTO beam bridge and the widening of two AASHTO beam bridges. In addition, the project involved the design of more than six miles of FDOT standard and non-standard noise walls and sign structures from MDX Enhancement Manual.

NW 57th Ave/Red Road Canal, FDOT District Six, Hialeah, Florida: engineer of record for the NW 57th Avenue project, located in Miami-Dade County. It consists of pile and panel walls and steel sheet pile walls that retain the widened portion of the NW 57th Avenue southbound lanes. These bulkhead walls are located along the Red Road Canal. The project is 7,250 feet long.

826/836 Interchange, FDOT District Six, Miami, Florida: engineer of record for the SR826/SR836 interchange complex. The project consists of the replacement and new construction of six multiple span AASHTO beam type bridges supported on piers and pile bents. These bridges carry the SR836 (Dolphin Expressway) over Milam Dairy Road, canals and railroad tracks. Clear spans of these bridges range from 90 feet to more than 115feet, while bridge widths range from 50 feet to 115 feet. Overall bridge lengths range from 200 feet to 1,170 feet, with an overall project bridge length of approximately 4,000 feet.

MIC Southbound CD Road, Miami, Florida: engineer of record for the design of the connector distributor between Central Boulevard at MIA and SR836 Expressway. The design included a simple span AASHTO beam bridge and a 10-span combination of steel box girders and AASHTO beam bridge. In addition, sheet pile and mechanically stabilized earth walls were included.

NW 25th Street Viaduct, Miami, Florida: project engineer involved in the design and the plan preparation of a 1.4-mile viaduct along 25th street from 82nd Avenue until it curves into 68th Avenue. The viaduct has a variable width with on and off ramps onto 25th Street. The superstructure is a steel plate girder with span up to 220 feet. The substructure varies between concrete hammerhead and straddle bents with steel caps. Roger was involved in the layout of the pier locations and spans arrangement, preparation of the framing plan for the entire viaduct, review of the BDR, and assisting the projects engineers in 60 percent design of the superstructure.

Education

B.S., Environmental Engineering
University of Florida, 2013

Years of Experience: 6

Joined Firm in 2014

Registrations

Licensed Professional Engineer,
Florida

Certifications

Certificate of Training/Attendance:
33rd Annual Governor's Hurricane
Conference

Certificate of Achievement:
Writing A Competitive FDOT SRTS
Application

Florida Dept of Transportation
GAP Web-based System for Local
Project Delivery

SFWMD Certificate:
Stormwater Management

Courtney has over five years of engineering design, permitting, and bidding services for roadway and infrastructure improvements, stormwater management systems, potable water systems, reclaimed water systems and wastewater collection and transmission systems.

Representative Projects

Delray Beach, FL

Osceola Park Neighborhood Improvements

Project Engineer for the engineering preliminary design report, final design, public outreach, permitting, and bidding services for 810 LF of potable water main, 13,030 LF of sanitary sewer improvements, 4,345 LF of drainage improvements, 10,125 LF of roadway reconstruction, 16,875 LF of roadway mill and overlay, 4,350 LF of permeable alleyway paving, landscaping, street lighting, sidewalk, and signing and marking improvements in the Osceola Park Neighborhood. Project included coordination with utility companies for relocation of above ground facilities in conflict with the proposed improvements.

Pompano Beach, FL

Kendall Lake Drainage Improvements

Project Engineer for design, permitting, and bidding of the proposed stormwater improvements within the Kendall Lake Neighborhood to address roadway flooding and standing water issues after rainfall events. The project included proposed drainage structures, piping, exfiltration trench, and outfall improvements. Permits obtained include Broward County Environmental Resource Permit, Broward County Surface Water Management License, Broward County Environmental License, Broward County Traffic Permit, and City of Pompano Beach Building Department.

Pompano Beach, FL

Gateway Drive Stormwater Improvements

Project Engineer for design, permitting, and bidding of the proposed stormwater improvements within the Gateway Drive area to address roadway flooding and standing water issues after rainfall events. The project included proposed drainage structures, piping, and outfall improvements. Permits obtained include Broward County Environmental Resource Permit, Broward County Surface Water Management License, Broward County Environmental License, Broward County Traffic Permit, and the City Beach Building Department.

Pompano Beach, FL

Esquire Lake Stormwater Improvements

Project Engineer for design, permitting, and bidding of the proposed stormwater improvements within the Esquire Lake Neighborhood to address roadway flooding and standing water issues after rainfall events. The project included proposed drainage structures, piping, exfiltration trench, and outfall improvements. Permits obtained include Broward County Environmental Resource Permit, Broward County Surface Water Management License, Broward County Environmental License, Broward County Traffic Permit, and City of Pompano Beach Building Department.

Pompano Beach, FL

A.1.A. Water Main Improvements

Project Engineer for the design, permitting, bidding, and construction for the water main replacement project that included approximately 3,500 linear feet of 6-inch water main, new fire hydrants, new water services and meter boxes, and roadway restoration.

Tamarac, FL

Tamarac Lakes South Water Main Improvements

Project Engineer for the design, permitting, bidding, and construction for the water main replacement project that included approximately 11,000 linear feet of 8-inch and 12-inch water main, new fire hydrants, new water services and meter boxes, rear-yard water service transfers, and roadway restoration.

Lantana, FL

S. Lake Drive Force Main and Stormwater Improvements

Project Engineer for the engineering design, permitting, bidding, and construction of a new 6-inch force main for Lift Station #4 along S. Lake Drive, and stormwater improvements along S. Lake Drive from E. Central Boulevard to Lake Worth Avenue.

Lake Worth, FL

2nd Avenue South Roadway Improvements

Project Engineer for the engineering design, bidding, and construction of the 2nd Avenue South (Dixie Highway to Federal Highway) Roadway Improvements Project. The project is located within the City's Community Development Block Grant (CDBG) target area. CDBG funding was provided for the project through Palm Beach Department of Economic Sustainability.

Boca Raton, FL

A1A Area Infrastructure Improvements

Project Engineer for the engineering, design, and permitting services for the infrastructure improvements to the A1A Area neighborhood. Specific project components consisted of full roadway reconstruction; potable water main improvements; and new gravity sanitary sewer system, force main, and lift station to provide a conventional wastewater collection system to a neighborhood currently service by septic tanks and private lift stations.

Delray Beach, FL

Reclaimed Water Expansion Area 12C

Project Engineer for the design, permitting, bidding, and construction engineering services for the infrastructure improvements on the Barrier Island. Specific project components consisted of full roadway reconstruction (City roadways), roadway mill and overlay (SR A1A; FDOT roadway), potable water main improvements, sanitary sewer improvements, drainage system improvements, and installation of new reclaimed water main system via open-cut and horizontal directional drill methods. FDEP and SFWMD grants were obtained for the reclaimed water main construction funding and grant administration assistance was provided to the City during construction.

Sira “Jockey” Prinyavivatkul, PE
Civil Improvements

Education

B.S. Ocean Engineering, Florida
Atlantic University, 2002

Years of Experience: 20

Joined Firm in 2019

Registrations

Licensed Professional Engineer:
Florida

Associations

American Society of Civil
Engineers (ASCE)

Sira serves as Baxter & Woodman’s Water and Wastewater Department Manager for the Florida Division. His expertise includes design of water and wastewater infrastructure including lift station, sanitary sewer, stormwater management, potable water, and water reclamation projects. His background also includes providing engineering design, permitting, bidding, construction management and observation for roadway, parking lot, and culvert improvements, as well as levee inspections.

Representative Projects

Palm Beach County Water Utilities, FL
Improvements to Master Repump Station 9-North

Project Engineer for the data collection, engineering design, permitting, and bidding services for the upgrades and improvements at Master Repump Station 9-North, located at 1911 O S. State Road 7, Boca Raton, in District 5 of the County’s service area. The purpose was to upgrade the Master Repump Station to provide more reliability and improved operations. Master Repump Station 9-North is an inline type booster station that conveys domestic wastewater.

West Palm Beach, FL
Lift Stations No. 47 and 76 Rehabilitation

Project Engineer for the engineering design services for the rehabilitation of Lift Station Nos. 47 and 76. These lift stations have structural and electrical components that are nearing the end of their useful service life. The project also includes engineering design services for the required structural and electrical upgrades at each of the lift stations. Baxter & Woodman previously prepared a condition assessment at both of the lift stations to determine and document the upgrades and improvements required.

West Palm Beach, FL
Lift Station 100 Improvements

Project Engineer for the Design Services to prepare Contract Documents (drawings and technical specifications) for the detailed design of an inline booster pump station to replace the existing submersible type lift station at the LS-100 site. The detailed design includes the necessary site-civil, mechanical, electrical and instrumentation and control (I&C) improvements required to accommodate a shop fabricated, skid mounted in-line booster pump station at the site.

Lantana, FL
Water Treatment Plant High Service Pump Improvements

Project Manager for the Design Services to prepare Contract Documents (drawings and technical specifications) for the detailed design of the replacement of four existing high service pumps for the Lantana Water Treatment Plant. The detailed design included the necessary site-civil, mechanical, electrical, instrumentation and control (I&C), and structural improvements required for the replacement of the high service pumps and relocation of electrical control components into a new independent concrete masonry unit electrical building.

Palm Beach County Water Utilities, FL**Improvements to Lift Stations 393, 1023, and 8168 (Abidjan Estates)**

Project Manager for the data collection, engineering design, permitting, and bidding services for the upgrades and improvements at three separate lift stations within Palm Beach County's service area. Lift Station 393 required a design of a completely new lift station at a new location due to the existing lift station being within the right of way of Drexel Road. Sewer flows were redirected from the old lift station location to the new lift station location and the force main was extended. Lift Station 1023 was an existing lift station located in close proximity to two residential properties. The lift station was a can type station, reaching the end of its useful service life. The existing lift station was re-utilized and converted into a submersible type lift station, and impacts to adjacent residential properties were reduced. Lift Station 8168 was a rehabilitation project where the pumps, piping, valves, and appurtenances were replaced. Existing and future pumping capacities were evaluated and appropriate pumps were specified.

West Palm Beach, FL**North Shore Drive Subaqueous Water Main Crossing**

Project Manager for the engineering design services for the design of a subaqueous crossing at North Shore Drive in the City. The existing bridge mounted water main had reached the end of its useful service life. Baxter & Woodman had previously provided design drawings and specifications in the past. The City requested Baxter & Woodman to re-evaluate the design and make adjustments as needed. Additional subsurface utility locates, geotechnical exploration, and survey data collection were included for the design.

Gulf Stream, FL**State Road A1A Water Main Improvements - Phase II**

Project Manager for the engineering design services to prepare contract documents (drawings and technical specifications) for the detailed design of the replacement of existing 6-inch water main along State Road A1A with a new 12-inch water main and replacement of the 6-inch water mains on Sea Road, County Road, and Little Club Road with 8-inch water mains. Baxter & Woodman provided data collection, design, permitting, and bidding services for this project.

While working for others:

Lawson, Noble & Webb

During Sira's fifteen years with Lawson, Noble & Webb, he worked his way up from a Junior Civil Engineer to Senior Civil Engineer. As the Senior Civil Engineer, Sira performed civil engineering of stormwater management systems, grading, paving, potable water distribution, sanitary sewer collection, and lift station designs. He also performed quality assurance and quality control review of construction documents and executed construction engineering and management of neighborhood renovation projects.

Miller Legg & Associates

Prior to working at Lawson, Noble & Webb, Sira worked as a Field Representative at Miller Legg & Associates. As a Field Inspector, Sira was responsible for providing on site observations of construction for commercial and residential developments. He would coordinate with local municipalities, jurisdictional authorities, and contractors to perform threshold inspections and check on permitting requirements for the certification of projects.

Education

B.S., Civil Engineering
Illinois Institute of Technology,
1993

Joined Firm in 2006

Years of Experience: 27

Registrations

Licensed Professional Land
Surveyor: Illinois, Wisconsin

Licensed Professional Surveyor
and Mapper: Florida

Licensed Professional Engineer:
Illinois

IDOT Certifications

IDOT Bureau of Construction
Task Training/Certifications:
P.C.C. Paving
HMA Density Testing
HMA

Certifications

Nuclear Density Gauge, Troxler
Laboratories
Concrete Field Testing
Technician, ACI

Work History

2004-2006
Project Engineer and Land
Surveyor, Barrington
Engineering Consultants, Inc.

1993-2004
Project Engineer and Survey
Party Chief, Peter F. Olesen &
Associates, Inc.

Tony has 27 years of design and land surveying experience. His expertise includes the design of roadway reconstruction, roadway realignment, storm sewer, sanitary sewer, and water main projects. He is also proficient in the preparation of right-of-way acquisition, plat, and legal description documents. Tony teaches several surveying courses at the College of Lake County.

Representative Projects

Loxahatchee River Environmental Control District, FL Whispering Trails Gravity Sewer System

Professional Land Surveyor for the topographic and legal survey for the gravity sewer system and neighborhood roadway.

Loxahatchee River Environmental Control District, FL Master Lift Station

Professional Land Surveyor for the topographic and legal survey for the master lift station No. 1 rehabilitation.

Lake Worth, FL 2nd Avenue South Roadway Improvements

Professional Land Surveyor for the topographic and legal survey for the roadway improvements.

Arlington Heights, IL Kensington Road Topographic Survey, Tree Survey and Drafting Services

Project Manager for survey and drafting services for the Kensington Road improvements, a project length of 6,850 lineal feet. The project consisted of obtaining data of record, performing topographic survey of pertinent features, surveying tree locations and diameters in preparation for trail routing, and generating drawings compatible with AutoCAD 2016 and Autodesk Civil 3D 2016, and in standard IDOT format.

Country Club Hills, IL Pulaski Road – Phase I

Performed field survey to locate existing monumentation and the information used with research of the recorded documents to determine the existing property boundaries. Highway plats were prepared for the acquisition of additional right-of-way and easements necessary for the proposed improvements. The Pulaski Road corridor is currently a major collector facility that serves the City of Country Club Hills and provides a continuous, north-south route through the City.

DeKalb County, IL DeKalb County Courthouse Expansion

Surveyor for the civil site improvements related to the expansion of the historic DeKalb County Courthouse in downtown Sycamore, IL. Working with the project architect and City staff, improvements included utility relocations and extensions, grading and drainage design, roadway, and on-street parking improvements.

DeKalb County, IL DeKalb County Jail Expansion

Surveyor for the civil site improvements associated with the expansion of the DeKalb County Jail and public safety building. The improvements required relocation of existing utilities, extension of new utility services, roadway improvements, drainage and detention design, parking lot construction, easement plat preparation, and coordination with various stakeholders. The design included a stormwater retention and infiltration basin designed to remove stormwater pollutants prior to discharge into surface waters, as well as reducing peak stormwater flows.

Grayslake, IL

IL Route 120 and Alleghany Road Intersection Improvements

Plat documents were prepared for the acquisition of right-of-way from the Village of Grayslake for the proposed intersection improvements. The improvements consisted of the preparation of an intersection study and preliminary design. Included in the scope of work was a Location Drainage Study, Intersection Design Study, topographic survey, and geometric alternatives. The design of the improvements included traffic signals, storm sewer design, pavement marking plans, erosion control plan, permit approvals, and bidding documents.

Grayslake, IL

Atkinson Road Extension - Phase I

The location of the existing right-of-way for this project was determined based on research of the recorded documentation and monumentation located by field survey. Created various plat of highways for the acquisition of additional right-of-way and easement necessary for the proposed improvements.

Kane County Division of Transportation, IL

Tanner Road Bridge over Lake Run Creek

Surveyor for Phase I and Phase II engineering for the replacement of an existing 65-foot single-span slab bridge with a two-span reinforced concrete slab bridge. The rural cross section roadway over the structure carries an average daily traffic of less than 2,000. The preliminary design analysis consisted of determining structure type, waterway opening, geometric deficiencies, cost, and right-of-way needs for the project. The Phase II design consisted of design drawings for full replacement of the structure and resolving design deficiencies. Existing cross sections at the structure were examined to satisfy County guidelines for clearance, as they were substandard. Insufficient guardrail and steep cross section sideslopes were reviewed to determine recommendations for the preferred alternative. The preparation of floodway permits for IDNR and construction permits for Army Corps of Engineers was necessary. Design work was done in accordance with IDOT standards.

Lake Forest, IL

IL 43 and Westleigh Property Acquisition Assistance

Professional Land Surveyor for obtaining property at the Waukegan Road (IL Rt. 43) and Westleigh Road intersection from Lake Forest School District 67 Administration Center. This preliminary work was used to facilitate the exchange of property from School District 67 to the City of Lake Forest. The project included preparing legal descriptions for the anticipated right-of-way necessary for the planned IL 43 and Westleigh intersection improvements on District property, completing ROW exhibit for the proposed transfer, and coordinating revisions from City staff and the District.

Education

Civil Engineering
Florida International University

Joined Firm in 2019

Certifications

OSHA 30-Hour Construction
Training

ALTA Survey Basics

Confined Space Entry Training 1

Construction Confined Space Entry
Training Subpart AA - OSHA

Sam has an extensive background in field surveying, holding positions ranging from Rodman to Party Chief. He is proficient with various types of surveys, including boundary, location, topographic, land development and FDOT. His extensive experience also includes road and building construction; final surveys; road sub-grade stakeout; final elevation (blue tops); and various other paving, grading and drainage schemes such as parking lots. Sam has also performed sanitary sewer, drainage, road building, sidewalk construction, park renovations, and single-family housing. Utilized skills in plan, specification, and shop drawing reading. He is familiar with various total stations, EDM, and GPS receivers (Both L-Net, and Base use).

Representative Projects

Town of Lauderdale-By-The-Sea, FL

El Mar Drive Improvements

City of Delray Beach, FL

Seacrest Boulevard Phase III Road Improvements

Town of Jupiter, FL

Jupiter Lighthouse San Sewer Conversion

Monroe County, FL

Big Pine Key Road Improvement

City of Pompano Beach, FL

Esquire Lake Storm Sewer Improvements

Town of Lauderdale-By-The-Sea, FL

Terra Mar Drainage Improvements

Town of Lake Park, FL

Lake Shore Drive Drainage Improvements

While Working for Others:

Miami, FL

Public Works

- Performed inspection of projects from \$3,000 to \$5,000,000
- Projects included sanitary sewer, drainage, road building, sidewalk construction, park renovations, and single-family housing.
- Recognized nationally, along with the Mayor of Miami after completion of Miami Arena.

Other Land Surveying Experience:

Weidener Surveying - Party Chief

Teitelbaum Construction, Miami, FL - Project Layout Manager

Marlin Engineering - Party Chief

Craven Thompson & Associates – Fort Lauderdale, FL - Party Chief

Stoner & Associates - Davie, FL - Party Chief

Mark Escott, PE, CxA, LEED AP

Electrical Engineer

PROFESSIONAL QUALIFICATIONS

- » ACG Certified Commissioning Agent and an LEED Accredited Professional, completing over 15 LEED Certified projects during his time at SGM
- » Seasoned negotiator, leveraging utility providers across the State of Florida with issues concerning long term contracts, purchase agreements, services, equipment, and plants
- » Well-versed with conducting studies and analyses pertaining to Electrical Arc Flash, system coordination, and life cycle and cost economics for go/no-go decision making

RELEVANT LIFT STATION PROJECT EXPERIENCE

- Florida International University Biscayne Bay Lift Station Upgrade Miami, FL
- Broward College South Campus Lift Station- Pembroke Pines, FL
- IPIC Theater Lift Satation- Delray Beach, FL
- Palisades Lift Station- Clermont, FL
- Jubilee Apartments Lift Station- Orlando, FL
- Alexan at Audobon Lift Station- Orlando, FL
- Colonial Grand Apartments Lift Station- Orlando, FL

RELEVANT PROJECT EXPERIENCE

- Street/Site Lighting- Chipley, FL
- Riviera Beach City Hall HVAC Replacement- Riviera Beach, FL
- Orlando Police Department Metrowest Substation Build-Out- Orlando, FL
- Orange County Sheriff's Complex Photovoltaic System- Orlando, FL
- Barnett Park Recreation Center- Orlando, FL
- Public Works Facility Upgrades- Hialeah, FL
- City Hall HVAC Repalcement- Riviera Beach, FL
- Electrical Improvements of New River- Fort Lauderdale, FL
- Public Works Adminsitration EOC Building HVAC Renovation- Fort Lauderdale, FL
- Florida International University Sateillite Chiller Plant- Miami, FL
- Tarpon Point SNF Generator Upgrade- Sarasota, FL
- HHCC Lauderhill Generator Repalcement- Lauderhill, FL



YEARS OF EXPERIENCE:
28

YEARS WITH SGM:
13

EDUCATION:
University of South Florida, BS in
Electrical Engineering

REGISTRATIONS:
FL #50737- Electrical, ACG
Certified Commissioning
Authority, US Green Building
Council, LEED Accredited
Professional

SGM JOB TITLE:
Senior Electrical Engineer

Manuel Hernandez, PE

Senior Electrical Engineer

PROFESSIONAL QUALIFICATIONS

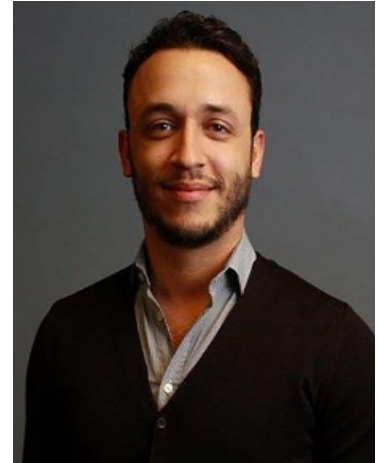
- » 12 years of experience designing municipality facilities, including police and fire stations
- » His electrical experience includes calculating service sizes, feeder sizes, branch circuit sizes, short circuit currents, voltage drop, and performing short-circuit/arc flash/coordination studies and over-current protection device selection using specialized software
- » Has worked previously with Miller Legg on similar Lift Station projects including the FIU Biscane Bay Lift Station in Miami Florida

RELEVANT LIFT STATION PROJECT EXPERIENCE

- Florida International University Biscane Bay Lift Station Upgrade Miami, FL
- Broward College South Campus Lift Station- Pembroke Pines, FL
- IPIC Theater Lift Satation- Delray Beach, FL
- Palisades Lift Station- Clermont, FL
- Jubilee Apartments Lift Station- Orlando, FL
- Alexan at Audobon Lift Station- Orlando, FL
- Colonial Grand Apartments Lift Station- Orlando, FL

RELEVANT PROJECT EXPERIENCE

- Hollywood Beach Community Center- Hollywood, FL
- Public Safety and Public Works Conversion- Riviera Beach, FL
- Boca Raton Public Safety Information Management Center- Boca Raton, FL
- Police Headquarters Firing Range HVAC Upgrades- Fort Lauderdale, FL
- GSA 6th Floor IT Data Center HVAC Upgrades- Fort Lauderdale, FL
- Pocket Park Electrical Upgrades- Miami Beach, FL
- Dimic Building Fire Alarm Replacement- Florida Department of Management
- FAU Housing Renovation- Boca Raton, FL
- Ft. Lauderdale/Hollywood Airport Terminal 4G Support Space- Ft. Lauderdale, FL
- Florida International University Satelliate Chiller- Miami, FL
- Hillsborough County Design Criteria Package for Public Safety Operatons Complex- Tampa, FL



YEARS OF EXPERIENCE:
12

YEARS WITH SGM:
5

EDUCATION:
University of Puerto Rico, BS
in Electrical Engineering

REGISTRATIONS:
FL #74989- Electrical

SGM JOB TITLE:
Electrical Engineer



YVONNE GARTH

President/CEO

YEARS OF EXPERIENCE

25

YEARS WITH GSI

15

EDUCATION

B.S., Journalism and Marketing,
University of Maryland

Certified Charrette Planner



Thinking beyond the **BOX**

WHY YVONNE? Yvonne offers 25 years of relevant experience with a primary emphasis in creating and leading proven economic development & outreach programs that have impacted the diverse, local business and workforce communities at the highest of both local and national levels.

Yvonne is President & CEO of Garth Solutions, Inc. (GSI) and brings her proven leadership and experience as she is respected throughout the construction & engineering community for providing diverse services to national, local, private and public entities in all aspects of business development, marketing, advertising, public relations, economic

development, outreach, diversity program consulting and more.

Her recent focus has been to lead the GSI team in their efforts to deliver impactful solutions for our clients. Along with her team, she has helped to create opportunities for small, diverse firms on multi-million dollar construction and related projects such as the New Meadowlands Stadium, Hollywood Fort Lauderdale International Airport, Nemours Pediatric Hospital and more. As CEO of GSI, Yvonne has overseen the successful award of over \$400 million worth of contract opportunities to the diverse & local business communities in which GSI has worked.

Her commitment to community is

further evidenced in her public service as a former Commissioner & Vice Mayor for the City of Miramar, Chair and Board Member for the Broward County Small Business Advisory Board and as a Board Member to the Miramar Cultural Arts Trust. A proven advocate for the communities in which she works, she earned the distinction as one of Diversity Plus Magazine's national "Women of Power" for 2009 and is featured in many trade & local South Florida newspapers. More recently, Yvonne was formally recognized by Legacy Broward as one of the 50 most influential African-American business leaders in Broward County, Florida for 2014.

REPRESENTATIVE EXPERIENCE: Development and Implementation of Diversity & Local Outreach Programs for the following:

- School Board of Broward County, Ft. Lauderdale, FL: \$800m bond program
- Sole Mia Local Preference Office, North Miami, FL: 185-acre mixed-use development
- Ft. Lauderdale Airport, Ft. Lauderdale, FL: new runway & terminal 4 expansion
- City of Miami Gardens Municipal Complex, Miami Gardens, FL
- Broward Health North, Deerfield Beach, FL: capital improvement program
- Broward Health Coral Springs, Coral Springs, FL: expansion program
- Broward County Convention Center, Ft. Lauderdale, FL: expansion Master Plan Study
- Nemours Children's Hospital, Orlando, FL: new 160-bed pediatric hospital



LACHERYL FITZPATRICK

Chief Operations Officer

YEARS OF EXPERIENCE

28

YEARS WITH GSI

15

EDUCATION /CERTIFICATIONS

B.S., Civil Engineering, University of Texas

Certified Charrette Planner



Thinking beyond the **BOX**

WHY LACHERYL? As a Civil Engineer by education, LaCheryl has a thorough understanding of the construction & project development vernacular. Her career spans over 28 years with hands-on implementation of all aspects of public outreach, project management and oversight on more than a dozen Garth Solutions, Inc. (GSI)

LaCheryl offers seasoned experience working on marquis local and national projects for GSI clients to include Skanska, AECOM and HKS. Promoted from within, she is a certified Charrette Planner, has been a key member of GSI's organization for over 5 years and is an integral

member of the firm's leadership team. She brings extensive continuity, specifically in the areas of community outreach, communications, diverse vendor programs, and project management.

LaCheryl brings substantial expertise and experience working with small & disadvantaged business enterprise program regulations and compliance requirements for Local, Municipal, County and Federal programs. She has also had an integral role in creating, evaluating, and executing various best practices for reporting and monitoring actual program participation for our clients and project owners.

LaCheryl is efficient in working with project management teams to develop and implement strategies designed to increase diverse, local business & workforce participation. She has led Project Administrative staff on project sites, trained staff in the establishment of document control procedures and implementation of Federal DBE programs to ensure compliance. LaCheryl has been instrumental in the national deployment of multiple Construction Management Building Blocks – (CMBB)®™ diverse vendor training programs created by GSI for its client, Skanska USA Building.

REPRESENTATIVE EXPERIENCE: Development and Implementation of Diversity & Local Outreach Programs for the following:

- School Board of Broward County, Ft. Lauderdale, FL: \$800m bond program
- Sole Mia Local Preference Office, North Miami, FL: 185-acre mixed-use development
- Ft. Lauderdale Airport, Ft. Lauderdale, FL: new runway & terminal 4 expansion
- City of Miami Gardens Municipal Complex, Miami Gardens, FL
- Broward Health North, Deerfield Beach, FL: capital improvement program
- Broward Health Coral Springs, Coral Springs, FL: expansion program
- Broward County Convention Center, Ft. Lauderdale, FL: expansion Master Plan Study
- Nemours Children's Hospital, Orlando, FL: new 160-bed pediatric hospital



RAJ KRISHNASAMY, P.E.

PRESIDENT, PRINCIPAL ENGINEER
33 Years of Experience



PROFESSIONAL QUALIFICATIONS

EDUCATION

- MS in Geotechnical Engineering, University of Memphis, 1995
- BS in Civil Engineering, Christian Brothers University, 1987
- Diploma in Electronic Engineering, Malaysian Air Force Institute, 1984

PROFESSIONAL ORGANIZATION AND REGISTRATION

- Professional Engineer: Florida, 53567
- Water Well Contractor, Florida, 11346
- Certified OSHA Supervisor
- Certified Environmental Consultant

PROFESSIONAL EXPERIENCE

Mr. Raj Krishnasamy, P.E., President and Principal Engineer of TSF, is a Florida State registered Geotechnical Engineer with over 33 years of experience. Mr. Krishnasamy oversees the geotechnical engineering, construction materials testing, and inspection services operations. His experience consists of successfully completing over 5,000 public and private projects. He serves as Project Manager for continuing contracts with over 20 Florida public agencies. He has a history of repeatedly retaining those contracts through successful, cost-effective and prompt execution of each task order. Mr. Krishnasamy's daily involvement with the in-house and field operations of the construction and geotechnical services departments provides him the "hands-on" experience and knowledge of current construction codes and construction practices throughout the State of Florida. Mr. Krishnasamy and his highly experienced team focus on providing the client with a consistently accurate, cost-effective quality product that is delivered on time and within budget.

ABBREVIATED PROJECT EXPERIENCE

- Seminole Tribe of Florida (STOF) Injection Well Pump System - 24" Ductile Iron Pipe (DIP) Excavation Work, Hollywood, FL
- Seminole Tribe of Florida - Raw Water Supply Improvements, Hollywood, FL
- Seminole Tribe of Florida - Hollywood WWTP Improvements, Hollywood, FL
- Water Main Replacement, Hollywood, FL
- Lift Station A-6, Hollywood, FL
- Sodium Hypochlorite & CO2 Injection System, Pembroke Pines, FL
- Miramar Wastewater Reclamation Facility Expansion, Miramar, FL
- GT Lohmeyer WWTP Process Pipe Replacement, Fort Lauderdale, FL
- Broward College Chiller Plant Underground Pipe, Fort Lauderdale, FL
- NW 44th Street/Pine Island Rd Water Transmission Main Improvements, Sunrise, FL
- SFWMD S-140 Pump Station Improvements, Broward County, FL
- South Broward WWTP Generator Enclosure, Broward County, FL
- North Regional Load Center 5 & 6 Replacement, Broward County, FL
- Melaleuca Water Main Phase I, Dania Beach, FL
- Broward 3A WTP, Dania Beach, FL
- Utility Repair - Oakland Park Blvd & Dixie Hwy, Oakland Park, FL
- Annual Utility Repairs, Weston, FL
- Springtree Water Treatment Plant, Sunrise, FL
- GT Lohmeyer Emergency Generator Connection and Switchgear Upgrades, Fort Lauderdale, FL



KUMAR VEDULA, P.E.

PRINCIPAL ENGINEER
24 Years of Experience



PROFESSIONAL QUALIFICATIONS

EDUCATION

- MS in Geotechnical Engineering, University of Memphis, 1995
- BE in Civil Engineering, Andhra University, 1992

PROFESSIONAL ORGANIZATION AND REGISTRATION

- Professional Engineer: Florida, 54873
- American Society of Civil Engineers, Past President (Broward Branch)

PROFESSIONAL EXPERIENCE

Mr. Vedula, a Florida-Registered Professional Engineer, has over 24 years of experience providing engineering services for a wide variety of geotechnical projects involving foundation design, slope stability analysis, WEAP analysis and interpreting PDA reports, excavation support, and construction inspection. His extensive experience includes foundation inspections (shallow and deep foundations), soil modification (dynamic compaction, stone columns), preloading, excavations, backfilling, and post construction monitoring. Mr. Vedula has served as a principal inspector on numerous surcharging and settlement evaluations of organic laden soils assignments. His project experience includes 300+ geotechnical engineering studies for various projects types including stadiums, parks, piers, shoreline stabilization, dredging, bridges, roadways, utilities, high rise buildings, schools and government facilities. Mr. Vedula has authored, and co-authored papers published in national and international publications.

ABBREVIATED PROJECT EXPERIENCE

- Water Main Replacement, Hollywood, FL
- Lift Station A-6, Hollywood, FL
- Miramar Wastewater Reclamation Facility Expansion, Miramar, FL
- GT Lohmeyer WWTP Process Pipe Replacement, Fort Lauderdale, FL
- NW 44th Street/Pine Island Rd Water Transmission Main Improvements, Sunrise, FL
- North Regional Load Center 5 & 6 Replacement, Broward County, FL
- Melaleuca Water Main Phase I, Dania Beach, FL
- Broward College Chiller Plant Underground Pipe, Fort Lauderdale, FL
- Utility Repair - Oakland Park Blvd & Dixie Hwy, Oakland Park, FL
- Sodium Hypochlorite & CO2 Injection System, Pembroke Pines, FL
- Annual Utility Repairs, Weston, FL
- SFWMD S-140 Pump Station Improvements, Broward County, FL
- Pump Station Improvements at C-1, C-2, and A-16, City of Fort Lauderdale, FL
- Lakeside Gardens Drainage Upgrades, Broward County, FL
- South Plaza, City of Oakland Park, FL
- Historical Area – Gardens IIB, Plantation, FL
- South Broward WWTP Generator Enclosure, Broward County, FL
- Springtree Water Treatment Plant, Sunrise, FL
- Broward 3A WTP, Dania Beach, FL
- Miramar EWTP Renovations, Miramar, FL
- Peele Dixie Water Treatment Plant Building Repair, Fort Lauderdale, FL
- GT Lohmeyer WWTP Process Pipe Replacement, Fort Lauderdale, FL
- GT Lohmeyer Emergency Generator Connection and Switchgear Upgrades, Fort Lauderdale, FL



WSP USA Inc. (WSP) is the US operating company of WSP, one of the world's leading engineering and professional services firms. Dedicated to serving local communities, we are engineers, planners, technical experts, strategic advisors and construction management professionals.

WSP designs lasting solutions in the water and environment, transportation, buildings and energy markets. With more than 10,000 employees in 160 offices across the US, we are technical experts who design and provide strategic advice on sustainable solutions, engineering projects that will help societies grow for lifetimes to come.

WSP is one of the oldest continuously operating consulting firms in the US. Over that time, we have become a global consulting firm assisting public and private clients to plan, develop, design, construct, operate and maintain thousands of critical infrastructure projects around the world. We are a diverse company of approximately 49,000 people in more than 500 offices across 40 countries. We have a strong commitment to technical excellence, a diverse workforce, and service to our clients.

LOCAL FLORIDA PRESENCE

In Florida, we have provided solutions to design, design evaluations, project management and construction of infrastructure systems for Florida cities, counties and utilities for more than 50 years. We offer planning, engineering design and construction management and inspection services to Florida municipalities, utilities, public agencies and private clients, as well as state-specific water policy and technical issues.

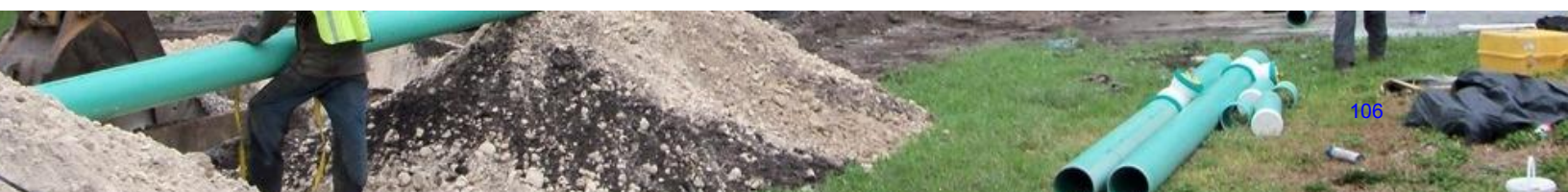
Our long and varied experience across the state and especially in South Florida where 229 of our staff live and work, gives us in-depth knowledge of the region. WSP consistently delivers the planning, design and construction management of water resources projects on time, within budget and to the highest quality standards.

Our infrastructure portfolio ranges from the mega projects that define an entire region to smaller, more local projects that keep a community humming. WSP has maintained a presence in Florida that spans more than three decades with South Florida offices in Miami, Fort Lauderdale and a project office in the Keys. A few of our key local clients include:

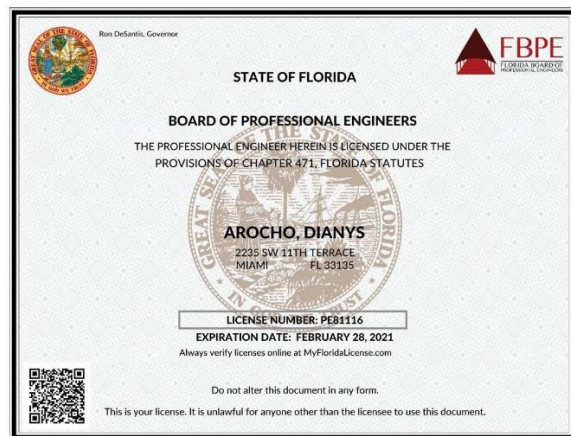
- Broward MPO
- PortMiami
- Miami-Dade County
- Florida Department of Transportation
- City of Miami
- City of Miami Beach
- City of Coral Gables
- Town of Medley
- South Florida Regional Transportation Authority
- South Florida Water Management District



Our extensive water and wastewater utilities local experience includes the design of large diameter watermain and forcemain, pump stations, collection system and trenchless technologies, including horizontal directional drilling.



WSP LICENSES AND CERTIFICATION



BAXTER & WOODMAN, INC.

A proud history and service-oriented culture was established in 1946 by firm founders, Richard Baxter & Lorrin Woodman. As a result of hard work, commitment, and ever expanding engineering capabilities, Baxter & Woodman has grown to a full service firm 250+ strong, serving communities and governmental agencies throughout Illinois, Florida and Wisconsin. We strive to build community value with every project we complete. Our approach:

Our goal is to help
build community
value with every
project we complete.

FIND & FUND

Finding Funding to
Get Projects Built!

CONNECT & COMMUNICATE

Innovative Ideas to Connect Clients
with their Communities!

SAFE & SECURE

Count On Us in
an Emergency!

CONVENIENT OFFICE LOCATIONS

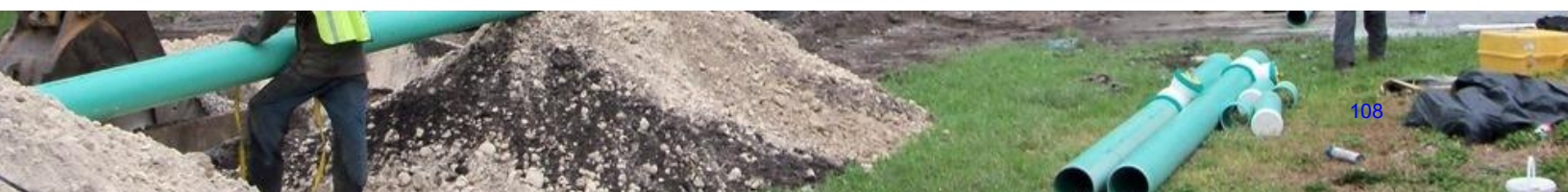
11 regional offices have been established to respond quickly to requests for meetings or to visit project sites. Staff members routinely work out of various office locations in order to provide the specific services and expertise our clients require. Our offices are located in:

- Crystal Lake, IL
- Chicago, IL
- DeKalb, IL
- Mokena, IL
- Burlington, WI
- Madison, WI
- Milwaukee, WI
- West Palm Beach, FL
- Fort Lauderdale, FL
- Key West, FL
- Orlando, FL



Baxter & Woodman, Inc.
Engineering Services

BAXTER & WOODMAN
Consulting Engineers



SERVICES OVERVIEW

Baxter & Woodman's staff of 250+ professionals have provided municipal engineering services to more than 500 communities, counties, and sanitary districts during our over 74 years of business.

We offer a **full range of municipal services** from project inception to construction close-out. All necessary engineering services are provided in-house with the exception of geotechnical engineering.



Water



Wastewater



Transportation



Stormwater



Infrastructure



Bridges/Structures



Environmental



Sustainability



Electrical



Lighting



Survey



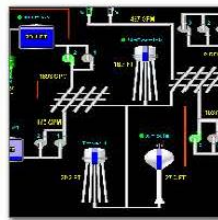
Construction



Public Outreach



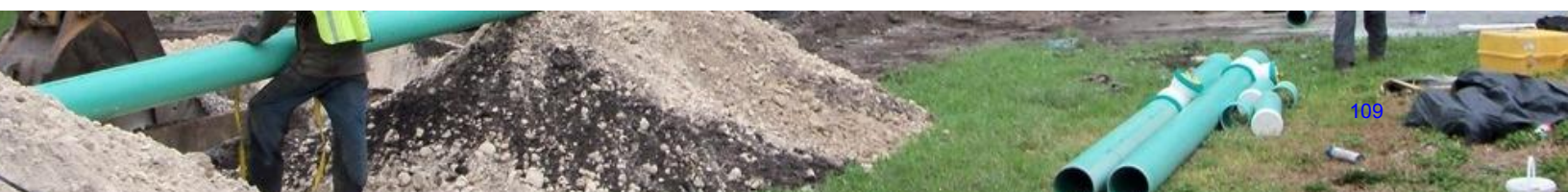
GIS



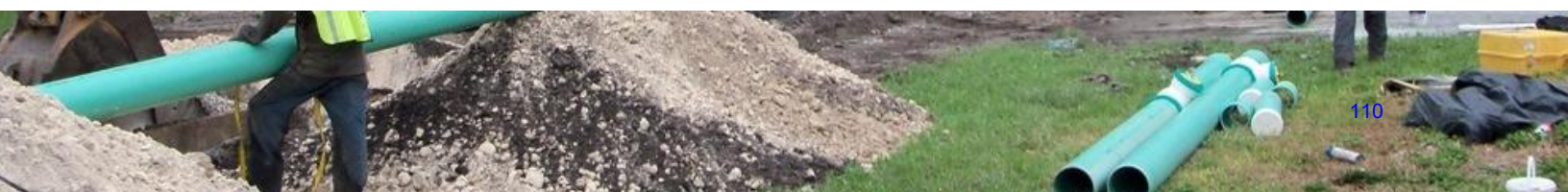
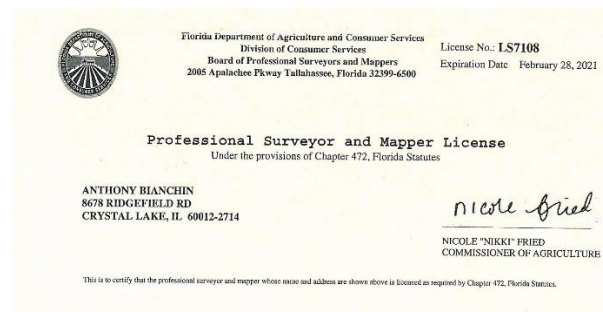
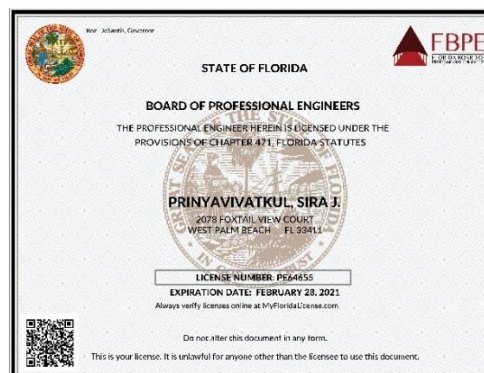
Automation/Controls



Grants/Funding



BAXTER & WOODMAN LICENSES AND CERTIFICATION





1 E. Broward Blvd Suite 1503
Fort Lauderdale, FL 33301

(954) 421-1944
(954) 421-1924 fax
www.sgmengineering.com



SGM ENGINEERING, INC. (SGM) is a Certified Minority Business Enterprise founded and incorporated in the State of Florida in 1991 with headquarters in Orlando, FL. Our business approach is to review, evaluate, design, and recommend the safest, most efficient, and cost-effective methods possible for all of our clients and the projects we undertake. We provide the highest quality design construction documents, cost estimates, construction administration, and coordination efforts with construction managers and owner's representatives, guaranteeing high professional standards and timely executions of every project.

Our staff consists of knowledgeable project managers, engineers, designers, and CAD technicians that complete their projects on-time and within budget. These field experts will be available immediately for your projects, backed by a support staff that can easily assist the team to simultaneously handle multiple projects. As a registered member of the U.S. Green Building Council, SGM does not shirk codes and energy conservation requirements. We represent all segments of the building industry, developing LEED® (Leadership in Energy and Environmental Design) Green Building Rating System® standards for highly sustainable buildings. For this project, we will put no less effort into delivering the same sustainable, cost-effective, and efficient solutions for which we're known.

Mechanical Engineering

SGM's mechanical engineers have experience in the design of mechanical systems including, but not limited to, fire protection systems, all types and sizes of HVAC systems, high temperature hot water boilers, piping, fluid systems, chilled water, compressed gas systems, elevators, hoists and cranes, specialized mechanical equipment, direct digital controls (DDC), and programmable logic controllers (PLC), as well as facilities to house the mechanical equipment.

Electrical Engineering

SGM's electrical engineers are skilled in the design of medium and low voltage AC power systems, uninterruptible power systems, computer power conditioning, grounding, lightning protection, lighting, emergency power, hazardous area electrical installations, and control and monitoring systems. We design simple and complex electrical systems to meet the needs of our clients: security installation to mass public densities, CCTV, CATV, fire alarms, detection systems, voice evacuation, cable tray systems, communications systems, communications premise wiring, Electronic Security Systems (ESS), and intercom systems designed and installed per national and local codes.

Plumbing and Fire Protection Engineering

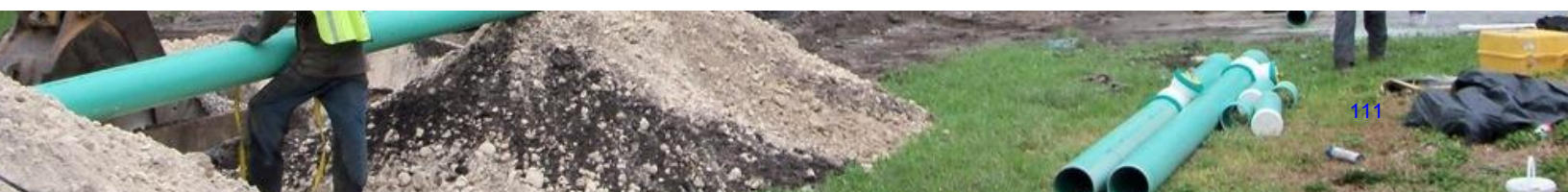
Our plumbing engineers have the ability to design for domestic water systems, hot water return systems, equipment and fixture identification, sanitary drainage systems, storm drainage piping, liquid propane/natural gas systems, and boilers. Our fire protection areas of expertise include: fire suppression requirements (light, ordinary, and extra hazard classifications); wet, dry, deluge and reaction systems; backflow prevention and metering specifications; and fire flow tests (static, residual, and flow).

Commissioning

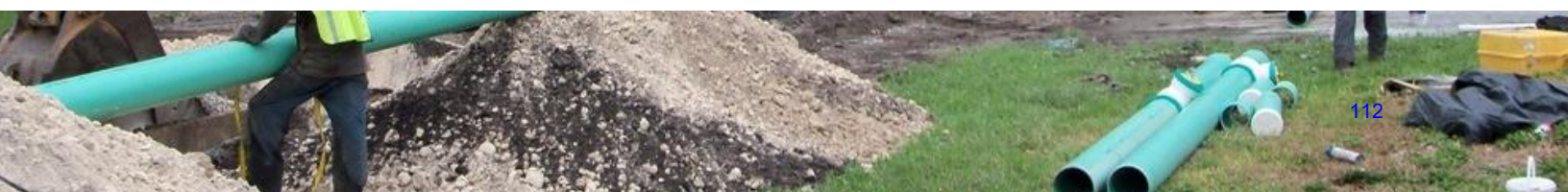
Commissioning (Cx) consists of systematically documenting that specified components and systems have been installed and started up properly and then functionally tested to verify and document proper operation through all modes and conditions. In addition, personnel training will be verified and final project O&M documents will be reviewed for completeness.

SGM currently has Certified Commissioning Agents on staff. These agents are committed to providing quality Commissioning Services from early in the design phase, through construction and into the warranty period. They have the ability to oversee commissioning activities for your facilities, while meeting the highest level of building certification feasible.

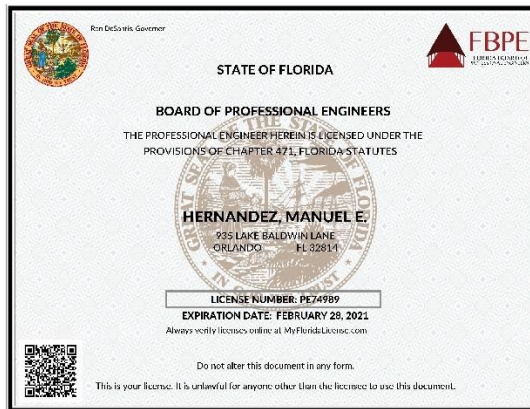
SGM Engineering, Inc. • MEP Consulting Engineers • 1 E.
Broward Blvd Suite 1503 Fort Lauderdale, FL 33301
(954) 421-1944 • (954) 421-1924 fax



SGM ENGINEERING LICENSES AND CERTIFICATION



SGM ENGINEERING LICENSES AND CERTIFICATION



Garth Solutions, Inc. (GSI) is a **Miramar** based small business that specializes in delivering comprehensive strategic business solutions to private and public entities in all aspects of **Public/Community Outreach**, Marketing & Communications, Diversity Consulting, Business Development and **Project Administration**.



Community Outreach & Public Involvement Services

GSI provides its public and private sector clients with methodologies and communication tools to effectively inform and engage affected communities and specific stakeholders with respect to major projects. Their team has experience working closely with a diverse group of community stakeholders, including construction managers, developers, architects, engineers, property owners, neighborhood groups, government agencies, community organizations and local businesses. Garth utilizes a variety of informational tools including web based flyers, brochures, newsletters, meetings, hotlines, videos and websites to enable each client to customize their individual message in an easily comprehensible style for their targeted audience. GSI employs two **certified Charrette Planners** that bring tremendous value during all aspects of the master plan development.

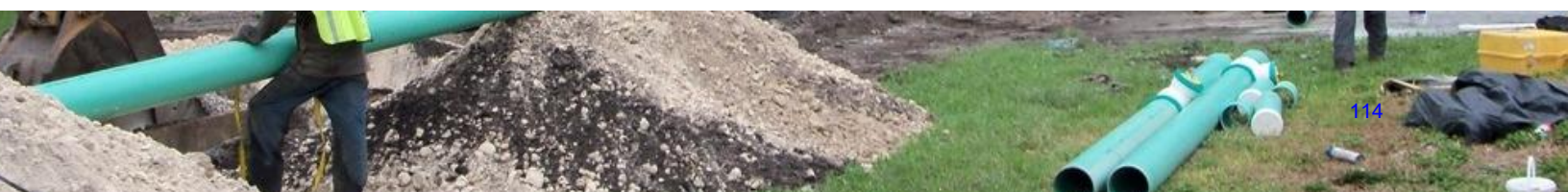
GSI's Community Outreach and Public Involvement services include but are not limited to:

- Charrette Planning
- Public meeting plan and implementation
- Communication material design & production
- Stakeholder identification and assessment
- Public meeting facilitation
- Educational programs

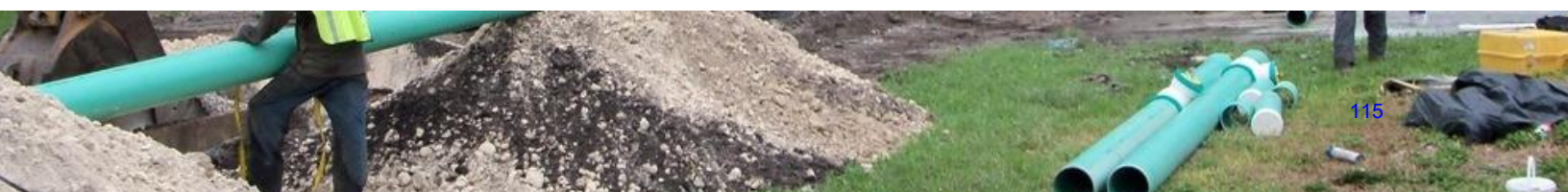
Project Management & Administration

GSI works seamlessly to augment their client's staff with project management and administrative support as they mobilize on project sites.

- Project Management
- Office & Site Management
- Project Administration
- Document Control



GARTH SOLUTIONS LICENSES AND CERTIFICATION



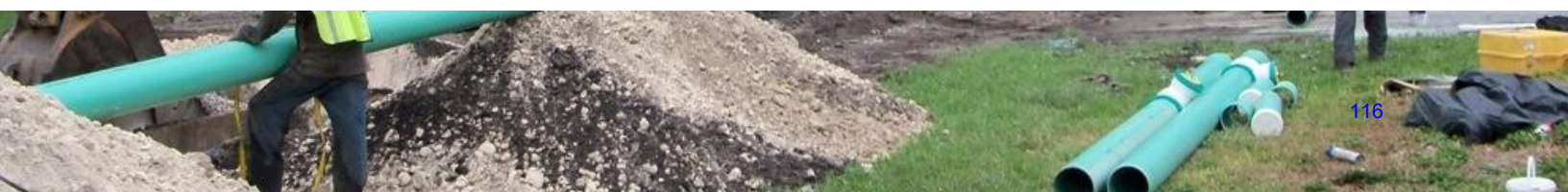
Tierra South Florida, Inc. (TSF) is a full service consulting **geotechnical engineering, construction materials testing and inspections engineering** firm with capabilities to provide test borings, engineering analyses and reports, AutoCAD and MicroStation plan sheets, laboratory soils testing, and construction materials testing. Services also include threshold/special inspection and roofing inspection services. TSF was incorporated in the State of Florida in 2003.



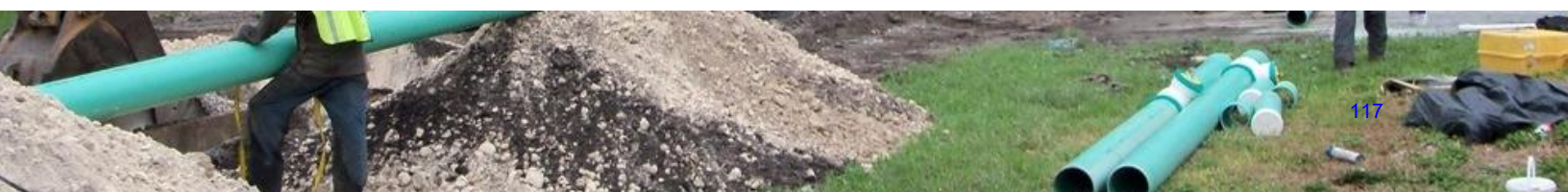
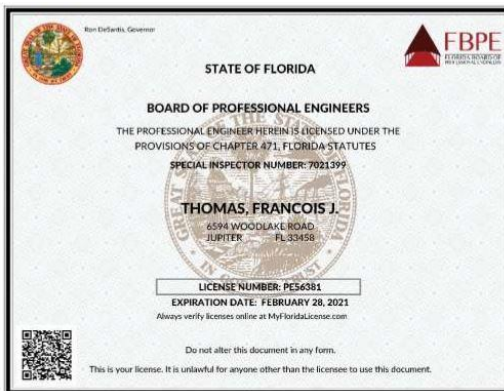
The professional team has been working together since 2000 and is committed to providing quality, responsive service establishing a reputation for sound approaches and professional competence in a wide range of technically demanding areas. TSF is a certified **Broward County County Business Enterprise (CBE), Disadvantaged Business Enterprise (DBE)** with the Florida Department of Transportation. TSF is also a certified **Minority Business Enterprise (MBE)** with the State of Florida's Office of Supplier Diversity.

TSF's principals have served as geotechnical engineering consultants to a large variety of clients, both public and private. These clients include architects, engineers, contractors, developers, utilities, institutions, schools, military, municipalities, and private enterprise covering commercial and residential entities. Each year TSF completes approximately 350+ projects throughout Florida. These projects range from large, multiple-year duration projects to small, short term projects. Approximately **70% of these projects are for public agencies**. Its collective project experience is broad-based, covering **utilities**, highways, **water supply** projects, buildings, bridges, communication towers, dams and levees, **airport** construction, **pavement design of municipal airports**, sinkhole remediation, ground improvement projects, landfills, slope stabilities analyses, and distressed structure/foundation studies.

TSF specializes in continuing contracts with government agencies covering both new and existing design and construction projects. By providing the most economical solutions and completing all work on or before the project schedule, they have been reselected for numerous continuing service task-based contracts with public agencies. **TSF currently provides geotechnical engineering, materials testing and inspection services through continuing contracts to numerous public entities, including FDOT, SFWMD, and dozens of municipalities. Over 60% of its daily workload is based on continuing contracts.**



TIERRA SOUTH FLORIDA LICENSES AND CERTIFICATION



Claimant	Project Name	Case No.	Description	Status
Healthcare District of Palm Beach County v. Miller Legg & Associates, Inc.	Lakeside Medical Facility	Palm Beach County 2013CA012963	April 2013 – Notice of Claim for design and construction defects relating to the perimeter road of the Project.	Currently in mediation
Seaside Landing, LLC v MLA, Jon Walls, Randy Cohen, Tim Ziegler & Dylan Larson	Seaside Landings development in Flagler County	Flagler County 2017 CA 000314	May 17, 2017 – Alleged breach of contract, professional negligence and fraud.	Discovery phase. Mediation hearing held April 2018
Monarch Lakes Property Owners Association, Inc. v. Miller Legg Associates, Inc.	Monarch Lakes	Broward County 08-008400(09)	October 18, 2010 – Complaint of drainage system defects and deficiencies.	Discovery Phase. Awaiting mediation hearing reschedule date.



		CERTIFICATE OF LIABILITY INSURANCE		DATE (MM/DD/YYYY) 4/23/2020																						
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. 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 Risk Strategies 12801 North Central Expy Suite 1710 Dallas, TX 75243		<table border="1"> <tr> <td colspan="2">CONTACT</td> <td colspan="2">Brian R. Hader</td> </tr> <tr> <td>PHONE</td> <td>(214) 503-1212</td> <td>FAX</td> <td>(214) 503-8899</td> </tr> <tr> <td>E-MAIL</td> <td colspan="3">certificatedallas@risk-strategies.com</td> </tr> <tr> <td>ADDRESS</td> <td colspan="3"></td> </tr> </table>				CONTACT		Brian R. Hader		PHONE	(214) 503-1212	FAX	(214) 503-8899	E-MAIL	certificatedallas@risk-strategies.com			ADDRESS								
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ADDRESS																										
INSURED Miller, Legg & Associates, Inc. 5747 N. Andrews Way Fort Lauderdale FL 33309		<table border="1"> <tr> <td colspan="2">INSURER(S) AFFORDING COVERAGE</td> <td>NAC #</td> </tr> <tr> <td colspan="2">INSURER A : Travelers Casualty and Surety Co America</td> <td>31194</td> </tr> <tr> <td colspan="2">INSURER B : Charter Oak Fire Insurance Company</td> <td>25615</td> </tr> <tr> <td colspan="2">INSURER C :</td> <td></td> </tr> <tr> <td colspan="2">INSURER D :</td> <td></td> </tr> <tr> <td colspan="2">INSURER E :</td> <td></td> </tr> <tr> <td colspan="2">INSURER F :</td> <td></td> </tr> </table>				INSURER(S) AFFORDING COVERAGE		NAC #	INSURER A : Travelers Casualty and Surety Co America		31194	INSURER B : Charter Oak Fire Insurance Company		25615	INSURER C :			INSURER D :			INSURER E :			INSURER F :		
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INSURER F :																										

COVERAGES		CERTIFICATE NUMBER: 65170324		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 LINE	TYPE OF INSURANCE	ADOL SUBR NOOL NOOL	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY CLAIMS-MADE OCCUR					EACH OCCURRENCE \$ DAMAGE TO RENTED \$ TENSESSES (Per occurrence) \$ MED EXP (Any and all persons) \$ PERSONAL & ADV. INJURY \$
	GEN. AGGREGATE LIMIT APPLIES PER POLY DIV AUTO LOC					GENERAL AGGREGATE \$ PRODUCTS & COMPOUND AGG \$
	AUTOMOBILE LIABILITY ALL VEHICLES OWNED A. TOW, 24 H HIRE A. TOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY					COMBINED SINGLE LIMIT \$ (Per accident) BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	UMBRELLA LIAB EXCESS LIAB DFT RETENTIONS					EACH OCCURRENCE \$ AGGREGATE \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY (Scheduled or Unscheduled) (Non-Excluded) OCC. CORP. & BEN. EXCLUDED (Mandatory) (N/A) Y/N N/A Y/N 10/22/2068 Y/N 10/22/2068	✓	UB6N2227379	5/1/2020	5/1/2021	✓ \$ \$ EL. EACH ACCIDENT \$1,000,000 EL. EMPLOYER & EMPLOYEE \$1,000,000 EL. EMPLOYER & EMPLOYEE \$1,000,000 EL. EMPLOYER & EMPLOYEE \$1,000,000
A	Professional Liability	✓	107222698	2/21/2020	2/21/2021	Per Claim/Annual Aggregate \$2,000,000

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

The claims made professional liability coverage is the total aggregate limit for all claims presented within the annual policy period to a deductible. Thirty (30) day notice of cancellation in favor of certificate holder on all policies.

CERTIFICATE HOLDER	CANCELLATION
Master Certificate	SHOULD ANY OF THE ABOVE DESCRIBED POINTS OF THE EXPIRATION DATE THEREOF, NOT BE IN ACCORDANCE WITH THE POLICY PROVISIONS AUTHORIZED REPRESENTATIVE Brian Hadar <i>Brian R. Hadar</i>

ACORD 25 (2016/03) The ACORD name and logo are registered marks of ACORD

20170924 | 20/21 03/16 | ROLAN DUBS 4/24/2020 4:25:21 PM (LST) | Page 1 of 1

ACORD ₁₀₁	CLIENT # 64012	MILLLEGG	DATE (MM/DD/YYYY) 10/23/2019												
CERTIFICATE OF LIABILITY INSURANCE															
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 BEHIND. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.															
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PRODUCER Greyling Ins. Brokerage/EPIC 3780 Mansell Rd. Suite 370 Alpharetta, GA 30022	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;"> CONTRACT NO. Trudy Henry </td> <td style="width: 20%;"> FAX (404) 866.550.4082 </td> </tr> <tr> <td> AGENT, BROKER, EXCH. 770.652.4225 </td> <td></td> </tr> <tr> <td colspan="2"> E-MAIL ADDRESS trudy.henry@greyling.com </td> </tr> </table>			CONTRACT NO. Trudy Henry	FAX (404) 866.550.4082	AGENT, BROKER, EXCH. 770.652.4225		E-MAIL ADDRESS trudy.henry@greyling.com							
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INSURER C															
INSURER D															
INSURER E															
INSURED Miller Legg 5747 N. Andrews Way Fort Lauderdale, FL 33309															

COVERAGES		CERTIFICATE NUMBER: 19-20		INSURANCE #:		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.							
TYPE	TYPE OF INSURANCE	ADDRESS BEN. (NOL)	POLICY NUMBER	POLICY EFF. (MM/DD/YYYY)	POLICY EXPI. (MM/DD/YYYY)	LIMITS	
A	☒ COMMERCIAL GENERAL LIABILITY ☐ GL-MADE ☒ GL-OC TOTAL AG'S QUOTE LIMIT APPLIES PER ☐ BOD ☒ BOD-ACC ☐ LOC ☐ OTHER		20SBU0728	11/01/2019	11/01/2020	EACH OCCURRENCE PER AGENT (ANY PERSON) PER AGENT (ANY PERSON) PERSONAL AUTO (ANY PERSON) GENERAL AGENT (ANY PERSON) PRODUCTS, COMPLEX AG	\$1,000,000 \$1,000,000 \$1,000,000 \$2,000,000 \$2,000,000
B	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED ONLY ☒ NON-OWNED ☐ BOTH ONLY	☐ BOD ☐ BOD-ACC ☐ LOC ☐ OTHER	20UEGNM2047	11/01/2019	11/01/2020	OWNED TRUCKS (ANY PERSON) BODILY INJURY (ANY PERSON) BODILY INJURY (ANY PERSON) BODILY INJURY (ANY PERSON) BODILY INJURY (ANY PERSON)	\$1,000,000 \$1,000,000 \$1,000,000 \$1,000,000 \$1,000,000
A	UMBRELLA LIAB EXCESS LIAB ☐ BOD ☒ BOD-ACC ☐ BOD-ACC-LOC ☐ BOD-ACC-LOC ☐ BOD-ACC-LOC-LOC	☐ BOD ☐ BOD-ACC ☐ BOD-ACC-LOC ☐ BOD-ACC-LOC-LOC	20SBU0728	11/01/2019	11/01/2020	EACH OCCURRENCE AGENT AGENT AGENT AGENT	\$5,000,000 \$5,000,000 \$5,000,000 \$5,000,000
WORKERS COMPENSATION AND EMPLOYERS LIABILITY ANY POLICY OR POLICY EXCLUDED OFFERED BY THE INSURANCE (Mandatory in NJ) From 1/1/2019 to 12/31/2019							
Y/N N/A							

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

CERTIFICATE HOLDER	CANCELLATION
Miller, Legg & Associates, Inc. 5747 N. Andrews Way Pt. Lauderdale, FL 33309	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 <i>Don C. Miller</i>

ACORD 25 (2016/03) 1 of 1 The ACORD name and logo are registered marks of ACORD KTRU1

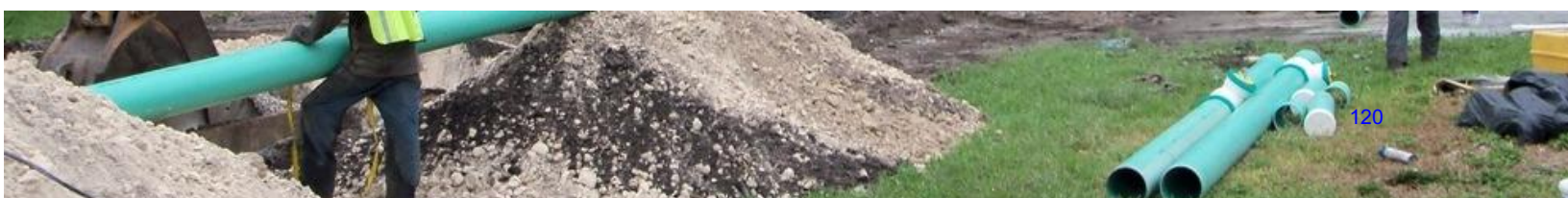
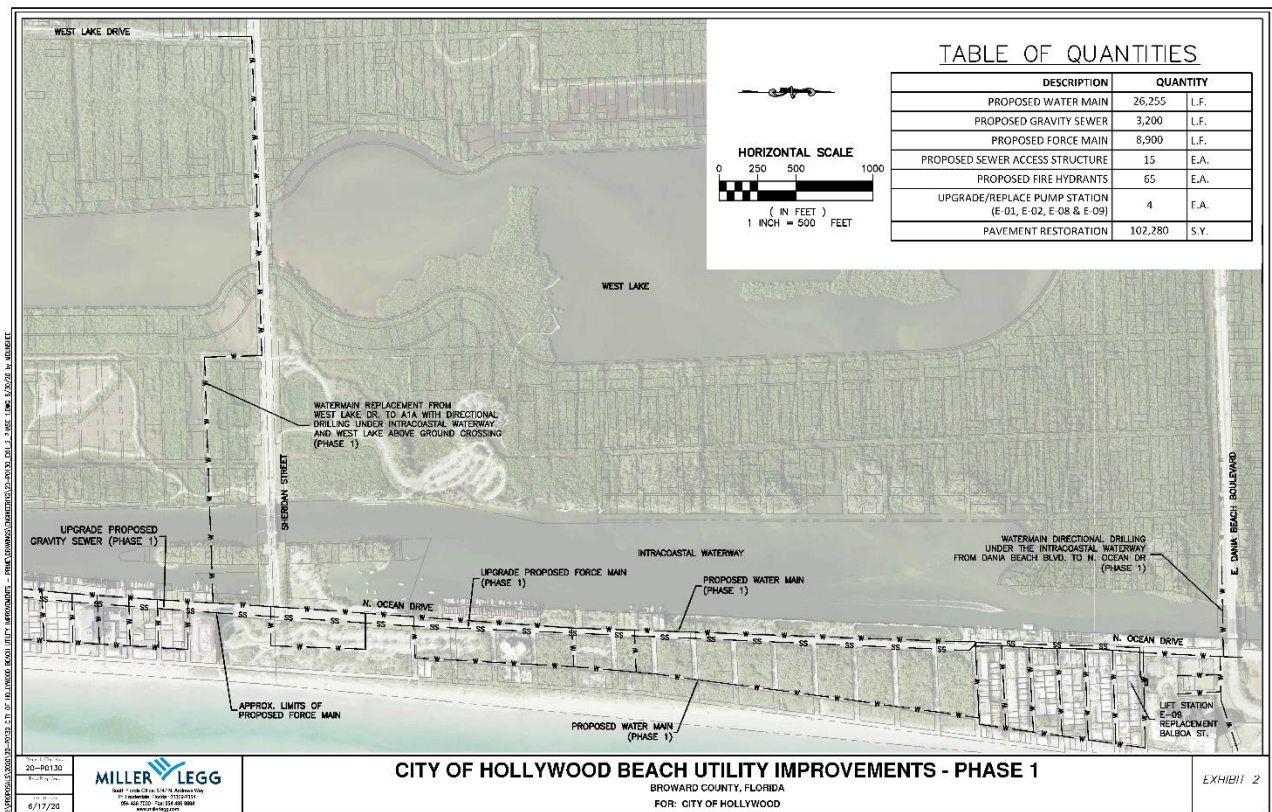


Miller Legg has performed multiple neighborhood water and sewer projects in its 55-year history. We have had extensive and successful exposure to and insight into the planning, design, permitting, bidding and construction management service aspects of a significant number of relevant City projects with the same components as those anticipated for this key and important project. We have studied the Scope of Work provided in this solicitation, are well aware of the expectations and requirements for this project and have evaluated the existing conditions so as to describe as comprehensively as possible our proposed approach to this project.

The proposed project contains two (2) main components:

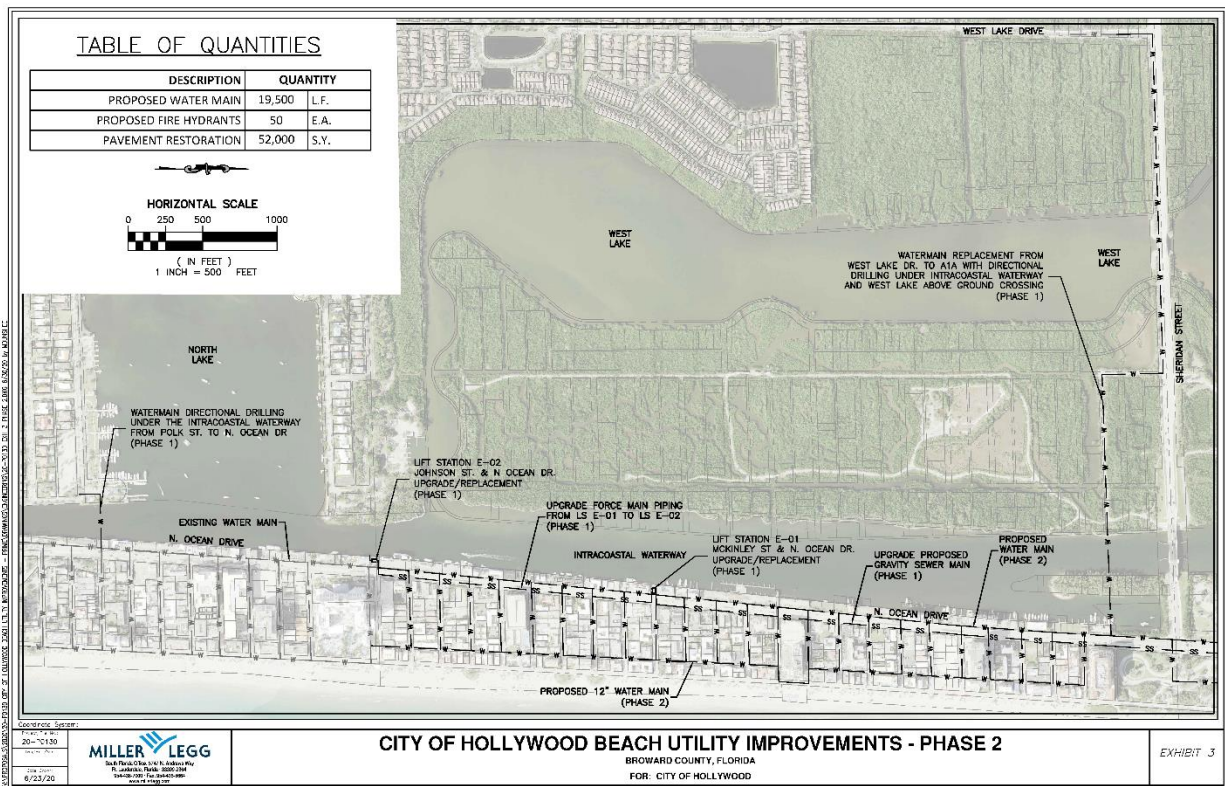
Phase 1 Improvements:

The following map shows the breakdown of the anticipated water and sanitary sewer improvements on an aerial image. *See also Exhibit 2 attached.*



Phase 2 Improvements:

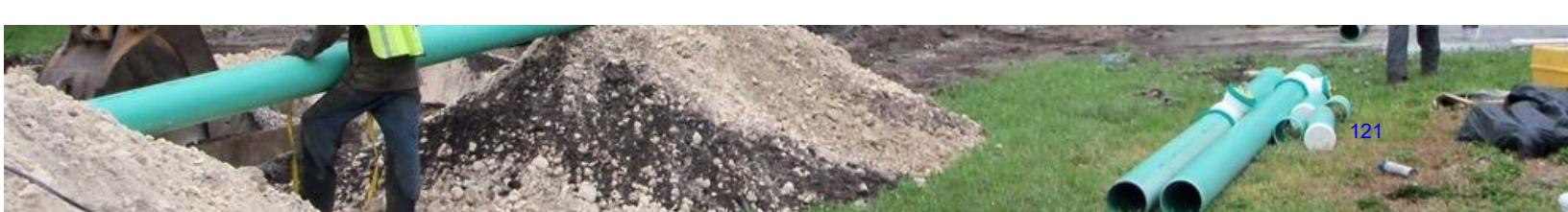
The following map shows the breakdown of the anticipated water and sanitary sewer improvements on an aerial image. See also Exhibit 3 attached.



Project Scope

The proposed water and sewer improvements will better serve the residents within the areas shown and include the following installations:

- Upsizing existing water mains within the areas shown above. We have identified the need for providing up to nearly 45,755 linear feet of new water main
- Replace existing Lift Station E-09
- Upgrade and/or Replacement of existing Pump Station E-01
- Upsizing of approximately 8,000 linear feet of force main
- Upsizing of gravity piping from Lift Station E-01 to Lift Station E-02
- Modification of the connection between Lift Station E-09 to Lift Station E-01
- Rehabilitation of Lift Station E-08



Upsizing Existing Water Main

Our team has identified several undersized water mains within the project boundaries, including some existing 2-inch diameter water lines. The upgrade of these existing mains with 45,755 linear feet of new water main will improve water service to the residents and the community, as well as increase the City's fire protection capabilities through the use of fire hydrants and building fire lines where applicable.

Lift Station E-09

Lift Station E-09 is currently a wet well configuration with the pumps located on top of the wet well. This station is located on private property and the current configuration does not meet the City's standards for pump station alignment and access. Replacement will involve the reconfiguration of the station with the more traditional wet well configuration with submersible pumps. The Miller Legg team will provide a more streamlined design that better incorporates the City's design standards, with significant consideration of the City's operation and maintenance needs.



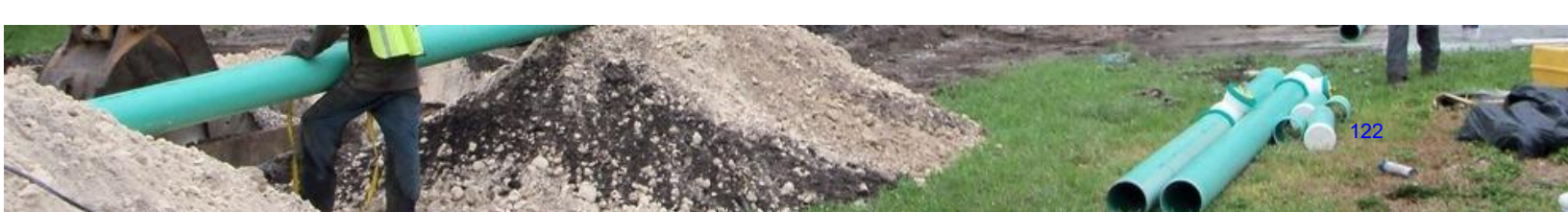
Lift Station E-01



Lift Station E-01 is currently contained within a building structure and currently receives flows from existing Lift Station E-09. Lift Station E-09 pumps via a force main along N. Ocean Drive up to Sherman Street and then discharges into a gravity sewer line which is directed ultimately into Lift Station E-01. Therefore, the flow from Lift Station E-09 is being "re-pumped" as part of the current sewer configuration for this beach area. The Miller Legg Team will review current capacities and pump station operational charts to determine whether an upgrade or full replacement are required. We will provide the City with improvement recommendations and complete a full design for the improvement option selected by the City.

Upsizing Force Main

For the upsizing of force main component of this project, it is anticipated that the force main from Lift Station E-09 will require 7,000 linear feet of pressurized piping. This improvement will connect to Lift Station E-01 and will extend along N. Ocean Drive. This improvement component will be combined with the rehabilitation/reconstruction of Lift Station E-09.



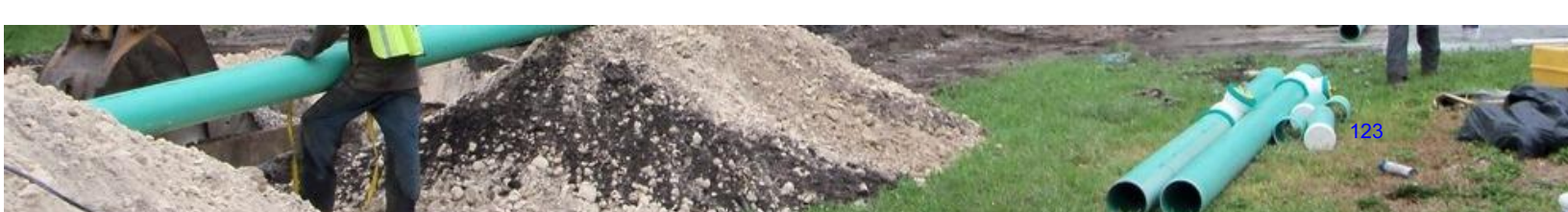
Upsizing Gravity Piping

For the current system configuration, the existing gravity sewer line from Sherman Street to Lift Station E-01 will be upsized. It is anticipated that approximately 3,200 linear feet of gravity sewer piping will need to be upgraded.

Lift Station Connection from E-09 to E-01

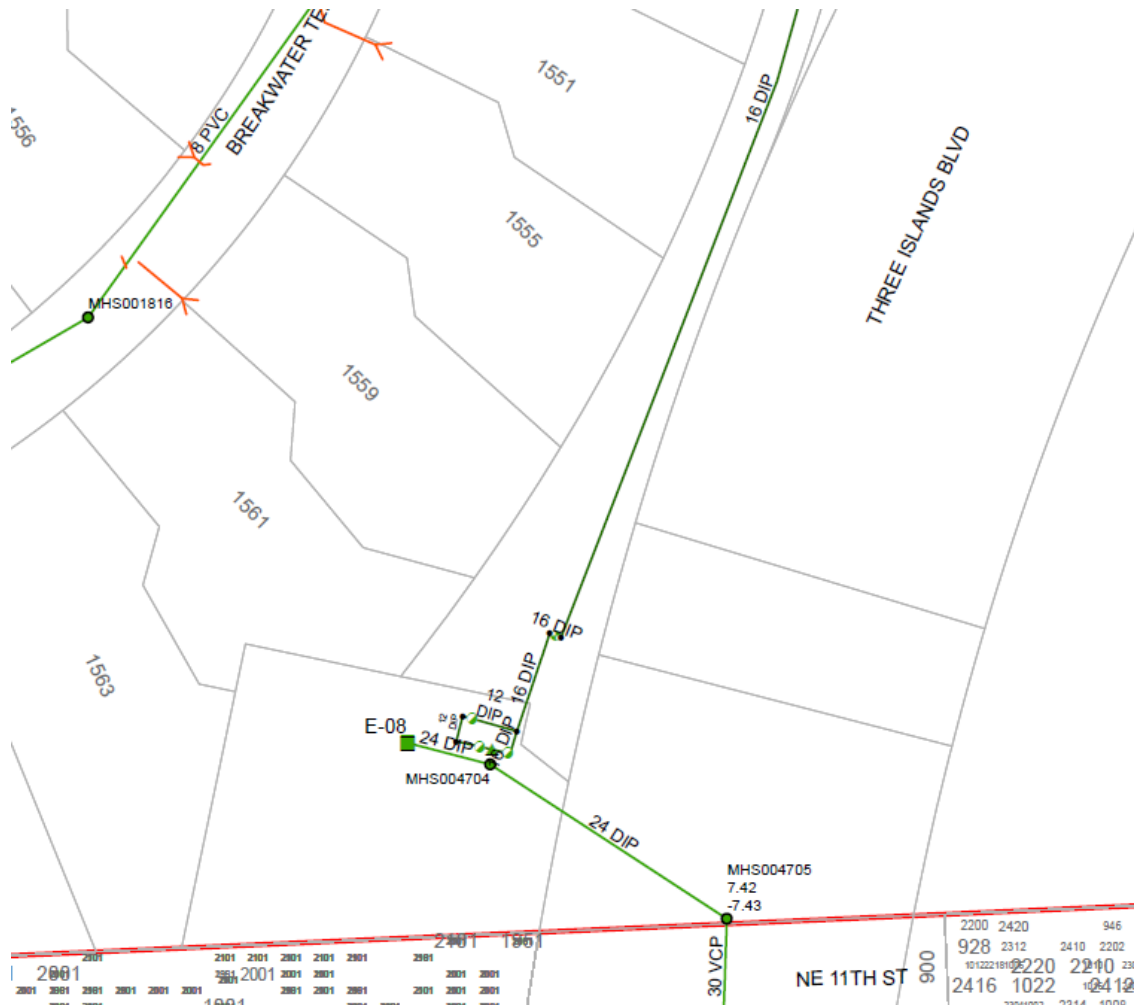
Lift Station E-09 currently discharges through an 8" force main along Balboa Street and then south along N. Ocean Drive to the manhole at Sherman Street. From this point the sewage flows within a gravity sewer main into Lift Station E-01. As part of this project, the connection of the Lift Station E-09 to Lift Station E-01 will be modified by upsizing the existing force main.

Below are map portions showing the locations of the **existing water main and sanitary sewer piping** throughout these areas.



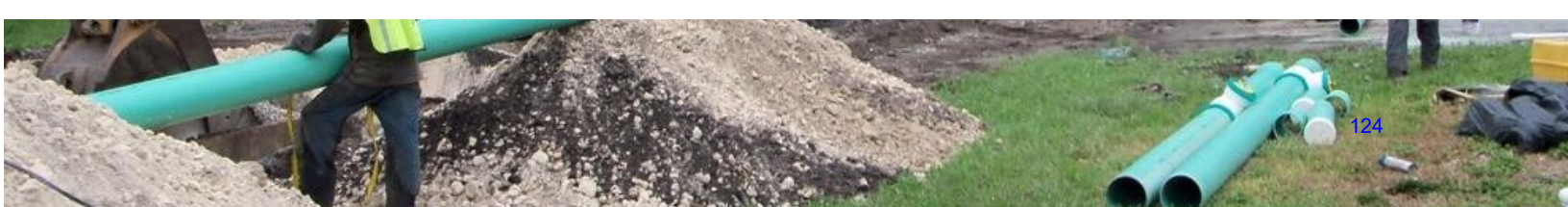
Lift Station Connection from E-08

As identified in Addendum Number 1, the rehabilitation of Lift Station E-08 is included as part of this project. Lift Station E-08 is not located within the boundaries as shown in the overall sketches above. This station is located along the west side of Three Islands Boulevard and is just north of NE 11th Street. This station appears to receive flows from the south from the City of Hallandale Beach through a 24" DIP gravity sewer pipe, and discharges through a 16" DIP force main.



Project Location Site Visits

The Miller Legg Team is very familiar with the project area and has spent many hours visiting the neighborhoods. Based upon our field visits and thorough project understanding, we have developed the following key project information to be considered:

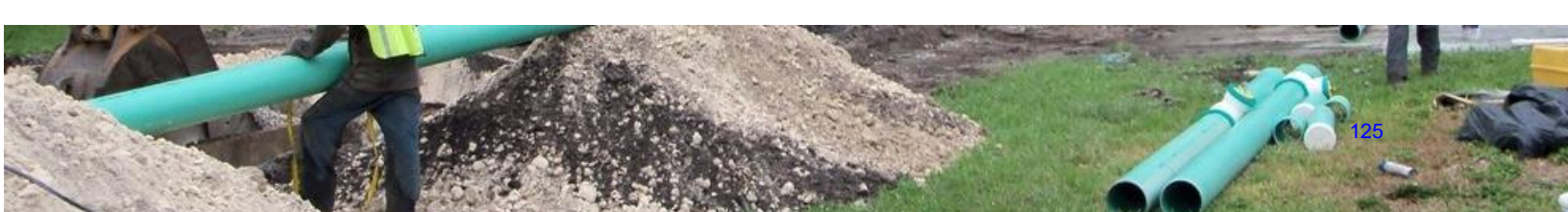


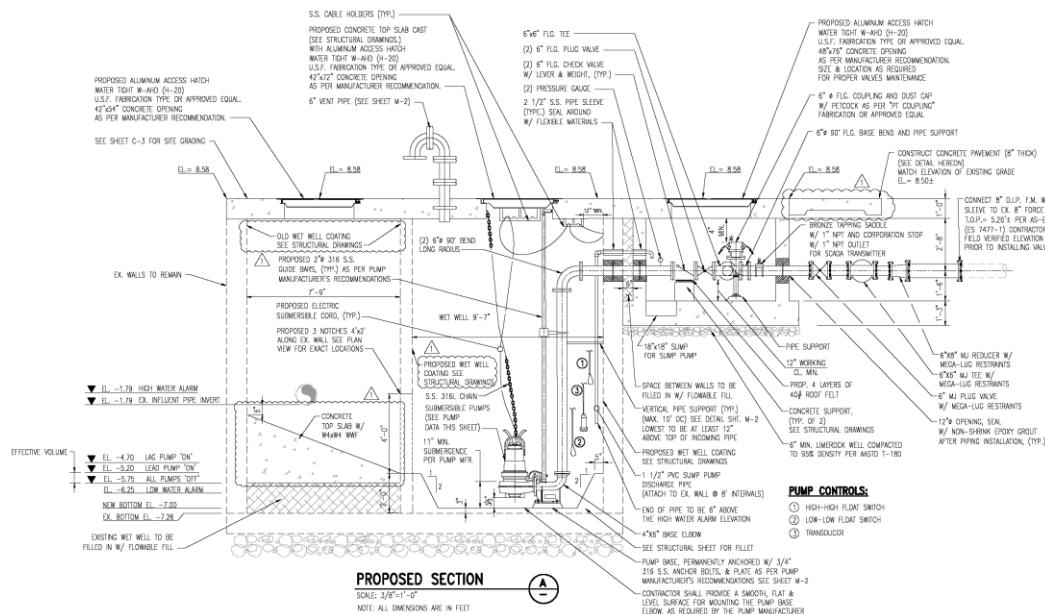
- N. Ocean Drive has been under construction by the Florida Department of Transportation (FDOT) in this area since 2017 and has been highlighted on local television news reports. The FDOT is resurfacing roadways, widening sidewalks, adding bike lanes and providing ADA compliant ramps. Construction of the City's water and sewer project within the area between Sheridan Street and Monroe Street will need to be handled gently utilizing construction methods that are as unobtrusive as possible. A community liaison will be critical both prior to, and during, construction as part of this project. Part of the initial investigation for the project will be to determine if there is currently a moratorium in place for the asphalt roadways. If a moratorium exists and the asphalt cannot be disturbed for an extended period, the use of directional drilling may be necessary along N. Ocean Drive.



- Miller Legg has assessed the City's pump station needs based upon the rehabilitation of Lift Station's E-01, E-02, E-08 and E-09, and is very familiar with the improvements necessary to meet the needs of this project. Miller Legg is currently working for Miami-Dade Water and Sewer Department on the rehabilitation of six similar types of lift stations. These stations have exceeded their life expectancy and currently operate above Nominal Daily Average Pump Operating Time (NAPOT) of 10 hours per day. One of the lift

stations, which is currently under construction is housed in a building similar to the facilities the City of Hollywood has at Lift Station E-01 and E-02. So, Miller Legg is very well versed in the necessary design criteria needed for the rehabilitation of the City's lift stations.





- As identified in the City's supporting documents for this proposed project, much of the Phase 1 work will require directional drilling. The Miller Legg team is very familiar with the process and would be a great asset to the City based upon our experience. As mentioned previously, much of N. Ocean Drive has been under construction for several years, therefore alternative construction methods such as directional drilling will be key to help minimize impacts to the residents within the neighborhoods of this project. These types of construction techniques may also help minimize impacts to City roads that have decorative pavers and concrete.
- Miller Legg has worked with other municipalities on the development of neighborhood water and sewer projects. Miller Legg is constantly innovating the designs for these types of projects. Miller Legg is involved in design utilizing systems such as mobile meter reading, lift station systems hardening due to the effects of rising sea levels and flood stages, and other new and innovative designs for neighborhoods such as these.
- Miller Legg has analyzed the proposed improvements identified for this project and has developed projected quantities estimates as shown on page 27 phase 1 and phase 2 tables.



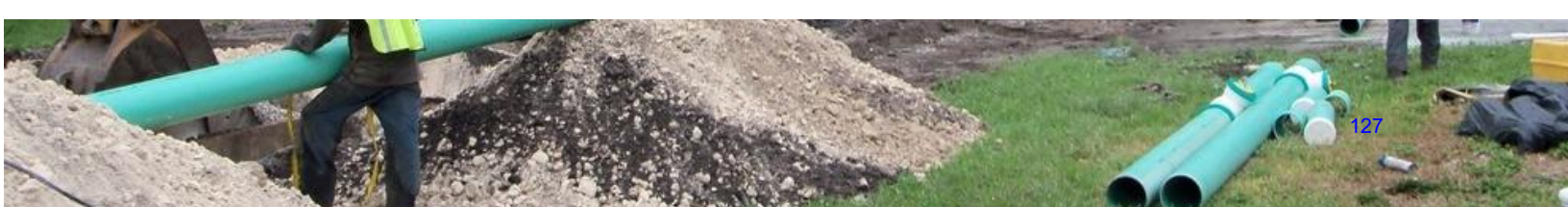
Communication and coordination with the City and City staff will be extremely important throughout this project. It will begin with developing a scope, fee and schedule that meet the City's expectation. Our approach will include open dialog with your key staff in order to identify the key issues to be addressed and to develop a comprehensive plan for resolution. Our Team has the background, knowledge and depth of resources to help the City define the challenges, determine the objectives and accomplish the goals for this project. This will include identification of all the stakeholders to establish their needs and expectations. Of primary concern will be communication interface between the City staff, the residents, businesses and the permitting governmental agencies. Under the direction of our Project Manager, Glen Harrelson, PE, the Miller Legg Team will help facilitate the necessary communication between these stakeholders to ensure that the final product addresses all expectations.

Upon award of this Contract and approval from the City, the Miller Legg Team will meet with the City's Project Manager and staff to discuss the project criteria and confirm project objectives, risks, concerns, budget and schedule. The kick-off meeting will ensure that the Project Team (Miller Legg Team and City) are fully coordinated regarding the City's needs, requirements, and expectations for this important project. Our Team knows the project area well and understands the City's processes and procedures. Not only are we ready to start NOW, but we will hit the ground running on day one to help expedite the project. There is no learning curve with the Miller Legg Team, and we have the depth of local resources to address this key project at once.

The COVID-19 pandemic and resulting social distancing have reshaped public communication. During this time people may be looking for a way to get involved without face-to-face contact. It is still important for people to be engaged so we have leveraged innovative and dynamic platforms to do so. Using the advancement of digital and social media platforms, we can create project specific websites to post information, send text and social media alerts, publish digital newsletters and stream public meetings and webinars. A mechanism will be provided for people to sign up for alerts and to share their comments and concerns through dedicated email and phone hotlines.

Social media is a great way to stay connected regardless of distance and with everyone quarantined at home, people are online more than ever before. Prioritizing its use during this time can help our team communicate with the community and let them know the project is still moving forward.

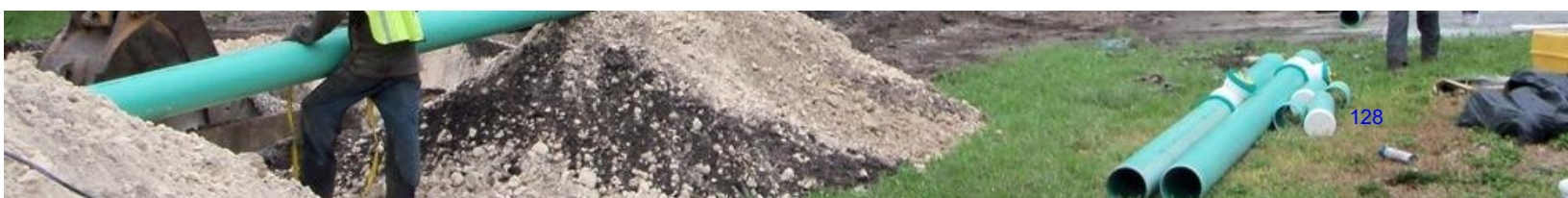
We will leverage the City channels and other community partners, leaders, and religious/spiritual communities to get the word out that the project remains on schedule, and they will relay that information to their circles. We have found that you can strengthen your relationships or build new ones as you support each other during this time.



We are doing something similar on a few of our other projects like, Las Olas Streetscape where we implemented a “virtual walking tour”, Naples Airport Noise Study where we participate in virtual public/committee meetings, Broward County Public Schools where we publish digital newsletters and send out alerts.



Regardless of which outreach and engagement methods or tools are used, it is critical to be responsive to questions, provide timely answers and to follow up after engagement processes have been completed.

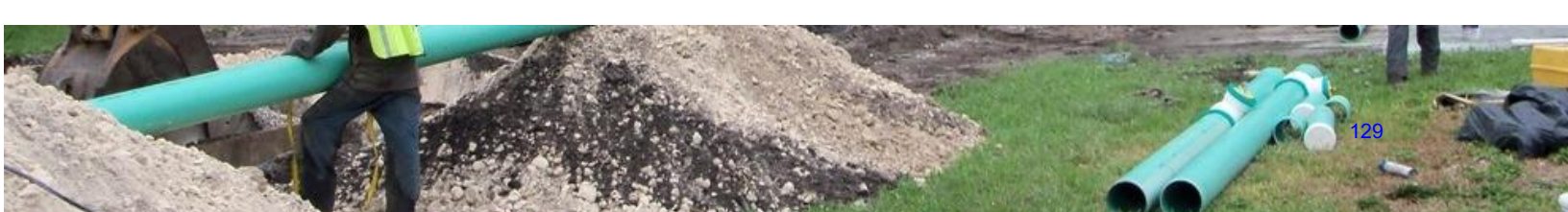


ANTICIPATED SCOPE

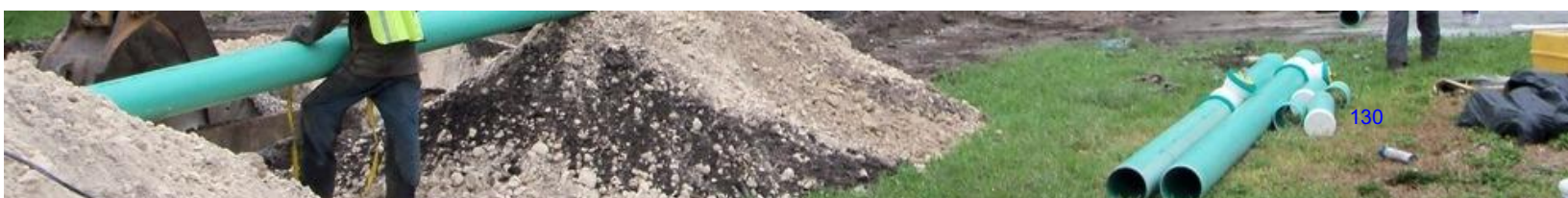
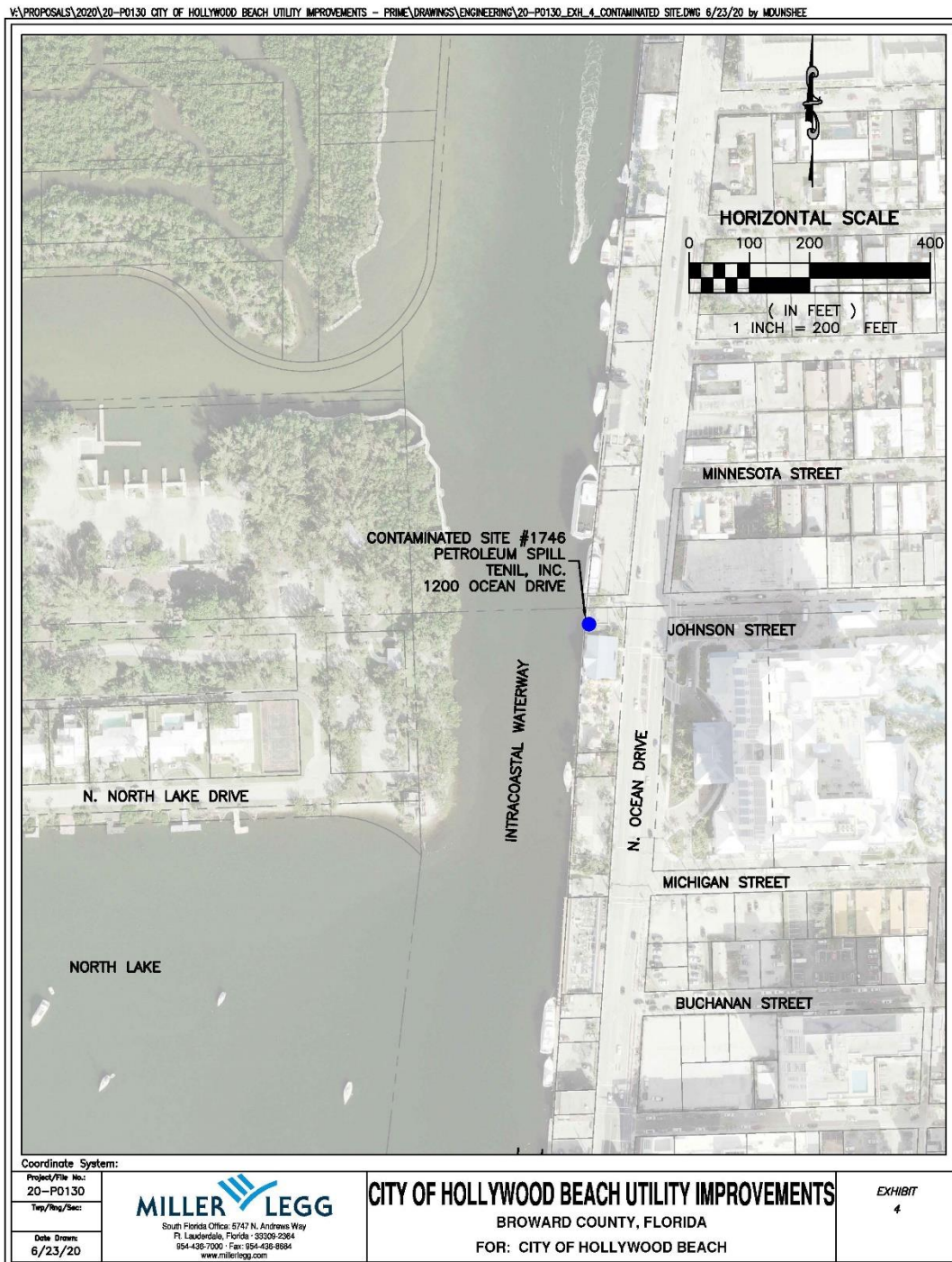
The anticipated scope of services for the project includes:

- Meet with City staff to confirm scope of work, requirements, and expectations
- Survey the project area
- Environmental survey of the project area
- Coordinate with utility companies within the project limits
- Provide subsurface utility evaluation
- Perform Preliminary Design Phase services, including preparation of an overall map of the proposed improvements
- Coordinate with City staff regarding any anticipated conflicts
- Develop engineering documents for the proposed improvements
- Provide permitting services with the local governmental agencies
- Coordinate with City staff regarding any issues that arise during permitting
- Provide final construction documents
- Assist City with the bidding process and contractor selection
- Provide construction management and inspection services for the project, as approved and requested by the City
- Provide final certification for the project ensuring the installation of all components meet the intent of the design and meet the objectives of the City

Of paramount concern is the **necessity for the planned improvements to cause minimal interruption to City residents and businesses**. This will be a challenge when working in public rights-of-way. The Miller Legg Team has extensive experience dealing with the development of roadway utility systems and will provide expertise regarding the proper maintenance of traffic (MOT) and phasing of construction to assist with this challenge. Our Team will be able to coordinate the impacts of construction with the traffic flows before they become an issue for the residents and to the City. ***Keeping safe accessibility and mobility is a key goal which our Team has delivered successfully for many other local projects.***



The Miller Legg Team has identified that there is one (1) contaminated site within the limits of the project. Please refer to Exhibit 4 attached. This site is adjacent to Lift Station E-02 and is located at 1200 N Ocean Drive. The Miller Legg Team will coordinate work with the contractor during this phase of the project to ensure that no contaminated sites are affected during the dewatering for the installation of piping for this project.



**SURVEYING & UTILITY COORDINATION**

The Miller Legg Team has reached out to all local utility companies within the area via a Design Ticket to determine the location and extent of their utilities. We will coordinate with these utility companies to locate their facilities and to avoid conflicts during construction. **This will minimize construction change orders.** The Miller Legg Team will utilize this information during the surveying process to confirm as accurately as possible the location of all utilities. All information will be provided to the contractor prior to construction to ensure that there is no interruption to service during the construction of this project. As mentioned, this will also help to eliminate change orders and facilitate the project to stay within budget and schedule. The Miller Legg Team has identified that there are multiple utility companies located within the rights of way corridors.

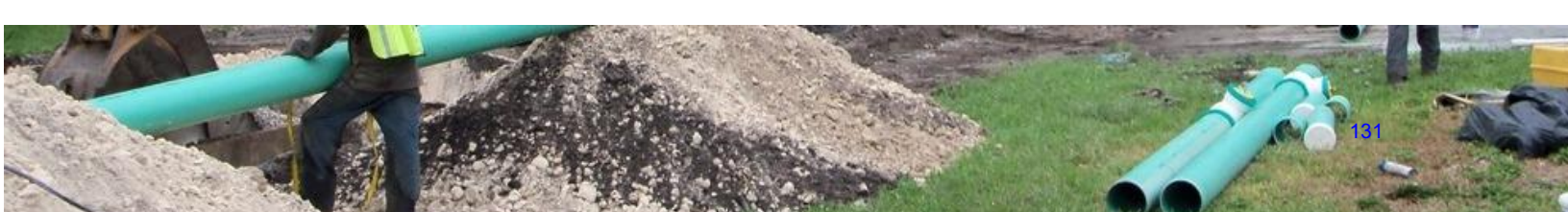


The Team engineering staff will work closely with our Team surveying staff to ensure that the necessary data is captured during this process to meet the design intent. Our engineers will frequently visit the project sites during the surveying process to ensure this outcome.

Of critical concern for our surveyors will be locating the existing property corners and right of way lines for each roadway. It has been our experience that this thorough analysis will help establish the limits of the right-of-way improvements and help to minimize any work on the homeowner's private property.



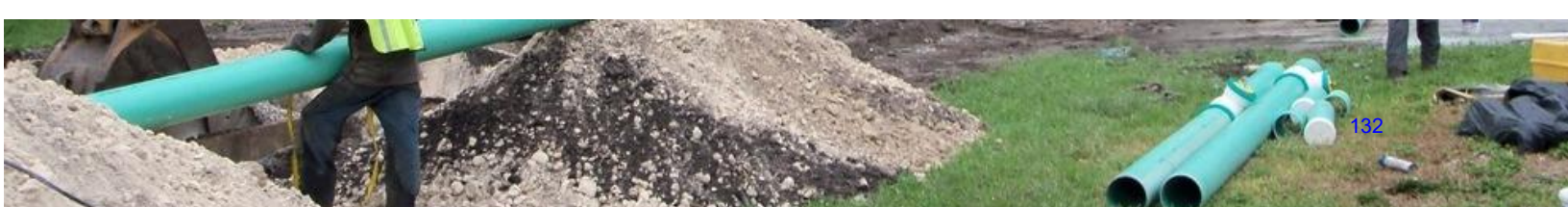
The Miller Legg Team also can provide Subsurface Utility Engineering (SUE). We will supply this service to investigate existing utilities more thoroughly. Performing not only the horizontal but the vertical location will ensure that minimal conflicts will be encountered by the contractor. The location of these utilities will be paramount to starting the project correctly and completing the project with as few conflicts as possible. **The placement of gravity sewer will require deep installation and wide excavations, therefore knowledge of existing utilities (horizontally and vertically) will be critical to the success of the project.**



If the City is interested in expediting survey collection and data processing in order to expedite the project, the Miller Legg Team can implement **mobile mapping technology**. Mobile mapping offers a compact, highly flexible system focused on engineering-grade surveys and asset inventory collection. Mobile scanner capabilities can produce a unique blend of high-density LiDAR data and digital imaging quickly and efficiently. It allows the ability to collect data while driving in the vehicle at the speed of traffic. The point cloud and photo data can then be used to quickly analyze areas for project planning and offer more accurate design information. This work can often be accomplished on the day of collection. Using the latest advanced imaging technology, the mobile asset collection expedites field data collection and imaging and data processing, resulting in reduced project timelines. Maximizing productivity and increasing safety, this process efficiently uses the design-grade data collected through an ArcGIS platform. Product deliverables are enhanced by utilizing both field and office staff simultaneously to meet project goals.

Mobile mapping advantages:

- Portability accelerates project timeline with fast deployment to any project
- Streamlined ability to record survey grade data and spatial imaging
- Asset collection in an ESRI platform
- Highly sophisticated and integrated workflow, providing a complete solution from project data to project intelligence
- Capture 360-degree project views with photos
- The mobile mapping system can be attached to many types of platforms, boats, rail systems, golf carts, ATVs and many others. This allows for collection anywhere for many applications
- The data can be imported into a CAD format in either 3D, 2D, or DTM





The Miller Legg Team specializes in the execution of water, wastewater, and stormwater infrastructure projects for the entire lifecycle from planning and engineering, to design, permitting, procurement and through construction close-out, including public involvement.

Our Team has experience working with similar projects that have needs aligning with those of the City such as water main replacement and meter conversion projects. In addition, our Team members are acting as Program Managers for the MDWASD's Lift Station Rehabilitation Program which consists of the rehabilitation and reconstruction of outdated and under capacity lift station facilities in Miami-Dade County.

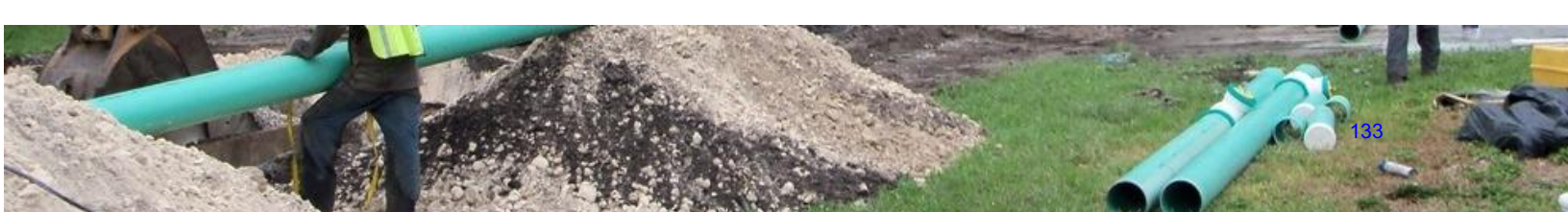
Below please find our **typical design process breakdown and main activities:**

As required for a successful project, the Miller Legg Team has spent many hours in the field analyzing the utility information gathered for this project. Therefore, below please find **suggested approaches to some of the issues** that will need to be addressed as part of the design phase of this project:

- Develop a corridor and alignment for the water and sanitary sewer systems
- Utilize directional drilling where possible to help minimize pavement restoration impacts
- Coordinate with existing utilities to avoid conflicts, minimize possible change orders and time delays
- Coordinate early and during construction with all stakeholders, such as residents and commercial businesses to raise awareness and alleviate concerns

Upon collection of all the survey data and utility coordination, the Miller Legg Team will proceed to develop the 30%, 60%, 90% and final construction documents (or as requested by City). Our Team will coordinate with the City regarding each of these submittals to review the documents, address concerns/questions and address scheduling and budget issues. There will be continual coordination with the City Project Manager during all phases of this project, including design document submittals.

Within a neighborhood water and sewer project, each lot or parcel will require a sewer and water service. The construction of new water services and gravity sewer lines will be extended to each of the parcels within the improvement area.





SEA LEVEL RISE ISSUES

The Miller Legg Team has been fully involved with Broward County sea level rise issues. Our Team understands how the effects can impact public utility systems as well as how design and implementation of those systems will need to be performed. Our Team is currently working with Miami-Dade County WASD to ensure that new and rehabilitated lift stations constructed within the County take into account current flood stages and future sea level rise with respect to top slab elevations, station access and pump control systems. **Miller Legg has extensive experience and can provide multiple design alternatives to the City in order to assist with the placement of sanitary sewer lift stations** and ensure that rim elevations and control panel equipment are placed in a manner to ensure that they will not be impacted by flood stages.



PERMITTING

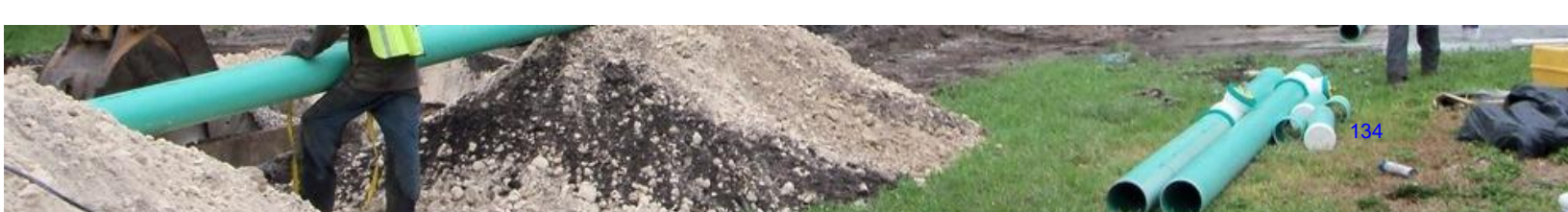
The Miller Legg Team has assembled an experienced group of professionals with an understanding of local regulations who bring a wealth of permitting knowledge on similar projects. Our Team truly understands the regulatory challenges for this project since we have:

- Local experience permitting projects with similar challenges in the City and Broward County
- Completed the permitting and construction of similar pipeline projects for the City of Hollywood and surrounding municipalities

Our Team members have extensive permitting experience with numerous municipal projects throughout South Florida and Broward County, including environmental, stormwater management, transportation and utility improvements. Our Team is intimately familiar with Federal, State and Local permitting regulations and requirements for the various agencies that have jurisdiction over the project. We have strong relationships and a successful permitting track record with many such agencies including Florida Department of Environmental Protection (FDEP), Broward County, Florida Department of Transportation (FDOT) and South Florida Water Management District (SFWMD).

Once the City has approved the 90% construction drawings, the Miller Legg Team will submit plans to the regulatory agencies to begin the regulatory process for the following permits:

1. **City of Hollywood** – Engineering and Building Permit Approval

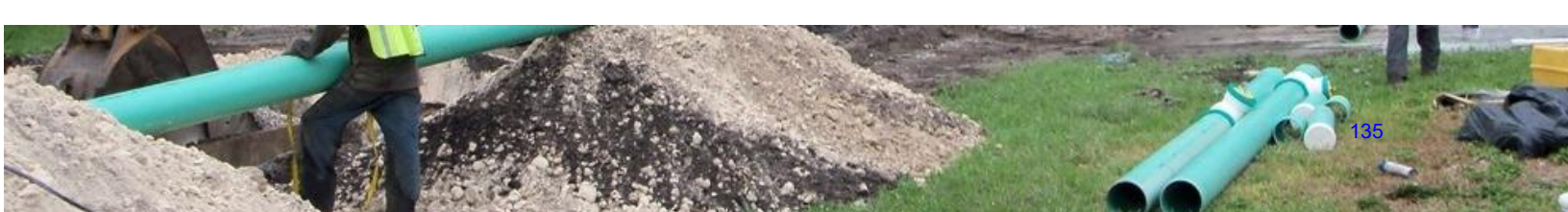


2. **Broward County/FDEP** – Notification Application for Constructing a Domestic WW Collection/Transmission System
3. **Florida Department of Environmental Protection (FDEP)** - Notice of Intent to Use the General Permit for Construction of Water Main
4. **Broward County Traffic Engineering** – Pavement Marking and Signage (if required)
5. **Broward County Contamination** – We have identified one contaminated site within the project area.
6. **FDOT** Utility Construction Permit & Maintenance of Traffic – Utility Improvements within FDOT ROW (N. Ocean Drive)
7. **South Florida Water Management District (SFWMD)** – Dewatering for pipe installation
8. **SFWMD** – Right of Way permit
9. **United States Army Corps of Engineers** – Form 4345
10. **Coast Guard Permit** – Navigable Waterway
11. **FDEP** - Submerged Land Easement
12. **City of Hallandale Beach** – Engineering Permit (If necessary for the rehabilitation of Lift Station E-08)

In addition, our Team will have planning meetings with the Regulatory Agencies in order to proactively coordinate all issues prior to submittal.



Planning a Public Outreach strategy for localized infrastructure improvements begins on Day One of the program. With its traditional Design-Bid-Build delivery method, the Hollywood Beach Utility Project offers us the opportunity to get a head start in first understanding and then engaging the key stakeholder groups (residents, businesses, and visitors) in the areas designated for the upcoming work. This will be accomplished through a grassroots approach that focuses on building awareness, educating the relevant stakeholders, setting expectations, and mitigating negative reactions prior to the project reaching an active stage of construction.



Purpose & Goals of Public Outreach

The overarching purpose of the Public Outreach Program will be to maintain an open line of communication with key stakeholder groups in an effort to promote awareness, encourage cooperation, and find preemptive solutions to the disruptive impact of construction on the neighborhoods and businesses involved.

At the project kick-off meeting, a public involvement plan (PIP) will be submitted for review and approval. Based on the key elements, this plan will serve as the guiding document for defining the strategy employed by the Miller Legg Team in conveying information to the public. The PIP will identify the stakeholders, potential issues, communication methods, and a plan for monitoring progress and general activity.

The key goals involved in the success of this plan include:

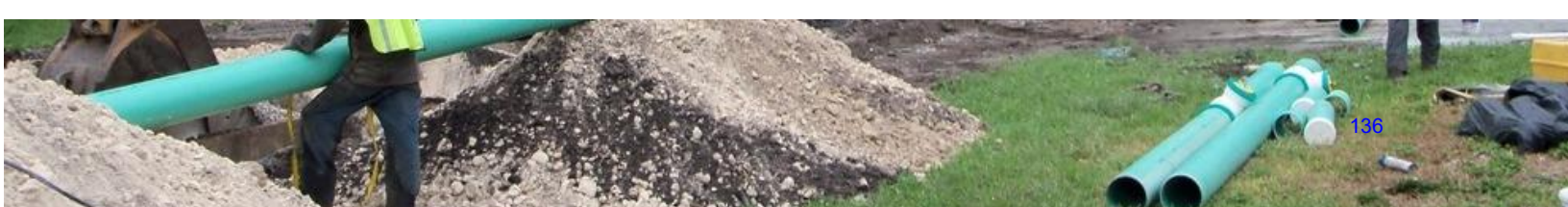
- Encouraging public support and confidence in the Systems Improvement Project
- Addressing the needs and concerns of residents, local businesses, visitors, and other interest groups while moving the project toward completion
- Providing factual and transparent information to the impacted target audiences
- Offering various avenues for stakeholders to obtain timely updates as well as convey any questions or concerns

Accomplishing the goals outlined in the PIP requires an understanding of the fundamental elements involved. These elements can be summed up as the Project Process, Area of Impact, and Key Stakeholders, as follows:

- **Project Process**
Scope of work, timeline of active construction, and the expected benefits of the project itself
- **Area of Impact**
Established neighborhoods and commercial areas
- **Key Stakeholders**
Target audiences that include residents in the surrounding communities, local organizations and businesses, as well as other relevant interest groups or entities

Implementation of the Public Outreach Strategy

Our Public Outreach Program will be tailored to run parallel with the traditional Design-Bid-Build process from the onset through the completion of design. The primary methods of implementation will be to **activate**, **engage**, and **inform** key stakeholder groups about the System Improvement project. In particular, this process focuses on helping stakeholders gain an informed perspective about the purpose, functionality, and benefits of the upcoming infrastructure upgrades.



ACTIVATE – Establish the Groups

- Identify Stakeholders
- Select Communication Modes
- Determine Message

The critical first step in developing the public outreach program is identifying the stakeholders, including but not limited to surrounding residents, businesses, organizations, patrons/visitors to the area, representative public officials, and relevant public agencies.

Once we have a comprehensive and inclusive list for outreach, our Team will determine which methods of communication will be most effective. We will communicate to stakeholders in their “language,” using the preferred and most available modes of communication. Once we identify the best vehicles of communication, we will work with the City and Design Team to craft clear and focused messaging appropriate to the needs and potential concerns of each group.

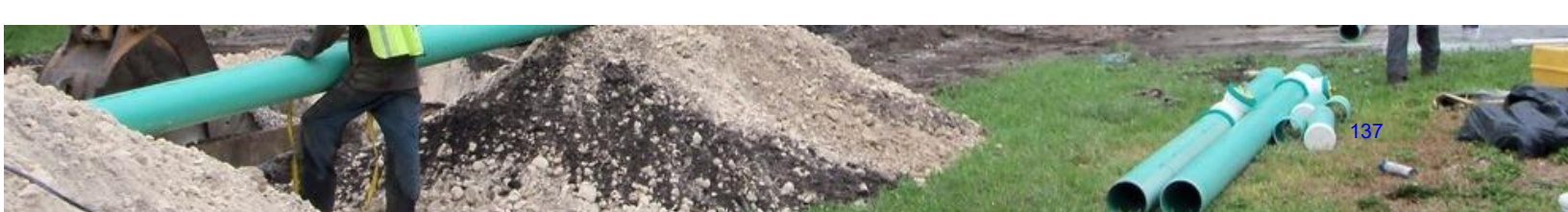
ENGAGE – Get the Word Out

- Use Mixed Strategy
- Provide Varied Methods to Connect
- Inclusive Communication
- Understand Community Concerns
- Follow Up

Engaging and educating stakeholders is accomplished by providing clear and accurate information regarding the purpose of the infrastructure upgrades and how the end results will benefit the community. Additionally, it is important to inform stakeholders about expectations and timelines for the design and other phases of the project.



To catch the attention of a variety of target audiences, we deploy varied strategies that encompass a mix of communication methods (in person, online, print, etc.). The easier it is for stakeholders to get the information they need, the more likely they will be to engage with the outreach avenues provided. Utilizing inclusive methods of communication is essential to establishing an effective dialogue with all relevant audiences. **Particularly during the planning and design phase of a new project, the overall goal is to make each stakeholder group feel supported in its own specific concerns regarding the Systems Improvements Project.**



As with any communication, follow up is a valuable resource for pinpointing essential areas of focus and provides opportunities to tailor services to specific circumstances and needs. **Follow up is also key in building community trust in the project's administration, which is the most valuable outcome of effective engagement.**

INFORM – Dialogue with Stakeholders

- Linguistically & Culturally Responsive Communication
- Streamline the Message
- Multiple Communication Vehicles



The Miller Legg Public Involvement Team will work closely with the Design Team and the City Communications Team to develop clear, concise and effective communication materials and platforms to encourage an informed public. Messages will be streamlined to present the information in a concise, accessible manner in formats influenced by stakeholder preferences. This includes multilingual and

multicultural modes of communication.

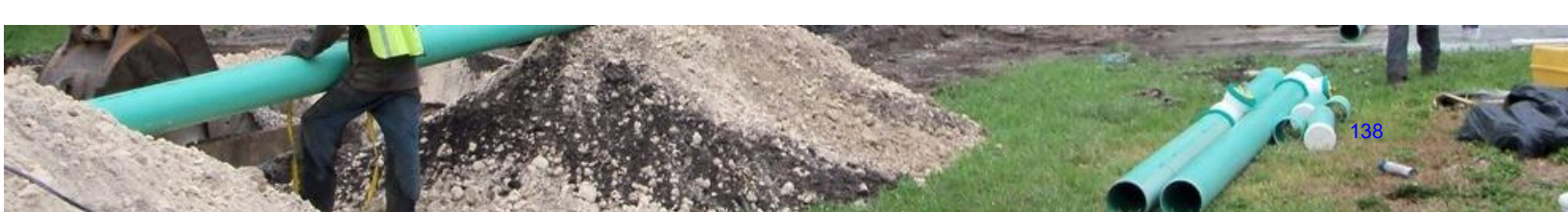
Maintaining our focus on active engagement, multiple convenient platforms and methods will be available for stakeholders to provide comments on the information distributed. The platforms or avenues may include but are not limited to: small or individualized meetings, public meetings, print materials, website content, text message notifications, social media pages, dedicated email support and call-in hotline, etc.

The process of forming a comprehensive understanding of the elements involved in the project, coupled with the implementation of a Public Outreach Strategy centered on activation, engagement, and a trustworthy stream of information, is essential to successful project completion. By providing the discussion platforms and information streams, our Team will keep the project narrative under City control, helping to manage expectations, build trust, and mitigate negative outcomes before they can arise.



CONSTRUCTION ADMINISTRATION

Upon approval of the Final Construction Drawings, the Miller Legg Team will work with City staff throughout the bidding and construction phases. Our engineers can provide highly qualified technical input and observation to ensure a successful project. Our Team has a history of ensuring construction projects are built in conformance with approved specification and details. We will provide a senior level Construction Manager for the duration of the project to ensure this as well as keeping the project on schedule and making sure change orders are rare. Our staff

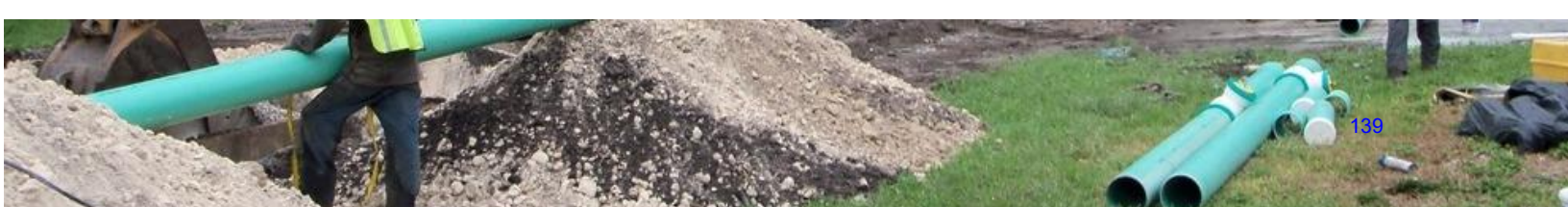


will be proactive and will be instructed to take detailed photographs and prepare reports for each area where construction will occur. This activity will be beneficial for all parties to guarantee that any damage to private property has been documented before and after construction.

The Miller Legg Team is fully vested in **trenchless technology design for pipelines** as alternates to the traditional open cut method. We have installed multiple pipelines in South Florida. During the planning phase of the project, we will determine potential locations where these methods can be used. Typically, these methods are used in the following scenarios:

- Canal/Intracoastal Crossings
- Rail tracks Crossing (FEC, CSX)
- Highway Crossing
- Roads under Moratorium Status
- Intersections with Heavy Traffic

Our Team is ready to meet with the City at the onset of the design phase to discuss each case to find the most cost-effective to solution and move forward the design expeditiously. Below please find technical background on the **techniques** that our Team proposes to use:



Horizontal Directional Drilling:

Horizontal directional drilling (HDD) was developed in the early 1970s by the U.S. petroleum industry. It is a surface-launched system and is widely used by construction companies for the installation of flexible conduits (HDPE, PVC, steel, etc.) often under rivers or other surface obstructions. A pilot hole is drilled, which determines the path of the installed pipe. A small diameter (1" to 5") drilling string with a steering head penetrates the ground at the prescribed entry location and a predetermined angle, usually between 8° and 18°. The steerable drilling string is pushed through the ground along a pre-determined alignment and returns to the surface on the other side of the obstacle or waterway. Next, a back-reamer is attached to the drilling string



to cut a tunnel for the conduit to be pulled through. The final size of the back-reamed tunnel is generally 30% to 50% larger than the outside diameter of the product pipe. This overcut provides adequate annular space for drilling fluids and spoils to return to the surface; this also facilitates the bending of the pipeline during the pull-back process. A bentonite-based drilling fluid is used to lubricate and stabilize the pilot hole and back-reamed tunnel. Finally, the pipeline or utility line, suspended and lubricated by the drilling fluid and connected to the drill pipe using a pulling head and a swivel, is pulled back into the freshly excavated bore hole. The pullback operation continues until the pipeline reaches the drill rig.



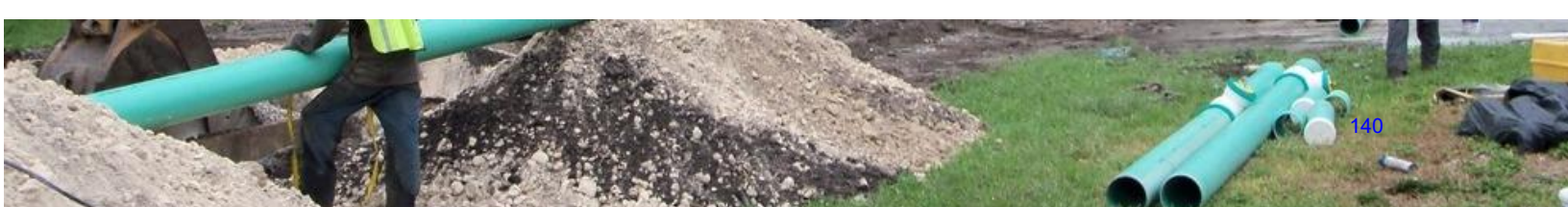
Micro tunneling

Micro tunneling (MT) has been used in the United States since the mid- '80s. Construction of utilities within busy urban areas, underneath waterways, or other natural or man-made barriers presents environmental concerns, safety hazards, and community/stakeholder pressures to minimize disruptions to businesses, transportation, and residences. Environmentally sensitive areas such as estuaries, wetlands, and streams can be bypassed underground when trenchless methods are employed. MT industry considers approximately 3,000 feet as the maximum practical distance between access shafts. It was also determined that the cost of access shafts is relatively high due to the porous rock and high ground water conditions that would be present throughout this project.



Pipe Jacking

Pipe jacking is a general term for all methods that use a jacking process to slide pipe segments through the ground with the new segments being added in the starting shaft. The use of pipe jacking

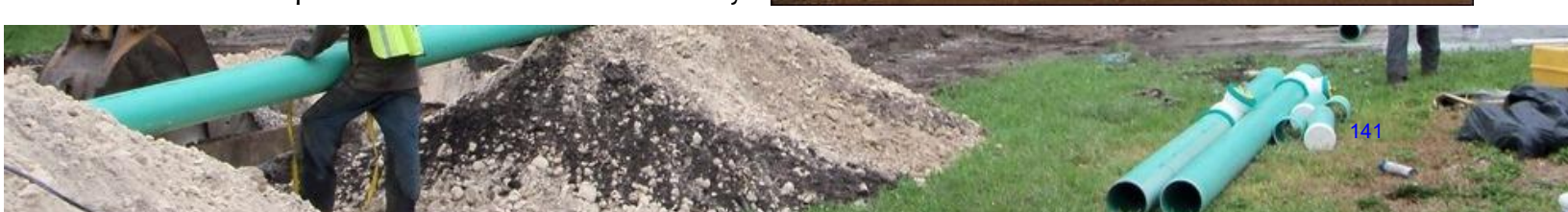
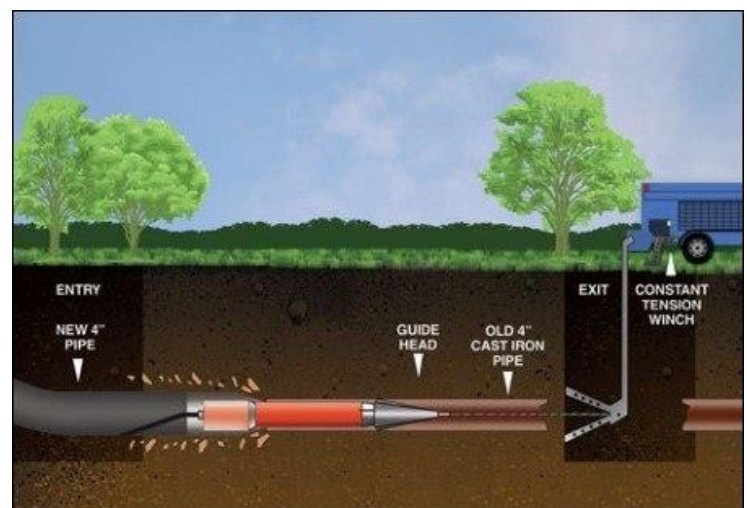


for the installation of pipes and/or tunnels is believed to have started around the end of the 19th Century. Initially, it was typically a person-entry construction process for fairly short installations. The face would typically be excavated by hand mining and the sections of pipe/tunnel would be thrust forward from the starting shaft with new sections added periodically within the starting shaft. Over the 20th century, variations of the basic pipe jacking procedure were developed, making it a sophisticated method for the installation of large diameter pipes over significant distances in most soil conditions. These include:

- The use of a tunnel shield (steel cylinder) as the lead element in the pipe jacking operation. This provided a durable leading edge to the pipe jacking operation and an area for the tunnelers to work that was protected from overhead soil collapse.
- The use of a segmented tunnel shield with steering jacks between the segments. This allowed a degree of steering control for the pipe jacking operations.
- Use of compressed air techniques (already used in tunneling) to provide face support in collapsible ground for an example of a compressed air lock to access the tunnel face.
- Use of other partial face support techniques that could be incorporated into the tunnel shield. These could extend the use of pipe jacking into weaker soils by limiting the area of tunnel face that is unsupported at any one time. Examples are the use of “sand shelves” that restrain the flow of sand into the tunnel face and “face plates” that support the tunnel face but can be opened one-by-one to allow excavation of a limited portion of the face at a time.
- The use of a fluid-filled front chamber within a “tunneling machine” at the front end of the pipe string. In this “slurry micro-tunneling” system, a mud slurry under pressure is used to support the tunnel face and also to provide a means of conveying the excavated soil through a pipe back to the starting shaft where the excavated soil is separated from the mud slurry before it is recycled back to the excavation face.

Pipe Bursting

Pipe bursting is a method commonly used for pipeline replacement. **There has been a recent discussion in Broward County on the environmental implications that pipe bursting occasions, specifically when existing pipe is made of Asbestos Cement (AC).** Therefore, it is important to know in advance the existing conditions before determining to use this method. In the pneumatic system, the bursting tool is a soil displacement hammer driven by

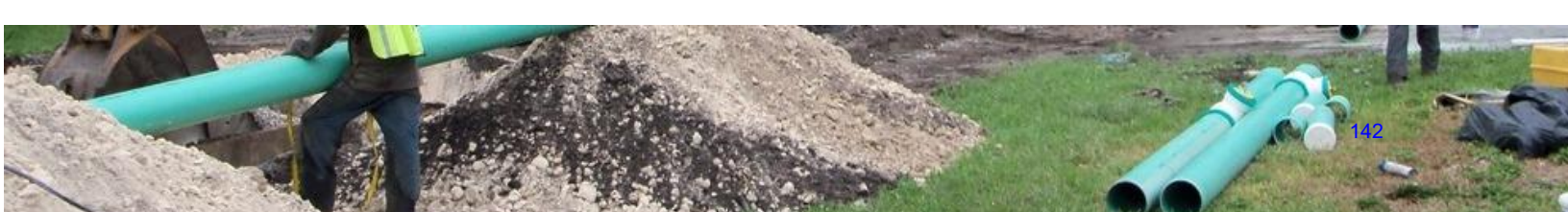


compressed air. An expander is fitted to either the front or near the rear of the pneumatic soil displacement hammer. The pneumatic hammer assembly is launched into the host pipe via an insertion pit. The tool is connected to a constant tension winch located at the receiving point. The constant tension of the winch keeps the tool and expander in contact with the unbroken section of pipe and centered within the host pipe and when combined with the percussive power of the hammer helps maintain the hammer and expander inside the existing pipe. The percussive action of the hammering cone-shaped head is similar to hammering a nail into the wall; each hammer stroke pushes the nail a short distance. It cracks and breaks the existing pipe, with each stroke. The expander combined with the percussive action push the fragments and the surrounding soil away providing space for the new pipe. Reversible tools are available that allow the pneumatic hammer to back itself out through the installed pipe saving the expense of a reception pit. Once started, the burst continues to the destination manhole/reception pit where the tool/expander assembly is retrieved. The process continues with little operator intervention until the head reaches the pulling shaft at which point it is separated from the new pipe. Regarding pneumatic pipe bursting operations, considerations should be made for the noise generated by the air compressor and pneumatic hammer. Generally, the noise is concentrated near the open end of the replacement pipe due to the release of pressure associated with the pneumatic action through the new pipe.

The advantages are especially notable in pipeline replacement for deeper lines, where the greater depth of lines increases the cost of open cut replacement through extra excavation, shoring, and dewatering, etc., while it has minimal effect on the cost of pipe bursting. Additionally, as the underground utility network becomes even more congested through the advancement and expansion of services like gas, high speed cable, and fiber optic the need to preserve space underground for future growth becomes a necessity. By utilizing the existing utility corridor new easements are not required and construction can take place through a previously opened trench. A standard practice when utilities are laid in a new location is the grouting of the “abandoned” pipeline in place with a flow able style grout, which will only complicate future construction underground.

Additional advantages of pipe bursting over the open cut replacement are indirect cost savings, due to

- ✓ Less traffic disturbance
- ✓ Shorter time for replacement
- ✓ Less business interruption
- ✓ Less environmental disturbance
- ✓ Reduced surface paving expenses
- ✓ Other social benefits



Pipe bursting usually produces less ground disturbance than open replacement. In open cuts, there is stress relief in the ground as the trench is dug, and the unconfined ground moves inward and downward. Also, service lines parallel to the trench displace laterally and downward, while service lines crossing the trench sag. Shoring can reduce these movements, but usually does not prevent them. Open cut replacement that involves cutting through a road pavement structure can reduce the life of the pavement structure through backfill settlement in addition to the adjacent ground movements. Social costs such as traffic and business disruption, length of time and mess for open cut, reduced pavement life, environmental mitigation and others all can increase the total effective cost of open cut construction. Even when bursting costs the same or slightly more than open cut in terms of contract price, the decrease in total effective costs compared to open cut makes bursting very attractive.

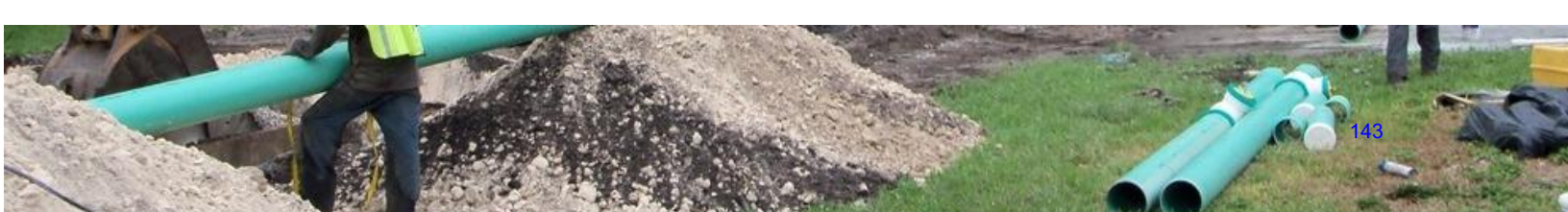


QUALITY ASSURANCE AND QUALITY CONTROL

Quality Control is a continuous review process that will be performed by each designer. Quality Assurance will be the application of systematic reviews of designer calculations and work products which demonstrate that our products and deliverables meet all requirements, such as quality, accuracy, City requirements, Regulatory conditions, etc. These Quality Assurance reviews will be held at hold points typical for this type of design service, such as design development and pre-final design.

The Miller-Legg core quality Team, comprised of William Schipske, PE (Miller Legg), will generate a **quality management plan**. This plan will be **project-specific, written**, and serve the purpose of **enhancing the City's control of time, cost, and quality** by communicating effectively with the City on the following key points:

-  Develop a common understanding of the QA/QC processes and deliverables
-  Identifying who is responsible and for what for what they are responsible
-  Measuring conformity of project document
-  Quality Assurance people and processes
-  Quality Assurance Safety programs
-  Monitor Risk management
-  Quality tools including an issues log to track and resolve project issues
-  Lines of authority
-  Communication protocol
-  Standard lift station control panels
-  Standard specification language for gender neutral words and include an Abbreviations specification to expedite Purchasing acceptance



Quality for Design

The Miller Legg Team's quality assurance starts with a kickoff meeting for the design Team to review the scope, planning document, and commit to scheduled deliverables. Our project specific quality assurance continues with an assigned project technical leader who will review each applicable quality procedures with the Team at the kickoff and engage the Team in implementing the project:

- ✓ Assign adequate review times in our resource-loaded schedule
- ✓ Define discipline deliverables and interdependencies by milestones
- ✓ Consult with design leaders to customize a baseline checklist and project milestones for each discipline while maintaining the checklist for the project's duration

Identify any scope, schedule, or budget changes in a timely manner, and obtain written City approval of project improvement changes from the project manager prior to proceeding with the work. Each of our Quality Assurance and Quality Control procedures is a seamless and normal part of any design cost and standard for any design project. Our designs are clear, concise, and defensible; complete in level of detail; well-coordinated; understandable; and, most importantly, biddable and constructible.

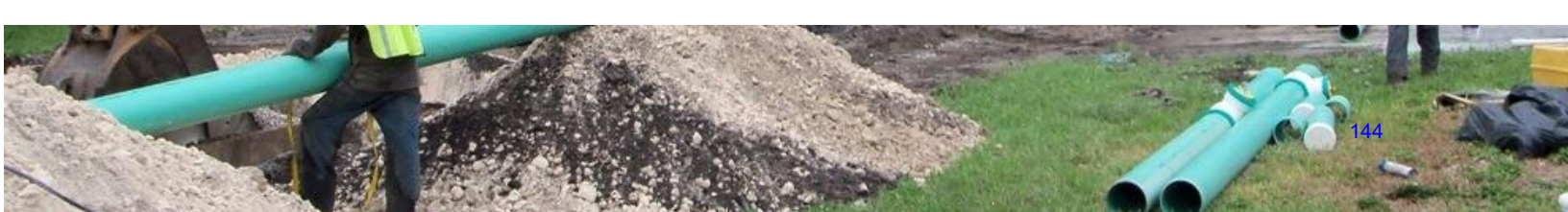
Big Picture

Our big picture design approach takes into consideration a well-thought-out sequence of construction. The sequence of construction or how the work is to be constructed, including which activity occurs first or second to not disrupt or to mitigate disruption of the residents during construction, plays an important role in the design.

Quality for Permitting, Bid Evaluation, Cost Estimating

The Miller Legg Team understands that the timeframe between Purchasing involvement and a Notice to Proceed (NTP) to the Contractor requires a high level of interdepartmental coordination, active engagement, and a continued commitment to quality and detail. During this time, the Miller-Legg Team works closely with the City Project Manager to provide the following information and support:

- Recommendation for Contractor self-performance percentage, Contractor certification qualifications, concise summary of work, estimated construction duration and allowances justification.
- Monitor and search for local bids at the County and nearby municipalities, including names of bidders, spread between low bid and high bid, and scope of work.
- Answer the questions at hand, but also involve other discipline designers to ascertain if other clarifications are needed to support the initial question. We will treat each bidder question with the utmost of seriousness.



Quality for Construction

Quality Control is a continuous review process that will be performed by the contractor. Quality Assurance will be the application of systematic reviews by our construction manager of the contractors work product which demonstrate that the contractor is doing what contract documents told the City they would do.

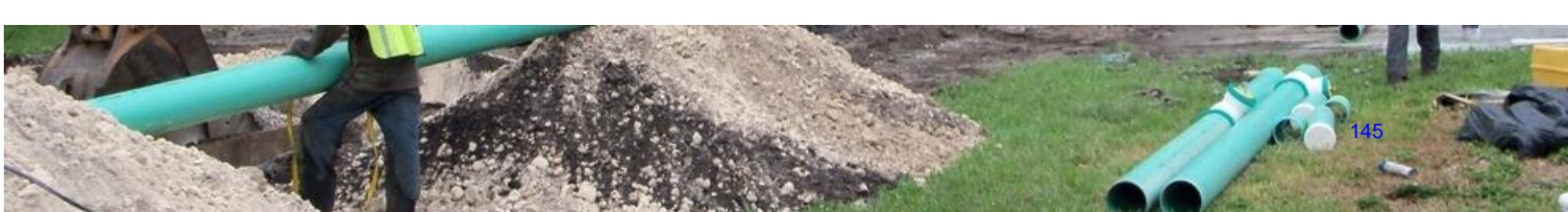


COST ANALYSIS AND COST CONTROL

There are several methods for ensuring that our designs remain within the Project Cost Budget that City has established. First, we uphold the project budget through strict observance of the project schedule and our Quality Assurance program because design flaws and delays usually result in construction cost overruns. Second, we complete a preliminary construction cost estimate at every submittal to check if our design is within the cost requirements or if value engineering alternatives can be incorporated without impacting the ability to meet the intended purpose set forth by the City. Third, any change in scope or direction of design will be discussed with the City to ensure that everyone on the Team understands the ramifications of that change on the construction cost budget. This attention to detail in our processes is at the core of Miller Legg's Value Engineering efforts.

Adherence to Schedule – Constructability and Operational reviews provide an understanding of the time needed for the construction to be completed and allow our Team to work with the City in detailing these constraints in the contract documents. This ensures that the required schedule during construction is realistic and can be accomplished without the City incurring acceleration costs or that these acceleration costs have been anticipated in the cost estimates where the need for expedited construction outweighs the higher costs associated.

Finally, **contractor-initiated value engineering options** are thoroughly reviewed and discussed with the City. It is critical to ensure that the quality and functionality of the project is not sacrificed by these requested changes and that consequential changes such as permit modifications are factored into a value engineering proposal to fully assess the benefits and potential pitfalls if the proposal is accepted.



**ESTIMATED TABLE OF QUANTITIES:**

Following please find an estimated quantity take off for the Project:

Hollywood Beach Utilities – Phase 1		
	Unit	
Proposed Water Main	LF	26,255
Proposed Gravity Sewer	LF	3,200
Proposed Sewer Force Main	LF	8,900
Proposed Sewer Access Structures	EA	15
Proposed Fire Hydrants	EA	65
Pump Station Rehabilitation	EA	4
Pavement Restoration	SY	102,280

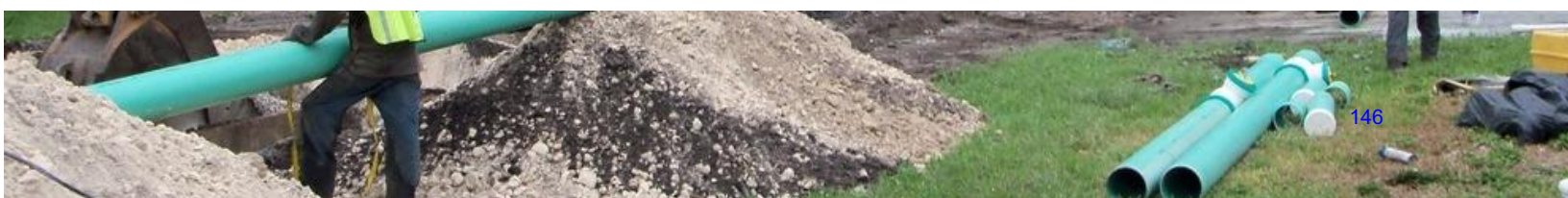
Hollywood Beach Utilities – Phase 2		
	Unit	
Proposed Water Main	LF	19,500
Proposed Fire Hydrants	EA	50
Pavement Restoration	SY	52,000

The rehabilitation of Lift Station E-08 is not identified as part of Phase 1 or Phase 2 in the documents provided by the City of Hollywood but is shown in the Phase 1 quantities above.

**VALUE ENGINEERING**

The Miller Legg Team has led or participated in numerous value engineering reviews, resulting in millions of dollars of savings. Value engineering (VE) and constructability reviews during design phases can result in considerable time and cost savings. If a project is identified as warranting a value engineering study, we provide experienced staff for the specific type of project. After the review, we prepare details and cost estimates for alternative approaches, and work with our clients to agree on recommendations for design changes. As a designer, program manager, or construction manager, our value engineering efforts focus on providing efficient, quality, constructible designs that will meet the client's needs while saving money.

The Miller Legg Team will work with the City to analyze the project with the focus on minimizing the overall construction cost while maintaining the quality and integrity of the design and without compromising the intent of City design standards. The Team will present the conceptual design to our internal VE reviewers, then provide any necessary support to the reviewers and address all questions and concerns that may arise. We recommend there be a one-day workshop to allow the VE review Team to discuss the project details, design parameters, and any



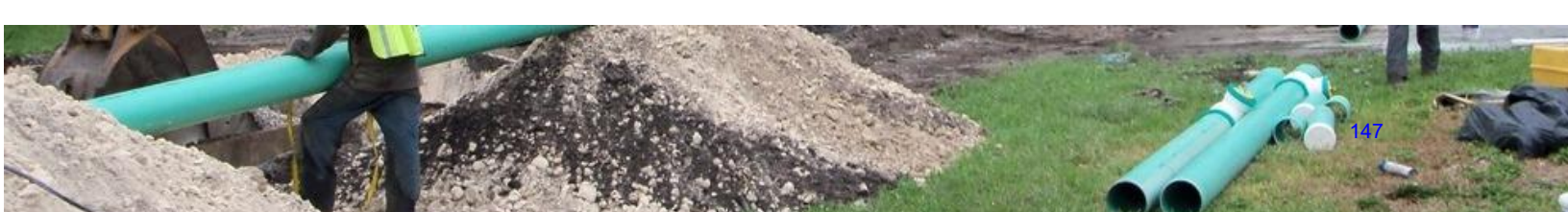
unique construction constraints or considerations with the Team. We have found this approach allows for an open exchange of design ideas, and fosters discussion of potential concerns/problem areas and possible solutions while usually putting the design Team members at ease with this constructive and beneficial process.

The Miller Legg Team has construction engineers and personnel with extensive pipeline and lift station construction experience to aid in the constructability analysis of VE Team recommendations. Since we have participated in hundreds of design/bid/build and design/build contracts, our Team can also enlist the help of utility/civil works contractors with whom we have partnered on past projects, so we can evaluate the design from both the engineer's and the contractor's perspective. This will allow us to provide detailed information regarding construction techniques and/or costs to ensure workable and cost-effective solutions are brought forward.

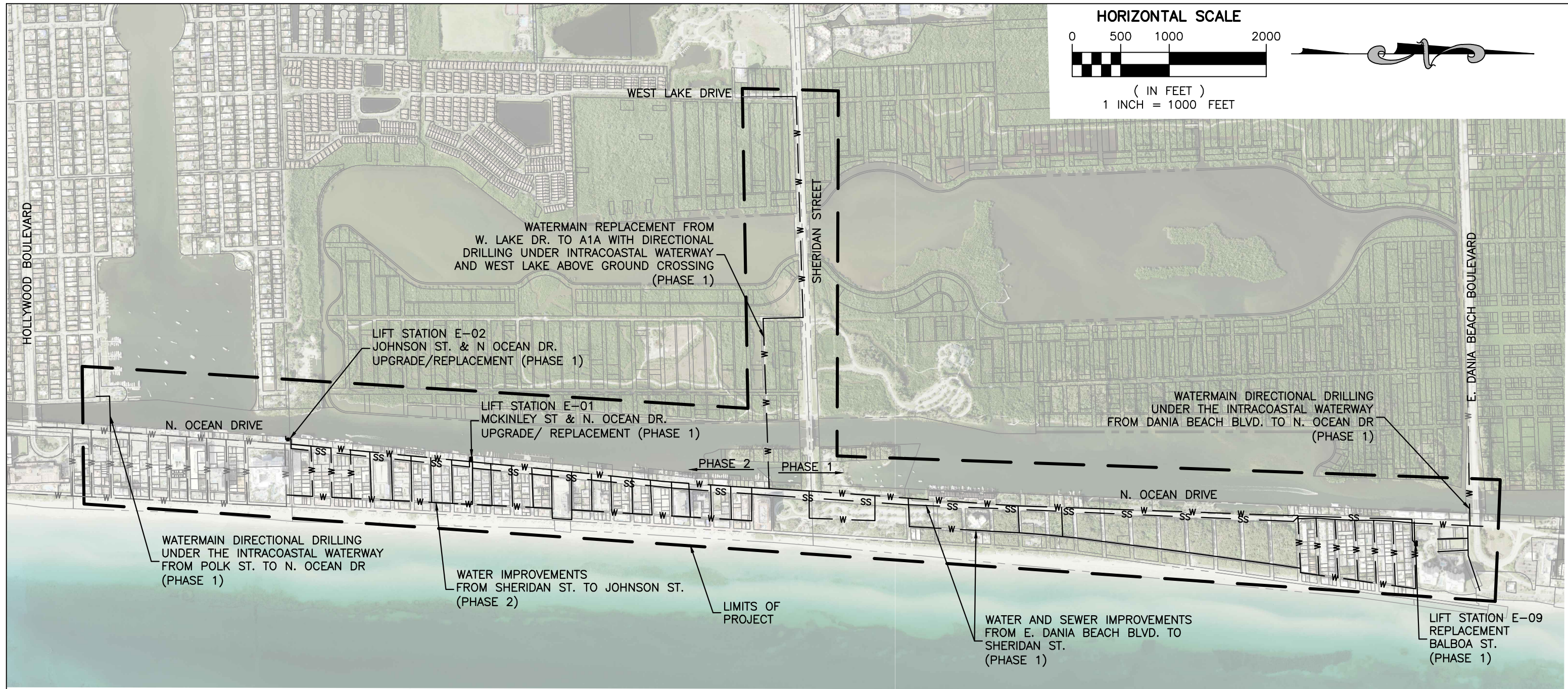


The Miller Legg Team's hands-on project management approach ensures transparent and regular communication among Team members and the City of Hollywood. We know from experience that the City's expectations can only be met if those expectations are spelled out, which is why effective communication is key for project delivery excellence. Our open and efficient communication, scheduling process, and Team circulation of regularly updated tracking tools ensures all parties (the City and Miller Legg Team members alike) are aware of the progress and developments associated with the project.

The City depends on our insistence on maintaining these real time tracking methods to give reassurance that a project is on track and provide advance warning of any potential issues. If a conflict were to arise between the intent of a project and satisfying for instance the permitting requirements for that assignment, the Project Manager would arrange a meeting with the City, the permitting agency staff and the appropriate members of the Miller Legg Team to further define the source of the conflict, explore alternatives, and seek a resolution that is satisfactory to all parties involved. However, because we have the expertise in-house to anticipate and address such concerns in advance of submitting, these conflicts are not common in our project permitting efforts.



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Coordinate System:

Project/File No.:
20-P0130
Twp/Rng/Sec:
Date Drawn:
6/16/20

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CITY OF HOLLYWOOD BEACH UTILITY IMPROVEMENTS - OVERALL IMPROVEMENTS

BROWARD COUNTY, FLORIDA

FOR: CITY OF HOLLYWOOD

EXHIBIT 1

148

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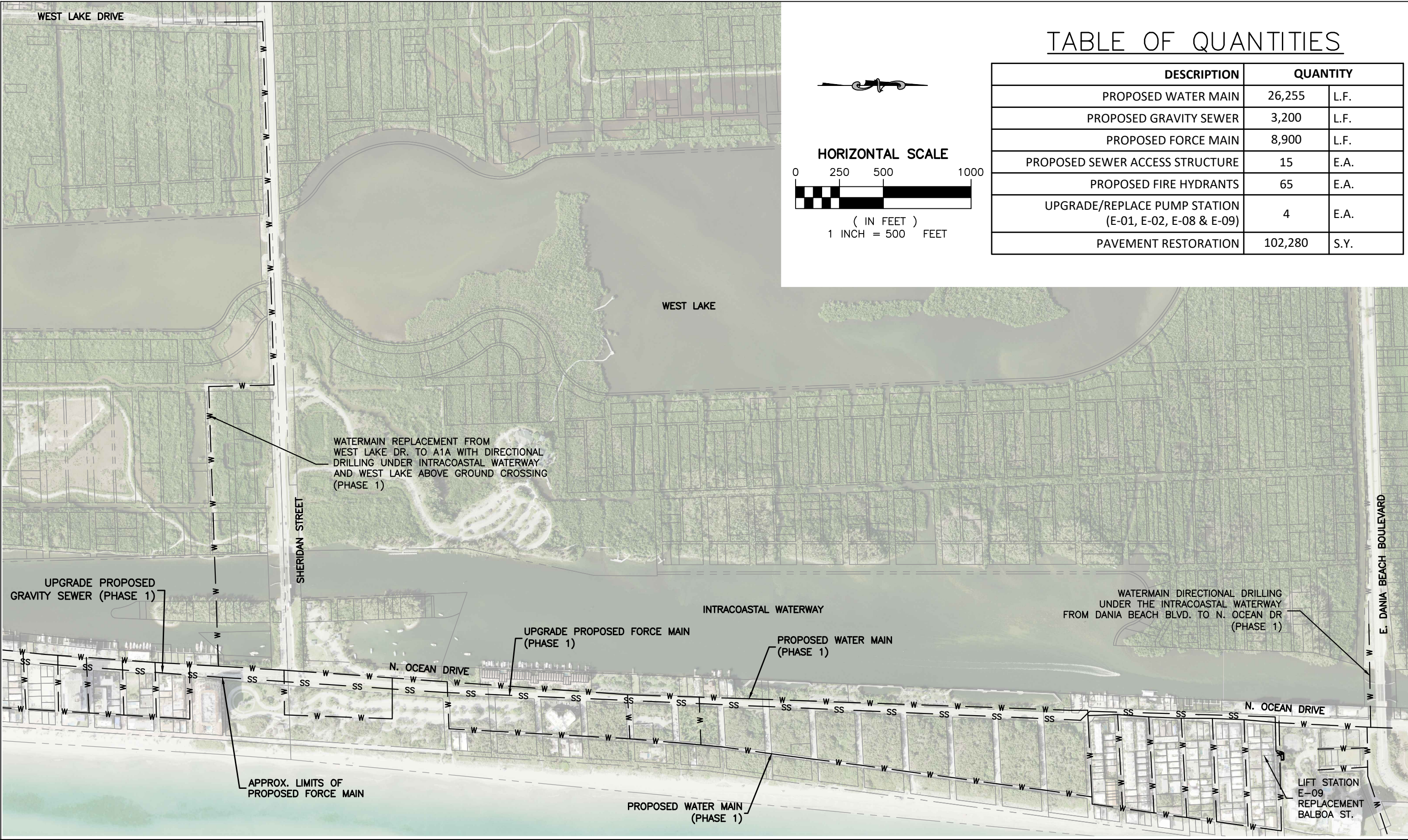


TABLE OF QUANTITIES

DESCRIPTION	QUANTITY	
PROPOSED WATER MAIN	26,255	L.F.
PROPOSED GRAVITY SEWER	3,200	L.F.
PROPOSED FORCE MAIN	8,900	L.F.
PROPOSED SEWER ACCESS STRUCTURE	15	E.A.
PROPOSED FIRE HYDRANTS	65	E.A.
UPGRADE/REPLACE PUMP STATION (E-01, E-02, E-08 & E-09)	4	E.A.
PAVEMENT RESTORATION	102,280	S.Y.

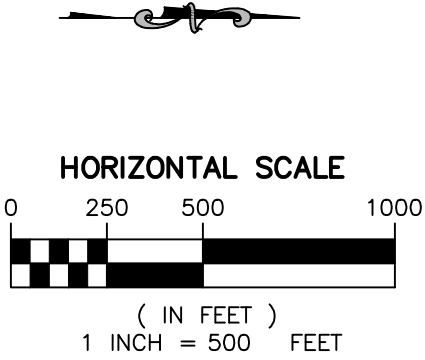
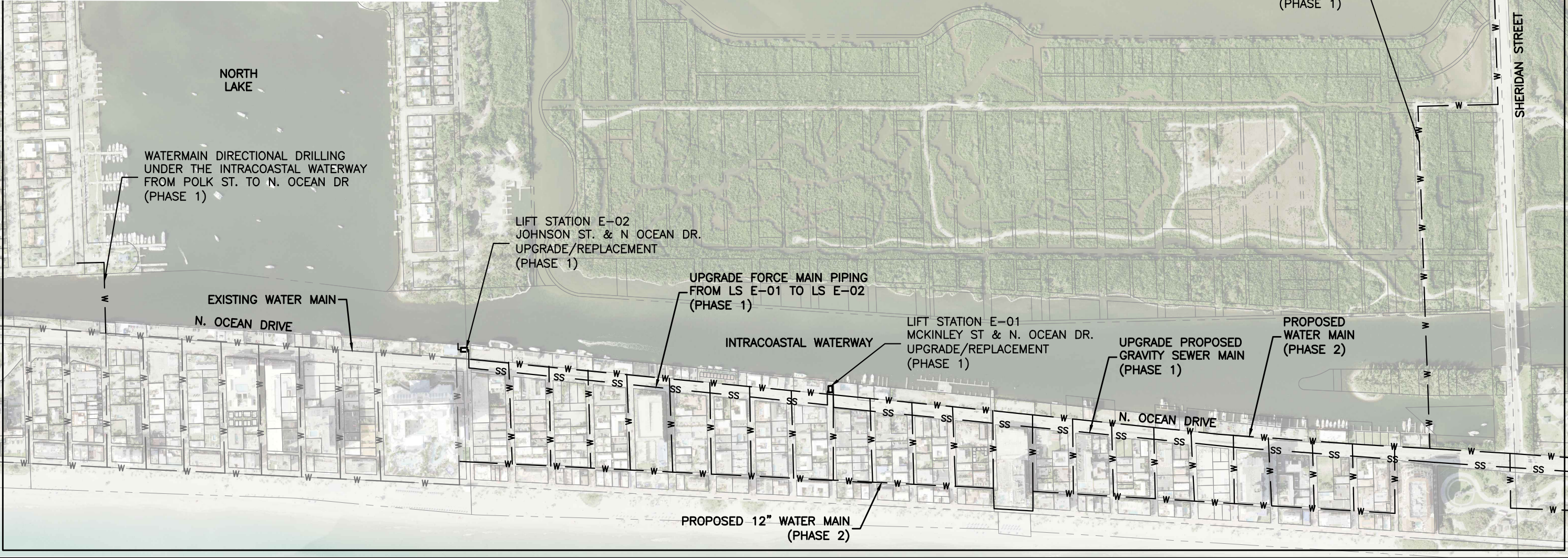
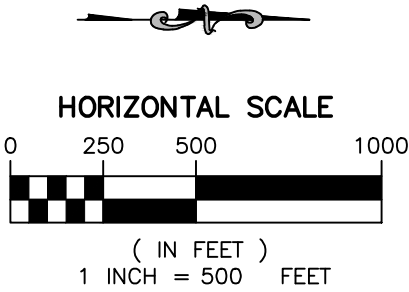


TABLE OF QUANTITIES

DESCRIPTION	QUANTITY	
PROPOSED WATER MAIN	19,500	L.F.
PROPOSED FIRE HYDRANTS	50	E.A.
PAVEMENT RESTORATION	52,000	S.Y.



Coordinate System:
Project/File No.:
20-P0130
Twp/Rng/Sec:
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CITY OF HOLLYWOOD BEACH UTILITY IMPROVEMENTS - PHASE 2
BROWARD COUNTY, FLORIDA
FOR: CITY OF HOLLYWOOD



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CITY OF HOLLYWOOD BEACH UTILITY IMPROVEMENTS
BROWARD COUNTY, FLORIDA
FOR: CITY OF HOLLYWOOD BEACH

EXHIBIT
4

ID	Task Name	Duration	Start	Finish
1	Estimated Project Duration	1853 days	Thu 10/1/20	Mon 11/8/27
2	Estimated Project Duration - Phase 2	904 days	Thu 10/1/20	Tue 3/19/24
3	Topographic Survey (w/ Mobile Mapping)	60 days	Thu 10/1/20	Wed 12/23/20
4	Environmental Survey	30 days	Thu 10/1/20	Wed 11/11/20
5	Utilities Verification	60 days	Thu 12/24/20	Wed 3/17/21
6	Subsurface Utility Evaluation	60 days	Thu 12/24/20	Wed 3/17/21
7	Geotechnical Investigation	14 days	Thu 3/18/21	Tue 4/6/21
8	Design 30%	45 days	Wed 4/7/21	Tue 6/8/21
9	City Review of 30% Plans	30 days	Wed 6/9/21	Tue 7/20/21
10	Design 60%	45 days	Wed 7/21/21	Tue 9/21/21
11	City Review of 60% Plans	30 days	Wed 9/22/21	Tue 11/2/21
12	Design 90%	45 days	Wed 11/3/21	Tue 1/4/22
13	Engineer's Estimate of Cost	45 days	Wed 11/3/21	Tue 1/4/22
14	City Review of 90% Plans	30 days	Wed 1/5/22	Tue 2/15/22
15	Permitting	180 days	Wed 2/16/22	Tue 10/25/22
16	Construction	365 days	Wed 10/26/22	Tue 3/19/24
17				
18	Estimated Project Duration - Phase 2	949 days	Wed 3/20/24	Mon 11/8/27
19	Topographic Survey (w/ Mobile Mapping)	60 days	Wed 3/20/24	Tue 6/11/24
20	Environmental Survey	30 days	Wed 3/20/24	Tue 4/30/24
21	Utilities Verification	60 days	Wed 6/12/24	Tue 9/3/24
22	Subsurface Utility Evaluation	60 days	Wed 6/12/24	Tue 9/3/24
23	Geotechnical Investigation	14 days	Wed 9/4/24	Mon 9/23/24
24	Design 30%	45 days	Tue 9/24/24	Mon 11/25/24
25	City Review of 30% Plans	30 days	Tue 11/26/24	Mon 1/6/25
26	Design 60%	45 days	Tue 1/7/25	Mon 3/10/25
27	City Review of 60% Plans	30 days	Tue 3/11/25	Mon 4/21/25
28	Design 90%	45 days	Tue 4/22/25	Mon 6/23/25
29	Engineer's Estimate of Cost	45 days	Tue 6/24/25	Mon 8/25/25
30	City Review of 90% Plans	30 days	Tue 8/26/25	Mon 10/6/25
31	Permitting	180 days	Tue 10/7/25	Mon 6/15/26
32	Construction	365 days	Tue 6/16/26	Mon 11/8/27

Project: High Level Schedule

Date: Tue 6/23/20

Task

Split

Milestone

Summary

Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

Deadline

Progress

Manual Progress

Page 1

INSURANCE REQUIREMENTS

The insurance policy shall not contain any exceptions that would exclude coverage for risks that can be directly or reasonably related to the scope of goods or services in this bid/proposal. A violation of this requirement at any time during the term, or any extension thereof shall be grounds for the immediate termination of any contract entered in to pursuant to this bid/proposal. In order to show that this requirement has been met, along with an insurance declaration sheet demonstrating the existence of a valid policy of insurance meeting the requirements of this bid/proposal, the successful proposer must submit a signed statement from insurance agency of record that the full policy contains no such exception.

The City reserves the right to require additional insurance in order to meet the full value of the contract.

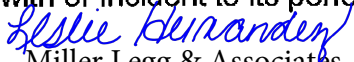
The City reserves the right to require any other insurance coverage it deems necessary depending upon the exposures.

HOLD HARMLESS AND INDEMNITY CLAUSE: Requesting revised language see attached

Miller Legg & Associates, Inc. Leslie Hernandez, CPA, CFO

(Company Name and Authorized Signature, Print Name),

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



Miller Legg & Associates, Inc. Leslie Hernandez, CPA, CFO

(Company Name and Authorized Signature, Print Name),

further certifies that it will meet all insurance requirements of the City of Hollywood and agrees to produce valid, timely certificates of coverage.

OTHER CONSIDERATIONS

Copies submitted may not be viewed until 30 days after opening date or notice of intent to award is posted.

HOLD HARMLESS AND INDEMNITY CLAUSE:

Leslie Hernandez

Miller, Legg & Associates, Inc. Leslie Hernandez, CPA, CFO

(Company Name and Authorized Signature, Print Name),

The CONSULTANT shall indemnify and hold harmless the CITY and CRA, and their officers and employees, from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the CONSULTANT and other persons employed or utilized by the CONSULTANT in the performance of this Contract. These provisions shall survive the expiration or earlier termination of this Contract. Nothing in this contract shall be construed in any way to affect the sovereign immunity of the CITY and CRA or the rights of the CITY and CRA as set forth in Florida Statutes 768.28, as amended from time to time.

DECLARATION

The aforementioned, as Proposer (herein used in the masculine singular, irrespective of actual gender and number), declares, under oath that no other person has any interest in this Proposal or in any resulting agreement to which this Proposal pertains, that this Proposal is not made with connection or arrangement with any other persons, and that this Proposal is made without collusion or fraud.

The Proposer further declares that he has complied in every respect with all the instructions to Proposers, that he has read all addenda, if any, issued prior to the opening of Proposals, and that he has satisfied himself fully relative to all matters and conditions with respect to the general conditions of the agreement and all relevant information to which this proposal pertains.

DISCLOSURE OF CONFLICT OF INTEREST

Vendor shall disclose below, to the best of his or her knowledge, any City of Hollywood officer or employee, or any relative of any such officer or employee as defined in Section 112.3135, Florida Statutes, who is an officer, partner, director or proprietor of, or has a material interest in the vendor's business or its parent company, any subsidiary, or affiliated company, whether such City official or employee is in a position to influence this procurement or not.

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

Name

Relationship

N/A

In the event the vendor does not indicate any name, the City shall interpret this to mean that no such relationship exists.

Miller Legg does not and will not discriminate against any person, employee or applicant for employment because of race, color, creed, religion, sex, sexual orientation, age, national origin, disability, national origin, marital status, political affiliation, or any other protected employee status, family leave status, or other non-job related factors. This policy applies to all terms, conditions, and privileges of employment, including hiring, training, placement, development, promotion, transfer, compensation benefits, Employee facilities, terminations, and retirements.

Equal Employment Opportunity

The Company does not discriminate against an Employee or applicant for employment because of race, color, religion, sex, sexual orientation, age, national origin, disability or any other protected Employee status, family leave status, or other non-job related factors. This policy applies to all terms, conditions, and privileges of employment, including hiring, training, placement, development, promotion, transfer, compensation benefits, Employee facilities, terminations, and retirements.

The Company's Equal Opportunity Policy is available to all Employees, including new Employees at the time of employment. To promote continued effective implementation, the concepts of equal opportunity and affirmative action are discussed at appropriate management and supervisory meetings.

The Equal Opportunity Policy is communicated to recruitment sources, subcontractors, and appropriate community organizations and agencies.

Affirmative Action

Miller Legg has a written Affirmative Action Plan regarding appropriate representation of minorities, women, people with disabilities, and all other protected classes at all levels and in all segments of the workforce.

It is the policy of Miller Legg to employ, without discrimination, qualified persons of the greatest ability. Employment practices shall adhere to all federal, state, and local laws. Such laws, depending on locale, prohibit discrimination based on age, ancestry, color, gender, HIV status, marital status, medical condition, national origin, physical or mental disability, race, religion, sexual orientation, veteran status, family leave status, citizenship status, or any other protected group status as defined by applicable law ("protected Employee status").

Miller Legg's Equal Opportunity Policy is available to all Employees, including new Employees at the time of employment. To promote continued effective implementation, the concepts of equal opportunity and affirmative action are discussed at appropriate management and supervisory meetings.

The Equal Opportunity Policy is communicated to recruitment sources, subcontractors, and appropriate community organizations and agencies.

Miller Legg incorporates a standard Equal Opportunity clause in all purchase orders, leases, and contracts, as applicable.





**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: **April 27, 2020**

FOR: **REQUEST FOR STATEMENTS OF QUALIFICATIONS (RFQ)
DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR
HOLLYWOOD BEACH UTILITY IMPROVEMENTS**

FILE NUMBER: **10-5106/18-7098**

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 March 19, 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: CHANGE IN RFQ DEADLINES AND INTRODUCTORY MEETING CANCELLATION

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, June 25, 2020**. The office of the City Clerk is located at City Hall, 2600 Hollywood Boulevard, Room 221, Hollywood, Florida, 33020. On **Thursday, June 25, 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 Conference Room, Hollywood, Florida, 33020.

The project introduction meeting scheduled for April 28, 2020 is CANCELLED.

Any questions shall be submitted via email by no later than **Thursday, June 4, 2020**; Attention: Wilhelmina Montero, P.E. (wmontero@hollywoodfl.org). The telephone number for general information is (954) 921-3930.



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Item 2: CHANGE IN RFQ ANTICIPATED SCHEDULE

RFQ, Page 10, Section VIII, “Anticipated Schedule”, shall read as follows:

The schedule shown below is provided for general information purposes only. Specific dates have been estimated and may vary as circumstances change.

Advertise for Qualifications:	March 19, 2020
Submission Deadline, 2:00 PM:	June 25, 2020
Short List Notification for Oral Interviews:	July 23, 2020
Oral Interviews:	August 13, 2020
Commission Approval:	October 2020

Item 3: CHANGE IN RFQ SECTION I, “INTRODUCTION”

RFQ, page 3, Section I, “Introduction”, paragraph 5, shall read as follows (deletions shown in strikethrough and additions in red):

“The sewer system improvements include the following tasks:

- Replacement of Lift Station E-9
- Upgrade/replacement of Lift Station E-1
- Upsizing approximately 8,000 lineal feet of force main
- Upsizing of gravity piping from Lift Station E-1 to downstream Lift Station E-2
- Modification of connection between Lift Station E-9 to Lift Station E-1”
- **Rehabilitation of Lift Station E-08**

Item 4: CHANGE RFQ SECTION VII, “ORAL PRESENTATION”

RFQ, page 9, Section VII, “Oral Presentation”, shall read as follows (deletions shown in strikethrough and addition in red):

“Selected firms may present an oral overview of their approach to perform design and construction management of similar ~~deep injection well pump station~~ **water and sewer infrastructure** projects and their ability to meet the City’s required project needs. At a publicly advertised meeting, the oral presentation will be limited to 20 minutes after



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which a question and answer period not exceeding 20 minutes pertaining to specifics will commence. The oral interview will be evaluated based upon the following:"

- 1. Knowledge of Project Site and Local Conditions (20 Points)** – Demonstrate knowledge of the project area characteristics as well as Federal and State Regulations, County, and City requirements, codes, and ordinances that apply to this project.
- 2. Proposed Project Staff Functions (20 Points)** - Indicate the organization of the design team, identifying the key personnel and describing their qualifications and responsibilities. Indicate prior experience on similar projects.
- 3. Overall Approach and Methodology (15 Points)** - Explain in detail your approach to the project from initial site survey through construction administration phases of similar **water and** sewer infrastructure projects. Include methods used during design and construction to monitor this project and resolve issues as well as methods of sequencing and coordination among your consultants to minimize conflict and errors.
- 4. Design Philosophy and Concepts (15 Points)** - Explain in detail your design philosophy and how it will be used to deliver a successful outcome in this specific project setting. Include details that will be analyzed and incorporated into the overall design. Explain how you will ensure that the project will be designed to include all the aspects the City desires. Describe how you have used innovative design concepts on other similar projects.
- 5. Cost Control and Value Engineering (20 Points)** - Demonstrate knowledge and experience in the design of water and sewer infrastructure, construction techniques and material evaluation to insure optimum value in meeting the design requirements.
- 6. Schedule for Projects (10 Points)** - Present a schedule for a typical project indicating methodology for effectively managing and executing work while optimizing time.

Item 5: SECTION VI, ATTACHMENT A (SUBMITTAL QUESTIONNAIRE)

Refer to Exhibit 1 of this addendum for "Attachment A: Submittal Questionnaire" of RFQ document.

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Item 6: RESPONDENT CHECK LIST

Refer to Exhibit 2 of this addendum for "Respondent Check List" to be included in RFQ Response Package.

Item 7: NOTES RELATED TO RELEVANT REQUEST RECEIVED FROM POTENTIAL RESPONDENTS

1. Do you anticipate extending the bid due date?
Response: Please refer to Item 1 and Item 2 of this addendum.
2. 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: All details regarding the selection process is contained in the RFQ package.
3. Was this bid posted to the nationwide free bid notification website at www.mygovwatch.com?
Response: No.
4. Other than your own website, where was this bid posted?
Response: This bid is currently posted on DemandStar only.
(<https://www.demandstar.com>)
5. I am writing to inquire if the City accepts Primes to also be a sub on another team. Kindly advise at your convenience.
Response: The City has no objection.
6. On page 8 of the PDF, it states "Submittal Questionnaire (Attachment A). Is there an Attachment A or would you like us to tab this section "Submittal Questionnaire (Attachment A)?
Response: Please refer to Item 5 of this addendum.
7. Can you please provide attachment A, the submittal questionnaire, that's referred to on page 10 for RFQ 10-5106/18-7098?
Response: Please refer to Item 5 of this addendum.
8. On page 8 of the RFQ there is a Submittal Questionnaire (Attachment A). Do we need to respond to these items separately or can they be addressed in our



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responses to the Selection Criteria on pages 6-7? Some of the questions in Attachment A overlap with the Selection Criteria and we would like to clarify the format the City would like us to follow and if Attachment A needs to be answered separately.

Response: The submittal questionnaire included in Exhibit 1 of this addendum shall be completed and included in the submittal package.

9. Do we need to submit a signed statement from our insurance agency of record that is discussed on page 16 of the RFQ under Insurance Requirements or is that to be provided if selected as the winning firm?

Response: There is no need to submit a signed statement from your insurance agency. The selected firms must be able to meet the minimum insurance required at time of contract execution.

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

Acknowledged Receipt of Addendum #1

Cara Pasquale, Director of Business Development
Miller Legg & Associates, Inc.

Date



**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) 921-3258

ADDENDUM NUMBER 2

Date: **June 23, 2020**

FOR: **REQUEST FOR STATEMENTS OF QUALIFICATIONS (RFQ)
DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR
HOLLYWOOD BEACH UTILITY IMPROVEMENTS**

FILE NUMBER: **10-5106/18-7098**

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 March 19, 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 by signing the “Respondent Check List” included in addendum No. 1 and including a printed and signed copy of all addenda in the submittal.** Failure to do so may subject Respondent to disqualification.

Item 1: CHANGE IN RFQ DEADLINE

The statements of qualifications will be received by the City Clerk of the City of Hollywood, Florida, on or before (but not later than) **10:00 AM** Local Time on **Monday, July 6, 2020**. The office of the City Clerk is located at City Hall, 2600 Hollywood Boulevard, Room 221, Hollywood Florida, 33020. On **Monday, July 6, 2020** at **10:30 AM**, 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 Conference Room, Hollywood, Florida, 33020.

Item 2: DELIVERY OF RFQ PACKAGE

To assist in mitigating the 2019 Novel Coronavirus (COVID-19) potential exposure and transmission risks, it is strongly recommended that the RFQ package be mailed to the City Clerk’s Office, 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, Wilhelmina Montero, P.E.

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ADDENDUM NUMBER 2

Item 3: WEBEX TELEPHONIC MEETING FOR INITIAL RAKING MEETING AND ORAL PRESENTATION MEETING

The initial ranking and oral presentation meetings will be conducted through WebEx telephone meeting. The City will provide a WebEx meeting link, dial in number and access code before the initial ranking meeting and oral presentation. RFQ Respondents could present their files through shared screen function during the oral presentation WebEx meeting.

Item 4: PROFESSIONAL ENGINEERING CONSULTANT SERVICES AGREEMENT

Refer to Exhibit 1 of this addendum for "Professional Engineering Consultant Services Agreement."

Item 5: PROJECT LOCATION MAP

Refer to Exhibit 2 of this addendum for "Project Location Map".

Item 6: NOTES RELATED TO RELEVANT REQUEST RECEIVED FROM POTENTIAL RESPONDENTS

1. The City indicates in the RFQ that various upgrades and improvements are required for the utility systems. Has a preliminary design report been prepared that identifies pipe sizing and upgrades? Is a copy of the preliminary design report available?
Response: A preliminary design report has not been prepared for this project.
2. What is the proposed Phase 1 and Phase 2 construction budget under this contract?
Response: This is a request for qualifications, not a request for proposals.
3. Does the City have location maps available of the project limits?
Response: Refer to Item 5 of this addendum.
4. Do we submit the selection criteria information after the Profile of Consultant?
Response: It is the prerogative of the Respondent how to organize the information presented in their submittal.
5. For previous performance on related projects page 6 of the RFQ. Do we include the requested reference information below with every project listed on the resumes or just for the projects on the list of similar jobs?
 - Owners name, address and telephone number
 - Original schedule and scope of project

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- Achieved schedule and scope of project
- Number and brief description of change orders or amendments issued during the project
- Average turnaround time for request for information and shop drawing/submittal approvals
- Experience managing state revolving fund and American Iron and Steel compliance documentation

Response: It is up to the Respondent to decide how much information is included in their submittal. At a minimum the information requested in the advertised RFQ must be included in the submittal.

6. How many members are on the selection committee?

Response: There will be five members in the selection committee for this RFQ.

7. For previous performance on related projects page 6 of the RFQ. Can we use individual experience in addition to firm experience?

Response: The City is interested in firm experience.

8. Can the required information in Selection Criteria be submitted with the Profile of Consultant since some of the information overlaps? We would like to clarify the format the City would like us to follow.

Response: Please provide the information required in the Selection Criteria in a separate section from consultant profile for ease of review.

9. Submittal Questionnaire A. If we are a corporation on section G do we attach both a Company Brochure and an Annual Report or can we provide just one of the 2?

Response: Respondents can provide either document.

10. If we do not have an Audited income statement can we provide the last 2 years of tax returns?

Response: All respondents must include a copy of current audited income statement and balance sheet.

11. Is there a minimum number of projects that need to be provided for Selection Criteria #2 and #5?

Response: No.



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12. For Selection Criteria #2 previous performance can we provide projects from subconsultants?

Response: Primary Consultant must have the required experience/qualifications.

13. For Selection Criteria #2 and #5 can we provide ongoing projects?

Response: Yes, ongoing projects can be submitted, although preference is for completed projects.

14. Can the City make available As-builts and/or GIS files or Figures showing the extent of the watermain replacement, sewer lines and lift stations?

Response: Project details will be provided before development of the proposal.

15. Can the City make available As-builts and/or GIS files or Figures for the existing alignment of the approximately 8,000 LF of force main requiring upsizing?

Response: Project details will be provided before development of the proposal.

16. Is it the intent of the City to award both phases of the Project to one consultant or will two consultants each be awarded a phase?

Response: The City Commission will make the final selection/award in the City's Best Interest.

17. Can you also provide an exhibit depicting lift stations locations, piping location to be replaced? Are there available as-builts or atlas information that you can provide?

Response: Project details will be provided before development of the proposal.

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

Acknowledged Receipt of Addenda #2

Cara Pasquale

Cara Pasquale, Director of Business Development
Miller Legg & Associates, Inc.

6/25/20

Date 41 Page



Contact:
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