





SOUTH OCEAN BRIDGE DRIVE

SOLICITATION 471-11891

T-Y-LININTERNATIONAL

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Required Forms

- a. Statement of Qualification Certification
- b. Non-Collusion Statement
- c. Local Business Preference (LBP)
- d. Contract Payment Method
- e. Sample Insurance Certificate

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EXECUTIVE SUMMARY

SOUTH OCEAN BRIDGE DRIVE



Executive Summary

T.Y. Lin International (TYLI) – a California based corporation - congratulates the City of Fort Lauderdale on its mission of pursuing the highest quality of life for its residents. To support your efforts, we have structured a multi-disciplined team of professionals who have the experience and practical knowledge necessary aligned with the City's endeavor of promoting a safe and sustainable bridge for the residents of Harbour Inlet, and in the broader sense, a livable environment for all its residents and the working community.

In effect, TYLI is as a "one-stop-shop resource of professional services" specializing in the planning, design and construction of bridges and associated infrastructure throughout South Florida, and particularly in support of local municipalities. We are proud of our local workforce and are firmly committed to providing our clients with project excellence. For over 60 years, our firm has provided civil, structural, transportation, construction administration, and mechanical, electrical engineering as well as, architectural, landscape architectural, environmental services.

T.Y. LIN INTERNATIONAL – FORT LAUDERDALE, FLORIDA

The Fort Lauderdale office of TYLI has been providing services to both public and private sector clients throughout more than 20 years. With five offices throughout Florida, TYLI is a full-service infrastructure-engineering firm with in-house multi-disciplined capabilities and maintains a staff of over 200 professionals in Florida, giving the TYLI team depth of resources to perform multiple tasks concurrently.

The TYLI Team project manager, James Kanter, PE, will serve the City from our Fort Lauderdale office located at 500 W. Cypress Creek Road, Suite 330, Ft. Lauderdale, FL 33309. Mr. Kanter is contact information includes his e-mail address (james.kanter@tylin.com), direct line (954) 308-3374 and mobile phone (954) 997-0371.

Officers, principals, supervisory staff, and key individuals that are listed in the table below will support Mr. Kanter.

STATEMENT OF QUALIFICATIONS SUMMARY (SOQ)

In the following sections of the SOQ we present our qualifications and experience (Section 4.2.3), organizational profile and project team (Section 4.2.4), and approach to the scope of work (Section 4.2.6). We have also include references in Section 4.2.7, minority participation provisions in Section 4.2.8., subconsultant information (Section 4.2.9), and required forms (Section 4.2.10).

Name	Firm	Role	Office Location
Joe Yesbeck, PE	T. Y. Lin International	Principal-In-Charge	Fort Lauderdale
James Kanter, PE	T. Y. Lin International	Project Manager	Fort Lauderdale
Atiq Alvi, PE	T. Y. Lin International	QA/QC Manager	Tampa
Joe Gomez, PE	Keith & Schnars	Constructability Reviews	Fort Lauderdale
James Rosales, PE	T. Y. Lin International	Bridge Design Task Leader	Coral Gables
Carlos Alcantara, PE	Corradino	Roadway Task Leader	Fort Lauderdale
Jorge Ortiz, PE	Keith & Schnars	Construction Administration/Inspection	Fort Lauderdale
Francisco Alonso, PE	T. Y. Lin International	Drainage Engineering	Coral Gables
Salman Rathore, PE	Corradino	Traffic Engineering & Data Collection	Fort Lauderdale
Colin Henderson	T. Y. Lin International	Environmental Task Leader	Coral Gables
Yvonne Garth	Garth Solutions	Public Involvement	Miramar
Angela Alba, PE	Arehna Engineering	Geotechnical Engineering	Coral Springs



FIRM QUALIFICATIONS



Firm Qualifications and Experience

STANDARD FORM 330

The Standard Form 330 is attached at the end of this section.

FIRM'S PROFESSIONAL SERVICES EXPERIENCE

TY-LIN INTERNATIONAL

T.Y. Lin International (TYLI) is a full-service, engineering firm focused on the planning, design, and construction of infrastructure solutions for public and private clients worldwide. The firm is an internationally recognized pioneer in solving the most difficult engineering challenges. Headquartered in San Francisco, California for over 60 years, TYLI has more than 2,500 professionals throughout the Americas and Asia.

TYLI's practice is proudly rooted in the design of bridges. Ranked one of the top the largest bridge design firms by Engineering News-Record, the company is one of the recognized world leaders in bridge design. TYLI can provide leadership and support on projects of varying size and complexity. Each client benefits from the company's global expertise while receiving personal attention to local needs.

TYLI is consistently ranked by Engineering News-Record amongst the Top 500 Design Firms:

» #50 - Top 500 Design Firms

» #31 - Top 100 "Pure" Designers

» #12 - Top 50 in Transportation

» #12 - Top 50 in Bridges

» #11 - Top 25 in Mass Transit and Rail

» #17 - Top 25 in Highways

Number of Years of Experience: 53 years

Business Structure: Corporation **Registration:** State of Florida

Address: 500 W. Cypress Creek Road

Suite 330

Fort Lauderdale, FL 33309

Phone & Fax: (954) 308-3374 Email: james.kanter@tylin.com

Website: www.tylin.com

Contact Person: James Kanter, PE **Size of Firm:** 2,500 employees

MUNICIPAL ENGINEERING

TYLI has proudly participated in many marguee local projects such as the Eller Drive Interchange at Port Everglades, the PortMiami Tunnel, and national projects, such as the Hoover Dam Overpass and Oakland Bay Bridge. Our practice is firmly rooted in the infrastructure needs of local municipalities. The combined resources of our Fort Lauderdale and Coral Gables staff, with over 80 professionals, has a team of engineers dedicated to local municipalities. This has been the cornerstone of TYLI's excellent reputation for engineering services in South Florida, and we are very proud of our accomplishments in projects of different sizes and complexities. We are also currently serving the City of Fort Lauderdale's Transportation & Mobility Department on a general consulting contract providing a wide array of services, including several DRI reviews, the Sistrunk Transit Feasibility Study, the Downtown Walkability Project, and the NE 13th Street Complete Streets project that is in its final stages of construction. TYLI currently holds or has held multiple continuing services contracts with the Broward County Aviation Department, Broward MPO, Broward College, the City of Fort Lauderdale, City of Coconut Creek, Town of Boca Raton, City of Miami, the City of North Miami, the City of Sweetwater, Miami Shores Village, Monroe County, and the Florida Department of Transportation (FDOT).



South Ocean Bridge Drive

SOUTH OCEAN BRIDGE DRIVE

BRIDGE DESIGN

TYLI offers a full complement of bridge services for all types of bridges arch, segmental, suspension, cable-stayed, and special ones - including conventional bridges like the South Ocean Bridge Drive. We offer the City of Fort Lauderdale all the services required to develop a successful bridge. Our local staff's knowledge and understanding includes federal, state and local design standards and permitting requirements for a variety of design and construction projects. The TYLI team has the capabilities to perform all the professional services described in the Scope of Work section of the City's RFQ. These services include:

Roadway Engineering

- » Maintenance of Traffic Plans
- » Traffic Engineering & Data Collection
- » Drainage Design
- » Signing, Marking & Lighting

Bridge Design

- » Bridge Planning and Engineering
- » Scour Analysis

Construction Administration and Inspection

- » Construction Administration and Inspection
- » Permitting and Environmental Services

Support Services

- » Architecture
- » Landscape Architecture
- » Utility Coordination
- » Subsurface Utility Engineering
- » Underwater Inspections
- » Geotechnical Engineering
- » Soils & Material Testing
- » Historical Resources
- » Surveying and Mapping
- » Right-of-Way Engineering
- » Public Involvement

TYLI's practice is proudly rooted in the design of bridges and we are recognized worldwide for excellence and innovation in the specialized field of bridge engineering. Specific examples of past projects that demonstrate our ability to deliver projects on time and within budget are demonstrated in our attached SE330.

FIRM'S SUSTAINABLE BUSINESS PRACTICES

TYLI is actively engaged in monitoring and improving its operational practices, design development and construction methods to achieve the highest levels of sustainability. Environmental considerations include energy reduction, water conservation, waste management, and toxic reduction strategies. TYLI is a certified Envision® Qualified Company and has established a TYLI Sustainability Program, which focuses internally to reduce waste and energy consumption, including the purchase of environmentally oriented products. Externally, our program advances sustainable planning, design construction, operations and maintenance for our projects and deliverables through extending the useful life of infrastructure, and reusing and upcycling materials and equipment. The program is overseen by a committee - TYLI's Corporate Sustainability Advisory Team – to ensure that we are genuinely meeting goals for improving sustainability in our work place and in the work we complete for our clients.

ENVIRONMENTAL CONSIDERATIONS

Energy Reduction - An important element of the TYLI Sustainability Program is our reliance on software and communications technology - such as Skype/Lync and video conferencing - to remotely work as a team. We have successfully completed analyses and design on complex projects throughout the U.S. and overseas without traveling to project offices, resulting in significant fuel savings and reduced carbon emissions. We have used these systems and practices for our local projects as well, and keep our travel limited to only those instances where our clients have made a specific request for an in-person meeting and/or when surveys and other field work are necessary. In addition, we consider LEED Certified or Energy Star buildings when procuring office space, and look for facilities where natural light can be utilized to minimize energy usage during the day. Nearly all TYLI offices, including our Fort Lauderdale office, are located in downtown areas and/or situated adjacent to transit lines. We also provide transit passes and keep company cars available for staff who commute via transit or bicycle but need a vehicle to visit a client or a work site. Project designs consider the locations of construction staging areas to accelerate schedules and minimize the distance vehicles will travel to the construction site. If allowed by local and Federal funding requirements, local suppliers of construction materials are specified to reduce truck travel miles. TYLI staff include many LEED-certified professionals, as well as Professional Engineers who are certified as ENVISION® Sustainability Professionals (ENV SP) through the Institute for Sustainable Infrastructure. These professionals are involved in project teams as requested by our clients to ensure maximum sustainability efforts are designed in to product deliverables and processes.

SOUTH OCEAN BRIDGE DRIVE



Water Conservation - TYLI incorporates rainwater collection and re-hydration of aquifers in projects through Low Impact Development (LID) designs such as detention ponds, vegetative buffers and bioswales. In planning-level discussions, which are anticipated for this project, we will evaluate opportunities to incorporate water collection cisterns and rain gardens. We will look for ways to collect stormwater and provide storage and pre-treatment, before draining it into the City's storm water system.

Our design for the NE 13th Street Complete Streets project, in Fort Lauderdale, replaces travel lanes with bike lanes and includes raised intersections, introduction of native plant species, bioswales and paved drains to clean and reuse stormwater.

Waste Management - TYLI employs corporate-wide waste management and reduction strategies as part of our commitment to sustainability and conservation. These include:

- » Energy vampires limited by setting printers, copiers, and lighting to 'sleep" when inactive
- » Printers automatically print double-sided/black and white to minimize paper and toner used
- » TYLI is primarily paperless
- » Cloud-based document control
- » Employees given TYLI coffee mugs, eliminated disposables
- » Used paper and presentation boards donated to local schools
- » Fax machines eliminated
- » Electronic timesheets
- » Energy-efficient dishwashers
- » Low-flow restrictors and timers
- » Filtered water, avoids waste and transportation of bottled water

We also apply innovative re-use strategies to our projects to reduce waste. For the Venetian Causeway in Miami, Florida we specified the reuse of the concrete structure as an artificial reef for habitat restoration. Toxic Reduction Strategies - TYLI advises clients to avoid the use of toxic chemicals and to use standard construction materials. When a client requests the use of toxic chemicals, specification are written to ensure adequate monitoring of their use or application. We provide specification for removal and disposal of hazardous materials as they are discovered on design and construction projects. When encountering lead and/or asbestos in rehabilitation efforts, we advise our clients on environmentally sound containment and disposal methods.

Environmental Impacts - TYLI designs projects to meet or exceed local, state and Federal environmental requirements regarding Social Equity and Environmental Justice issues. We work closely with neighbors, community representatives, social equity-based organizations, and staff from elected leaders' offices to provide information, gather input, collaborate to develop alternate plans and designs which do not disproportionately adversely impact any one community or group.

We are platinum members of the National Complete Streets Coalition where we work with community groups and local public health agencies to calm traffic speeds, improve pedestrian safety, and incorporate bicycle lanes and pedestrian infrastructure into roadway design.

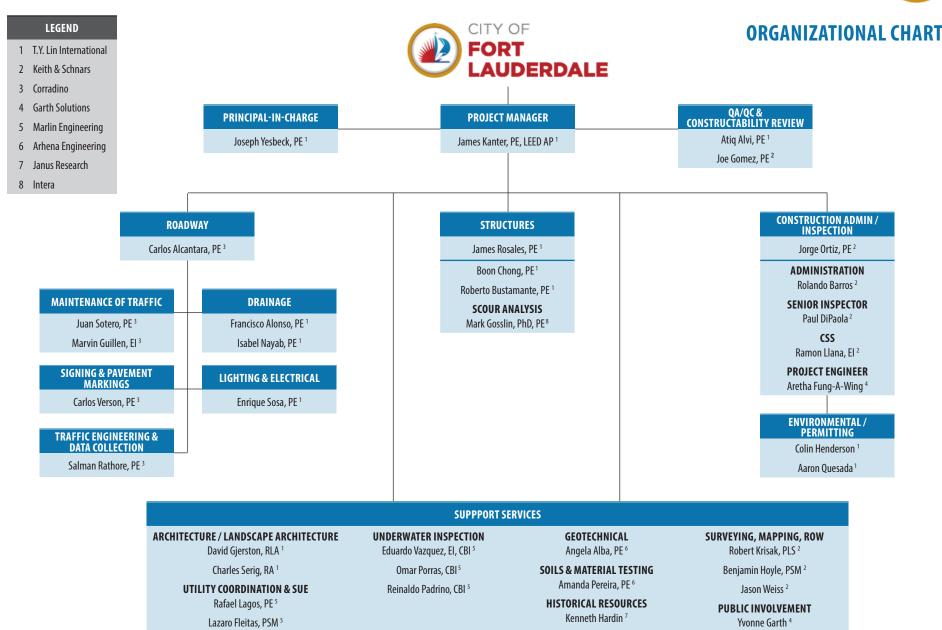
TYLI has been instrumental in developing public outreach practices to encourage social justice, involving a wide cross-section of the community, MWESB firms, low income residents, and disadvantaged youth.



ARCHITECT – ENGINEER QUALIFICATIONS

PART I - CONTRACT-SPECIFIC QUALIFICATIONS

	A. CONTRACT INFORMATION										
1. So	1. TITLE AND LOCATION (City and State) South Ocean Bridge Drive (Fort Lauderdale, FL)										
2. [2. PUBLIC NOTICE DATE 3. SOLICITATION OR PROJECT NUMBER										
	1,	/19/1	/				471-1189	I			
					.B. ARCH	ITECT-ENGINE	ER POINT OF CO	NTACT			
4. NAME AND TITLE James Kanter, PE – Unit Manager											
5. NAME OF FIRM											
T.Y. Lin International											
6.	TELEPH	I SNO	NUMBE	R	7. FAX NUMBI	ΕR	8. E-MAIL ADDRESS	5			
	954	-491-	5556		954-49	91-6117	James.Kant	er@tylin.com			
						.C. PROPOS					
	I	.(Checi	(c)	(Comple	ete this sectio	n for the prime c	ontractor and all k	ey subcontractors)			
	PRIME	J-V PARTNER	SUBCON- TRACTOR	9. FIRM	NAME	10. AI	DDRESS	11. ROLE IN THIS CONTRACT			
a.	х			CHECK IF BRANCH		T.Y. Lin Interna 500 W Cypress Suite 330 Fort Lauderdale	Creek Road,	Prime Consultant			
b.			х	CHECK IF B	RANCH	AREHNA Engine 1440 Coral Rid Coral Springs,	eering, Inc. ge Drive, #116	Geotechnical			
C.			Х	CHECK IF B	RANCH	The Corradino (5200 NW 33 rd A Suite 203 Fort Lauderdale	Avenue	Roadway Support			
d.			X	CHECK IF B	RANCH	Garth Solutions 7951 Riviera Bo Suite 411 Miramar, FL 33	oulevard	Public Involvement			
e.				CHECK IF B	RANCH	Intera Incorpor 2114 NW 40 th T Suite A-1 Gainesville, FL	Terrace	Scour Analysis			
f.				CHECK IF B	RANCH	Janus Research 1107 N Ward S Tampa, FL 336	treet	Historical Resources			
g.				CHECK IF B	RANCH	Keith & Schnars, PA 6500 North Andrews Avenue Fort Lauderdale, FL 33309 Construction Administration/Inspection					
h.				CHECK IF B	RANCH	Marlin Engineer 1700 NW 66 th A Suite 106 Fort Lauderdale	Avenue	Utility & SUE / Underwater Inspection			
D.	ORG	ANIZ	ATIO	NAL CHART O	F PROPOSED	TEAM					



	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person)							
12. N	AME	13. ROLE IN THIS CO	ONTRACT	-	14	4. YEARS EXPERIENCE		
	James Kanter, PE, LEED AP	Project Ma	nager		a. TOTAL 30	b. WITH CURRENT FIRM 3		
15. F	IRM NAME AND LOCATION (City and State)							
	T.Y. Lin International	_						
BS, BS, A	DUCATION <i>(DEGREE AND SPECIALIZATION)</i> Civil Engineering, University of Miami Architectural Eng., University of Miami , Florida International University		(S	RRENT PROFESSIONA TATE AND DISCIPLIA ofessional Civil Eng	VE)	ATION orida Reg. No.44005		
18. O	THER PROFESSIONAL QUALIFICATIONS (Publications,	Organizations, Training,	. Awards,	etc.)				
Ame	rican Society of Civil Engineers (ASCE), LEED A	Accredited Profession	nal, U.S	6. Green Building C	Council (U:	SGBC)		
P		19. RELEVANT PR	OJECTS					
	(1) TITLE AND LOCATION (City and State) W 116th Way Bridge over C-6 Canal (Bridge Design-Build for Misc. Maintenance Repair		/, FL	.PROFESSIONAL SEI	(2) YEAR C	OMPLETED CONSTRUCTION (If applicable) 2011		
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.)	AND SPECIFIC ROLE		☐ Check if project pe	erformed wi	th current firm		
Project Manager for owner's representation services for the rehabilitation of a pair of 125-foot 3-span, reinforced concrete bridges. The work included management of the solicitation process and oversight of CEI/CFM services. These services included attendance of pre-proposal meetings, response to RFIs, review of design-build proposals, technical support to city staff, review of design submittals' conformance with the contract documents, coordination with FDOT for design approvals, review of pay requests, and coordination of LAP reporting requirements. Construction phase services included oversight of CEI/CM Consultar and necessary design adjustments, response to RFIs, review of CEI/CM firm's pay requests, regular construction site visits and reporting, schedule, and progress report reviews, change orders and claim reviews, and coordination of on-going project issue with project EOR, CEI Consultant, and Design-Build firm.						These services included oport to city staff, review orovals, review of pay ght of CEI/CM Consultant enstruction site visits and		
ĺ	(1) TITLE AND LOCATION (City and State)					OMPLETED		
	Flamingo/Lummus Neighborhood Capital Right-of-Way Improvements - Miami Beach, FL			PROFESSIONAL SERVICES 2006		CONSTRUCTION (If applicable) 2006		
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) Principal-in-Charge in the for the consultant preliminary and final design of above and under District of Miami Beach. The project area encountry (east to west), and from Lincoln Road (1 pavement resurfacing and partial reconstruction drainage wells and pipe replacement, water many properties of the construction of the constructi	team responsible for er-ground improvem impasses more than 7th Street) to 5th Si in, sidewalk reconstr	er the ments to a squaretreet (neutron,	the right-of-way in re mile of municipa orth to south). The ADA-compliant pe	tion, public nfrastructual al streets, e scope of destrian ra	c involvement, and are in the historic Art Deco from Ocean Drive to Alton the work includes amp improvements, storm		
	(1) TITLE AND LOCATION (City and State)	•		<i>J</i>	(2) YEAR C			
	Islands Neighborhood Capital Right-of-Wa Miami Beach, FL	ay Improvements	-	.PROFESSIONAL SEI 2006	RVICES	CONSTRUCTION (If applicable) 2006		
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) Principal-in-Charge responsible for the mass improvements to the right-of-way infrastructuextensive public involvement, concept design pavement resurfacing, partial reconstruction, drainage wells and pipe replacement, water metals and provided the scope of the sc	ster plan verification are for the Star, Pall , and development of sidewalk reconstruct	, public m, and of bid p ction, A	Hibiscus Islands ir ackages for infrast DA-compliant pede	l prelimina n Miami Be tructure ir estrian rar	ary and final design of each. The work included inprovements that included imp improvements, storm		
	(1) TITLE AND LOCATION (City and State)					OMPLETED		
	Historic Steel Bridge Preservation at NW 5 Parkway and Hook Square/East 1st Ave -			.PROFESSIONAL SEI	RVICES	CONSTRUCTION (If applicable) 2000		
(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE					th current firm their approaches, e design of improvements ting sidewalks that were grate decks to reduce dead physical, material, and to the existing bridges for servation priorities. The			
]	(1) TITLE AND LOCATION (City and State)					OMPLETED		
	Donald Ross Road Bridge (SR 706) over the Waterway - Juno Beach, FL	ne Intracoastal		.PROFESSIONAL SEI	RVICES	CONSTRUCTION (If applicable) 1999		
e.	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) Senior Project Engineer for the design of the the ICWW. Scope of work included horizontal accordination with local agencies. The project all	e east and west two- and vertical geometr	-lane ap y, storn	nwater manageme	or bascule nt, signing	e-type bridge crossing over g, marking, lighting, and		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Joseph Yesbeck, PE Principal in Charge 39 15. FIRM NAME AND LOCATION (City and State) T.Y. Lin International – Fort Lauderdale, Florida 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) B.S. in Civil Engineering, University of Miami B.S. in Architectural Eng., University of Miami Professional Engineer, Florida, No. 44005 M.S.B.A., Florida International University 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) American Society of Civil Engineers (ASCE), LEED Accredited Professional, U.S. Green Building Council (USGBC) 19. RELEVANT PROJECTS (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) South Florida Regional Transportation Authority (SFRTA); **General Planning Consultant** N/A On-going (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm Project Manager. Provided rail planning services to SFRTA for a wide variety of tasks including system planning, station and site plan review. Services included public outreach /coordination for agency's legislative packages, short- and long-range rail planning, transit facilities planning and development, alternative analysis, major investment studies, and station area/transitoriented development. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Oakland Park Boulevard Transit Alternatives Analysis Fort Lauderdale, FL 2013 N/A (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm h. Project Director. The analysis identified high-quality, high-capacity premium transit service (BRT, LRT), as well as defined the markets and area to be served by the solution. These improvements will enhance the transit passenger and/or pedestrian experience, improve transit service reliability and travel time and encourage transit oriented development. TYLI services included considering the markets served, existing and future ridership, analysis of stop and transfer activity, existing and anticipated travel volumes, existing and forecast congestion, land use plans, economic development initiatives and sensitive social or natural environmental resources (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) South Florida Rail Corridor, Bascule Bridge over the South Fork of the New River PD&E Study 2010 N/A Fort Lauderdale, FL C. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm Project Manager. Based upon inspections, the railroad bridge had been determined to be structurally deficient and measures to stabilize this bridge had reduced horizontally. As a result, the NEPA Study identified the preferred bridge alternative (replacement) to accommodate future rail and marine traffic in the study area. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) I-75 and Pembroke Road Interchange Project Development & PROFESSIONAL SERVICES CONSTRUCTION (If applicable) **Environmental (PD&E) Study** 2009 N/A Pembroke Pines, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm d. Project Director. This NEPA study included the analysis of the mainline adjacent interchanges, and proposed interchange to determine the operational characteristics of I-75 with and without the proposed interchange in place. Three alternatives were evaluated as part of the study, including the baseline 'no-build' condition, single point urban interchange and tight diamond interchange alternative. In addition, as part of the study the alternatives were evaluated to determine environmental impacts, if any, resulting from the proposed interchange. Significant coordination was needed between neighboring municipalities which held opposing views on the project need. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) I-595/Central Broward East-West Transit Alternatives PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Analysis and Draft Environmental Impact Statement (DEIS) 2008 N/A Fort Lauderdale, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm Project Manager. The project included the Alternatives Analysis and the preparation of a DEIS for a 20-mile light rail (LRT) line. In addition to significant public outreach and involvement, other major tasks included identification of 16 station

locations, conceptual engineering, evaluation of Minimum Operable Segment alternatives, and preparation of a New Starts

submittal to enter into Preliminary Engineering.

	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person)								
12. N	IAME	13. ROLE IN THIS CO	NTRACT		14. Y	/EARS EXPERIENCE			
	Atiq Alvi, PE	QA/QC-Constructab	ility Review	a. TOTAL 26	-	b. WITH CURRENT FIRM 7			
15. F	IRM NAME AND LOCATION (City and State)			20		,			
	T.Y. Lin International- Orlando, Florida	a							
16. E	DUCATION (DEGREE AND SPECIALIZATION)	1	7. CURRENT PROFES	SSIONAL R	EGIS1	TRATION			
	MS, Civil Engineering, University of South Flori	da, 2010	(STATE AND DIS	SCIPLINE)					
	BS, Civil Engineering, University of South Florid		Professional E	ngineer, F	lorid	la #52245, 1997			
18. C	OTHER PROFESSIONAL QUALIFICATIONS (Publications, Transportation Research Board; Structural Fi Bridge Life-Cycle Cost Analysis Sub-Committ Committee; American Concrete Institute; An	iber Reinforced Polyn tee; Bridge Aesthetic	ners Committee; E s Sub-Committee;	Bridge Pre Non-Des	serva truct	ation Sub-Committee; ive Testing Sub-			
		19. RELEVANT PROJ	ECTS						
	(1) TITLE AND LOCATION (City and State)			(2) YEAR					
	Districtwide Bridge Engineering		.PROFESSIONAL SE	ERVICES	CON	ISTRUCTION (If applicable)			
	District 7, Florida		2008			2008			
0	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.	c.) AND SPECIFIC ROLE	☐ Check if pr	oject perfo	rmed	with current firm			
a.	Technical Advisor and Quality Assurance and providing engineering support servic provided for load rating analysis, produc and staff support. The repair projects co and substructure, movable bridge repair	even DSMO. Full-se development, spec	ervice enq ialized st	ginee udies	ering support is also s, inspection programs,				
	(1) TITLE AND LOCATION (City and State)		(2) YEAR	COMPLETED					
	Rehabilitation of Welch's Causeway Ba over Boca Ciega Bay St. Petersburg, Florida	PROFESSIONAL SERVICES 2006			CONSTRUCTION (If applicable) 2006				
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE								
	Engineer-of-Record and Project Manager. Structural steel repairs to movable span and concrete repairs on fixed spans, steel bridge painting (including hazardous materials assessment), complete tender house renovation, including roof replacement and installation of scour countermeasures.								
	(1) TITLE AND LOCATION (City and State)			(2) YEAR	COM	1PLETED			
	Hillsborough County Local Agency Par Project, West Columbus Drive Swing E Hillsborough	PROFESSIONAL SERVICES 2009			ISTRUCTION (If applicable) N/A				
	Hillsborough County, Florida								
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.	c.) AND SPECIFIC ROLE	□ Check if pr □	oject perfo	rmed	with current firm			
C.	Engineer-of-Record and Project Manager mechanical, and architectural of a 1926 of the steel members on the main spans bridge to support current traffic loading the second floor of the bridge tender horoom with an independent pile foundation for all aspects of the design, including file	historic thru-truss be and reinforced conc criteria. A second sto use and the bridge con on will be constructed	ob-tail swing bridg rete T-beams on t ory consisting of a ontrols will be mov I adjacent to the to	e. It invol he approa glass cub ed to this	lves s ach s e str s rooi	structural strengthening pans to enable the ucture will be added as m. A new generator			
	(1) TITLE AND LOCATION (City and State)			(2) YEAR	COM	1PLETED			
	Life Cycle Cost Analysis Study for Rehability Bayway Structure "E" Movable Bridge		.PROFESSIONAL SE	ERVICES	CON	NSTRUCTION (If applicable) N/A			
d.	St. Petersburg, Florida		<u> </u>						
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc Engineer-of-Record and Project Manager alternative in order to keep the aging br	r. The study was perf	ormed to determine	ne the mo	st fe				
	(1) TITLE AND LOCATION (City and State)	and Danseyle	DDOEESSIONALOS	(2) YEAR					
e.	Rehabilitation of New Smyrna Single L Bridge over Indian River New Smyrna, Florida	Leat Bascule	.PROFESSIONAL SE	EKVIUES	CUN	ISTRUCTION (If applicable) 2008			
٠.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.	c.) AND SPECIFIC ROLE	☐ Check if pr	oject perfo	rmed	with current firm			
	Engineer-of-Record and Project Manager diaphragms to the piers, along with med			to the fixe	ed co	nnections between the			

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME

13. ROLE IN THIS CONTRACT

QA/QC Manager and Constructability Reviews

14. YEAF a. TOTAL b

14. YEARS EXPERIENCE
L b. WITH CURRENT FIRM

15. FIRM NAME AND LOCATION (City and State)

Joe L. Gómez, PE

KEITH AND SCHNARS - Fort Lauderdale, FL

16. EDUCATION (DEGREE AND SPECIALIZATION)

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

B.S., Civil Engineering Technology, Florida International University, 1981

Registered Professional Engineer, FL #35526

A.A., Pre-Engineering, Miami-Dade College, 1977

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

FDOT CTOP Qualifications

TIN #G520432562950, QC Manager, Earthwork Construction Inspection -Levels I & 2

Professional Certifications FDOT: MOT - Maintenance of Traffic Advanced # 5653, Nuclear and Safety Training, HAZMAT Training, Auger Cast Pile, MSE Wall

Awards: Jay W. Brown Award for Outstanding Managerial and Leadership Abilities, FDOT 1991, Distinguished Alumni, "I am MDC", Miami Dade College, 2002, 2012

Professional Organizations: Florida Engineering Society - Board of Directors, Miami Chapter, American Society of Civil Engineers (ASCE), Member, Construction Management Association of America (CMAA), Member

19. RELEVANT PROJECTS

	19. RELEVAINT PROJECTS	3						
	(I) TITLE AND LOCATION (City and State)		COMPLETED					
a.	Districtwide Traffic Operations and Safety Studies, Miami- Dade and Monroe Counties, FL	PROFESSIONAL SERVICES 2015	CONSTRUCTION (If applicable)					
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm Project Manager and Engineer of Record for this three-year contract involved the development of various traffic operations studies for Miami-Dade and Monroe Counties, FL.							
			COMPLETED					
	(I) TITLE AND LOCATION (City and State)	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)					
b.	I-395/SR-836 (from Midtown Interchange/I-95 to US-41/SR-AIA MacArthur Causeway Bridge), Miami-Dade County, FL	2015	N/A					
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE						
	Senior Project Manager for the I-395 Corridor Improvements which included developing, 30% plans, criteria package and aesthetics manual for the project. Project also included significant infrastructure improvement around the project area as well major stakeholder coordination.							
			COMPLETED					
	(I) TITLE AND LOCATION (City and State)	PROFESSIONAL	CONSTRUCTION (If applicable)					
	SR-5/US-1 Overseas Highway (from MM 93 to MM 97), Tavernier, FL	SERVICES 2009	N/A					
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	□Check if project	performed with current firm					
	Project Manager and Engineer of Record for 4 miles of US-1 in the FL Keys. The project included milling and resurfacing, improving shoulders, adding drainage and the addition of a new northbound 10 ft. wide emergency shoulder. Included support during construction phase.							
		(2) YEAR	COMPLETED					
	(I) TITLE AND LOCATION (City and State)	PROFESSIONAL	CONSTRUCTION (If applicable)					
	SR-5/US-1 Overseas Highway (from MM 103 to MM 106), Key Largo, FL	SERVICES 2009	N/A					
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	□Check if project	performed with current firm					
	Project Manager and Engineer of Record for 3 miles of US-1 in the FL Keys shoulders, adding drainage and the addition of a new northbound 10 ft. wide en the construction phase.							

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person)									
12. N	AME	13. ROLE IN THIS C	ONTRACT	Г		14. YEARS EXPERIENCE			
	Carlos Alcantara, PE	Roadway	/ Task	Leader	a. TOTAL 15	b. WITH CURRENT FIRM 3			
15. F	15. FIRM NAME AND LOCATION (City and State) The Corradino Group, Inc., Doral, FL.								
16. E	DUCATION (DEGREE AND SPECIALIZATION)				L REGIST	RATION (STATE AND			
BS (Civil Engineering), University of Florida, 2001			SCIPLINE) ofessional Enginee	er, Florida	a No. 64760			
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. Alcantara Project Management experience encompasses plans preparation and development, roadway design, maintenance of traffic, lighting design, utility coordination, signalization design, signing & pavement marking design and drainage. Professional Certifications includes, FDOT Advanced Work Zone and Traffic Control Certified.									
		19. RELEVANT P	ROJECTS	S					
	(1) TITLE AND LOCATION (City and State)				• •	COMPLETED			
	West 31st and 32nd Street from West 12th to West 11th and 9th Avenue from West 30th to Hialeah, FL		nd	PROFESSIONAL SE 2015	RVICES	CONSTRUCTION (If applicable) 2015			
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.)	AND SPECIFIC ROLE		☐ Check if project pe	erformed w	vith current firm			
	Responsible for the design and preparation of of the City of Hialeah's Roadway Improvement Hialeah. The newly designed drainage system each street as is the policy in Hialeah. The drain Department. The project also includes lighting	Program under ou consisted of severa nage and roadway	r Genera I self-coi improve	I Engineering Serv ntained French Dra ment was permitte	ices Cont in system ed though	ract with the City of ns that run the length of n Miami-Dade County's RER			
	(1) TITLE AND LOCATION (City and State)				` '	COMPLETED			
	East 5th Ave from East 9th Street to East 17th 13th, 14th and 16th Street from East 4th Ave <i>Hialeah, FL</i>		, 12th,	PROFESSIONAL SE 2014	RVICES	CONSTRUCTION (If applicable) 2015			
b. Responsible for the design and preparation of contract documents detailing the full roadway and drainage reconstruction. The newly designed drainage system consists of several self-contained French Drain systems that run the length of each street as is the policy in Hialeah. This project is located in a densely residential neighborhood with multiple driveway connections per property. The reconstruction of the road converted the existing flush shoulder condition to a curb & gutter section which require the raising and lowering of the road in order to provide an adequate profile for drainage. The typical section conversion, profile modification and parking addition required extensive analysis of the connections to the existing properties at the right-of-way line to ensure positive drainage from the properties as well as driveways, sidewalk connections, etc. The project also included lighting, and signing and pavement marking improvements throughout the project limits.									
	(1) TITLE AND LOCATION (City and State)			222552212111 25		COMPLETED			
	NE 71st Avenue Roadway Improvements, Miar	ni, FL		.PROFESSIONAL SE 2016	RVICES	CONSTRUCTION (If applicable) Ongoing			
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc., Responsible for providing all management, er preparation of a complete set of construction US-1/ Biscayne Blvd. including, but not limite project also includes a combination of pavement properly direct storm water runoff towards the	ngineering analysis contract plans for d to, milling and re ent overbuild and r	and pla the impr surfacin	rovements of N.E. ng, proposed drain fuction of the corric	vices req 71st Stre age syste lor to pro	puired for the design and eet from N.E. 4th Court to em reconstruction. The ovide positive slopes to			
	(1) TITLE AND LOCATION (City and State)			.PROFESSIONAL SE		CONSTRUCTION (161111)			
	Bird Ave. Roadway Improvements, <i>Miami, FL</i>			Ongoing	RVICES	CONSTRUCTION (If applicable) Ongoing			
d. (3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE						ed for the design and IS 1 to Aviation Ave. The rainage system, on-street			
	(1) TITLE AND LOCATION (City and State)				• •	COMPLETED			
	SW 27th Avenue Reconstruction from US 1 to Miami, FL	Bayshore Drive,		.PROFESSIONAL SE 2016	RVICES	CONSTRUCTION (If applicable) 2016			
e.	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.,</i> Responsible for major reconstruction project the Bayshore Drive. The improvements consisted cenhancements (replacement of span-wire asset bicycle lanes, signing, landscaped raised media	nrough the heart of of ADA upgrades, a emblies with mast a	Coconut new self rms and	f-contained drainag count-down pedes	27th Aver ge system	nue from US 1 / SR 5 to n, signalization			

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM James R. Rosales, PE Bridge Design/Task Leader 25 25 15. FIRM NAME AND LOCATION (City and State) T.Y. Lin International – Coral Gables, Florida 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) MS, Civil Engineering, Florida International University, 1995 BS, Civil Engineering, Universidad Nacional de Ingeniería Lima, Professional Engineer, Florida, No. 54635, 1998 Peru, 1990 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) FICE/FDOT LFRD Certification, 1997 19. RELEVANT PROJECTS (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) FDOT District Six, NW 25 Street Viaduct 2010 2013 Miami, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm The project consists of the design of a new 1.4-mile elevated viaduct along NW 25 Street (over the Palmetto Expressway SR 826) serving as a limited access connection to MIA's cargo facilities. James was responsible for the design of the steel box straddle bents, end bents, pier columns, and foundations. He was also involved in the design of the superstructure elements, including the design of the concrete deck for the curved portion of the bridge and the ramps. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) FDOT District Six, I-395 Corridor Reconstruction 2012 Miami, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm b. The Project includes the design and construction of the widening and resurfacing of the Veterans Expressway (SR 589) from south of Gunn Hwy to the Sugarwood AET Mainline Gantry. The project is approximately 1.7 miles in length from MP 9.000 (begin) MP 10.726 (end). Design and construction of roadway widening to accommodate two additional mainline travel lanes in each direction of the Veterans Expressway for a total of 8 lanes (4 northbound and 4 southbound). Mr. Rosales is providing structural engineering design for the widening of several existing bridges. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) CONSTRUCTION (If applicable) PROFESSIONAL SERVICES SR 589 (Veterans Expressway) Widening and Resurfacing from South of Gunn Highway to Sugarwood Mainline Toll 2016 On-going Plaza, Florida's Turnpike Enterprise Hillsborough County, Fl C (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm Mr. Rosales was responsible for the preparation of plans showing existing utilities under the footprint of the building to be demolished and the required re-routing of those utilities that will remain in service. He was also responsible for the preparation of plans for the construction of the new south bus station at the east of the building and the new pavement on the airside section adjacent to the building. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) SR 826/Palmetto Expressway Section 2 Design-Build from 2010 2011 SW 68 Street to SW 33 Street Miami, FL d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm Design of \$177 million widening of the Palmetto Expressway including total reconstruction of the interchange at SW 40 Street/Bird Road. It also includes new frontage roads from the SW 56 Street/Miller Road Interchange to Bird Road, a new pedestrian bridge over the Palmetto Expressway just south of the Bird Road Interchange and noise abatement walls. Responsible for the structural design which includes concrete and steel bridges and miscellaneous structures. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Eller Drive Overpass Intermodal Cargo Transfer Facility Fort Lauderdale, FL 2011 2015 e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE oxtimes Check if project performed with current firm The project is for the final design on a complex interchange for express lanes from I-595 into Port Everglades. James was

responsible for the preliminary design of the substructure for all the bridges on the project. The preliminary design was

performed using AASHTO LRFD Bridge Specifications, and required extensive use of RC-Pier program.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Jorge Ortiz, P.E. Construction Management 34 Inspection 15. FIRM NAME AND LOCATION (City and State) KEITH AND SCHNARS - Fort Lauderdale, FL 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) B.S. Civil Engineering, University of Florida Registered Professional Engineer, FL #0037772, MD #0014738 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) MOT Advance Level Certification, Final Estimates - Level I &2, Asphalt Paving Technician - Level I, QC Manager Awards: Urban Project Award, Quality Construction, Resident Engineer, (US-1/Biscayne Boulevard) 19. RELEVANT PROJECTS (2) YEAR COMPLETED I) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** Keith and Schnars, Fort Lauderdale, FL N/A Ongoing a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm S.E. Florida Area Engineer –Responsible for construction management and contract administration of CEI projects including office and field staff supervision, manpower and project schedule monitoring, review and negotiate contract changes, prepare and execute task work orders and supplemental agreements and maintain client relationships. (2) YEAR COMPLETED (I) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** US-41 Groupings, Lee & Charlotte Counties, FL N/A 2013 (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm b. Project Engineer/Administrator - Provided CEI services on a grouping of 5 projects along US-41 in Lee and Charlotte Counties. Two of the five projects included: SR-867, McGregor Boulevard from College Parkway to Keenan Avenue, Lee County (FM No. 42522816201). These projects involved milling and resurfacing of 0.36 miles of roadway, widening of shoulders, drainage system reconstruction, sidewalk improvements, signing & pavement markings and signalization; Pine Island Road/SR-78 from US-41 to Del Prado Boulevard, Lee County (FM No. 42523015201) involved milling and resurfacing, widening of 2.6 miles of roadway for bike path, shoulder treatment, drainage improvements, de-silting, curb & gutter, guardrail, sidewalk construction, signing & paving and signalization. (2) YEAR COMPLETED (I) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** SR-AIA from Oakland Park Boulevard to Flamingo Avenue, N/A Ongoing Fort Lauderdale, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Senior Project Engineer. This is a "Greenway" beatification enhancement project which entails the reconstruction and restoration of approximately 1.04 miles of a four-lane roadway facility to include a bike lane in each direction and a raised median. The work also includes major improvements to the existing drainage system, new curb and gutter, sidewalk, extensive hardscape, lighting, signalization, signage and pavement markings. Responsible for the contract administration and construction management of this project including field staff supervision, overall construction project schedule monitoring, Quality Control of contractor operations and materials certifications. (2) YEAR COMPLETED (I) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** I-75/SR-93 from Broward County Line to East of SR-951 in N/A Ongoing Collier County, FL d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Senior Project Engineer. This is a 50-mile safety improvement project consisting of the installation of guardrail along the outside shoulders on both NB and SB. Some existing guardrails will be upgraded to meet the current design standards and the maintenance service openings will be improved to provide a better delineated entry points. Responsible for contract administration and construction management including quality control, resolution of project issues, contract negotiation, construction inspection and supervision.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person)								
12. N	AME	13. ROLE IN THIS C	ONTRACT	Γ	1	4. YEARS EXPERIENCE		
	Juan Sotero, PE	 Maintenance	of Tra	affic (MOT)	a. TOTAL 13	b. WITH CURRENT FIRM		
15 E	IRM NAME AND LOCATION (City and State)	Manrenarios	01 110		13	10		
15.1	The Corradino Group, Inc., Doral, FL.							
16. E	DUCATION (DEGREE AND SPECIALIZATION)		17. CUF	RRENT PROFESSION	AL REGIST	RATION <i>(STATE AND</i>		
	Civil Engineering), Florida International Univers	sity, 2001	DI	SCIPLINE) ofessional Enginee		•		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Professional Affiliations: American Society of Civil Engineers (ASCE); Member, Chi Epsilon – Civil Engineering National Honor Society; Tau Chi Alpha – Environmental Engineering Honorary						ring National Honor		
		19. RELEVANT P	ROJECT:	S				
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED		
	West 31st and 32nd Street from West 12th to West 11th and 9th Avenue from West 30th to Hialeah, FL		nd	PROFESSIONAL SE 2015	RVICES	CONSTRUCTION (If applicable) 2015		
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.)	AND SPECIFIC ROLE		□ Check if project p	erformed w	vith current firm		
a. Responsible for the design and preparation of contract documents detailing the full roadway and drainage reconstruction as of the City of Hialeah's Roadway Improvement Program under our General Engineering Services Contract with the City of Hialeah. The newly designed drainage system consists of several self-contained French Drain systems that run the length o street as is the policy in Hialeah. The proposed drainage and roadway improvement will be permitted though Miami-Dade County's RER Department. The project also includes lighting and signing & pavement marking improvements throughout th project limits. Extensive care was made during design to minimize impacts to existing landscaping, utilities and all other ex above ground objects.					ract with the City of that run the length of each though Miami-Dade ements throughout the			
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED		
	East 5th Ave from East 9th Street to East 17th Street & East 10th, 12th, 13th, 14th and 16th Street from East 4th Ave to East 6th Ave, Hialeah, FL			PROFESSIONAL SERVICES CONSTRUCTION (If app. 2014 2015				
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.)	☑ Check if project p	erformed w	vith current firm				
Responsible for the design and preparation of contract documents detailing the full roadway and drainage reconstruction newly designed drainage system consists of several self-contained French Drain systems that run the length of each stream the policy in Hialeah. This project is located in a densely residential neighborhood with multiple driveway connections property. The reconstruction of the road converted the existing flush shoulder condition to a curb & gutter section which the raising and lowering of the road in order to provide an adequate profile for drainage. The typical section conversion, modification and parking addition required extensive analysis of the connections to the existing properties at the right-cline to ensure positive drainage from the properties as well as driveways, sidewalk connections, etc. The project also inclighting, and signing and pavement marking improvements throughout the project limits.						length of each street as is vay connections per utter section which required section conversion, profile rties at the right-of-way		
	(1) TITLE AND LOCATION (City and State)					COMPLETED		
	FDOT District 6 – Drainage Improvements. SR Creek Drive Along 43rd Street, <i>Miami Beach, F</i>		ndian	PROFESSIONAL SE. Ongoing		CONSTRUCTION (If applicable) Ongoing		
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc., The scope of this project consisted on drainage main line with a 30" pipe, the installation of a resurfacing, improvements of pavement mark standards and requirements set forth in the A	ge improvements a pump station, and kings, and upgradir	long 43r d additio ng sidew	n of a pollution co alks and curb ram	clude repl introl stru	acement of the existing cture, milling and		
	(1) TITLE AND LOCATION (City and State)		_	DDOFFCCIONAL CE		COMPLETED		
	FDOT District 6 – RRR Project. SR A1A (Collins Lincoln Road to Indian Creek Drive, <i>Miami Bea</i>		f 	.PROFESSIONAL SE Ongoing		CONSTRUCTION (If applicable) Ongoing		
d. (3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE						and upgrading sidewalks is with Disability Act of		
	(1) TITLE AND LOCATION (City and State)	/ A la la 11 A		DDOELCCIONALCE		CONSTRUCTION (16 applicable)		
	FDOT District 6 – RRR Project. SR A1A (Hardin Indian Creek Drive to South of 75th Street, <i>Mi</i>		1	PROFESSIONAL SE. Ongoing		CONSTRUCTION (If applicable) Ongoing		
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc., The scope of this project consisted on milling a and curb ramps to comply with the accessibilit 1990 (ADA), and minor drainage improvement	ind resurfacing, imp y standards and red	oroveme		narkings,	and upgrading sidewalks		

	E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person)								
12. N	IAME	13. ROLE IN THIS C	ONTRACT	Г	1	4. YEARS EXPERIENCE			
	Marvin Guillen	Maintonanco	of Tre	offic (MOT)	a. TOTAL				
		Maintenance	OI II a	arric (MOT)	27	23			
15. F	IRM NAME AND LOCATION (City and State)								
	The Corradino Group, Inc., Doral, FL.								
16. E	DUCATION (DEGREE AND SPECIALIZATION)			RRENT PROFESSION <i>A</i> SCIPLINE)	AL REGISTE	RATION (STATE AND			
BS (Civil Engineering), University of Miami, 1987		Σ.	oon 2 . 2,					
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. Guillen has vast experience in highway design and municipal roadway street design. He has prepared Technical Special Provisions and processed all the necessary permits for the construction of several projects.									
		19. RELEVANT P	ROJECTS	6					
	(1) TITLE AND LOCATION (City and State)				• •	COMPLETED			
	West 31st and 32nd Street from West 12th to West 11th and 9th Avenue from West 30th to Hialeah, FL		nd	PROFESSIONAL SE 2015	RVICES	CONSTRUCTION (If applicable) 2015			
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.)	AND SPECIFIC ROLE		□ Check if project period in the period in the project period in the project period in the pe	erformed w	rith current firm			
a.	Responsible for the design and preparation of of the City of Hialeah's Roadway Improvement Hialeah. The newly designed drainage system street as is the policy in Hialeah. The proposed County's RER Department. The project also incorpoject limits. Extensive care was made during above ground objects.	Program under out consists of several: I drainage and road cludes lighting and s	r Genera self-cont way imp signing 8	Il Engineering Servained French Drain Provement will be parained pavement will be pavement markir	ices Conti n systems permitted ng improvi	ract with the City of that run the length of each though Miami-Dade ements throughout the			
	(1) TITLE AND LOCATION (City and State)				(2) YEAR (COMPLETED			
	East 5th Ave from East 9th Street to East 17th 13th, 14th and 16th Street from East 4th Ave Hialeah, FL		, 12th,	.PROFESSIONAL SE 2014	RVICES	CONSTRUCTION (If applicable) 2015			
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE								
b.	Responsible for the design and preparation of a newly designed drainage system consists of sethe policy in Hialeah. This project is located in property. The reconstruction of the road convethe raising and lowering of the road in order to modification and parking addition required extelline to ensure positive drainage from the proper lighting, and signing and pavement marking in	veral self-contained a densely residentiant the the existing fluto provide an adequate ensive analysis of the perties as well as drive	d French al neight ush shou ate profil ne conne veways,	Drain systems that corhood with multipler condition to a see for drainage. The extions to the exist sidewalk connections	It run the ple drivew curb & gu e typical so ing prope	length of each street as is vay connections per utter section which required ection conversion, profile rties at the right-of-way			
	(1) TITLE AND LOCATION (City and State)			DDOFFCCIONAL CE		COMPLETED			
	Bird Ave. Roadway Improvements, <i>Miami, FL</i>			PROFESSIONAL SE. Ongoing	RVICES	CONSTRUCTION (If applicable) Ongoing			
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) Responsible for providing all management, eng preparation of a complete set of construction of proposed improvements include roadway recorparking improvements and widening to include with both residential and commercial properties	gineering analysis a ontract plans for th nstruction, milling a bike lanes. This pr	nd plans e recons ind resur	struction of Bird Av facing, signalization	ces require e. from U on, new dr nsely-urb	ed for the design and S 1 to Aviation Ave. The rainage system, on-street anized corridor that is lined			
	(1) TITLE AND LOCATION (City and State)			DDOFFCCIONAL CE	• •	COMPLETED			
	SW 27th Avenue Reconstruction from US 1 to <i>Miami, FL</i>	Bayshore Drive,		.PROFESSIONAL SE 2016	RVICES	CONSTRUCTION (If applicable) 2016			
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) Responsible for major reconstruction project th Bayshore Drive. The improvements consisted cenhancements (replacement of span-wire asse bicycle lanes, signing, landscaped raised media	nrough the heart of of ADA upgrades, a mblies with mast a	Coconut new self rms and	-contained drainag count-down pedes	7th Aven ge system	ue from US 1 / SR 5 to , signalization			
	(1) TITLE AND LOCATION (City and State)					COMPLETED			
	FDOT District 6 – Drainage Improvements. SR Creek Drive Along 43rd Street, <i>Miami Beach, F</i>		ndian	PROFESSIONAL SE. Ongoing	RVICES	CONSTRUCTION (If applicable) Ongoing			
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.). The scope of this project consisted on drainage line with a 30" pipe, the installation of a pump improvements of pavement markings, and upgoence universely set forth in the Americans with	AND SPECIFIC ROLE improvements alo station, and addition grading sidewalks a	ng 43rd on of a p nd curb	ollution control str	de replace ucture, m	ement of the existing main illing and resurfacing,			

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Carlos Verson, PE Maintenance of Traffic (MOT) 11 11 15. FIRM NAME AND LOCATION (City and State) The Corradino Group, Inc., Doral, FL. 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND BS (Civil Engineering), Florida International University, 2004 DISCIPLINE) Professional Engineer, Florida No. 69387 MS (Civil Engineering), Florida International University, 2007 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. Verson has experience in the field of Roadway and Civil Engineering. He is in charge of preparing roadway plans, signing and pavement marking plans, signalizations plans, drainage plans and maintenance of traffic plans for roadway and civil engineering projects. Proficient with the F.D.O.T. Design Standards, the MUTCD, AASHTO and FDOT Plans Preparation Manual. 19. RELEVANT PROJECTS (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) NE 71st Avenue Roadway Improvements, Miami, FL Ongoing (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm Responsible for providing all management, engineering analysis and plans preparation services required for the design and preparation of a complete set of construction contract plans for the improvements of N.E. 71st Street from N.E. 4th Court to US-1/ Biscayne Blvd. including, but not limited to, milling and resurfacing, proposed drainage system reconstruction. The project also includes a combination of pavement overbuild and reconstruction of the corridor to provide positive slopes to properly direct storm water runoff towards the proposed/existing drainage inlets. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) SW 27th Avenue Reconstruction from US 1 to Bayshore Drive, 2016 2016 Miami, FL b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Responsible for major reconstruction project through the heart of Coconut Grove along SW 27th Avenue from US 1 / SR 5 to Bayshore Drive. The improvements consisted of ADA upgrades, a new self-contained drainage system, signalization enhancements (replacement of span-wire assemblies with mast arms and count-down pedestrian signals), decorative lighting, bicycle lanes, signing, landscaped raised medians /swales and pavement markings. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) .PROFESSIONAL SERVICES CONSTRUCTION (If applicable) FDOT District 6 – Drainage Improvements. SR A1A/Collins Ave/ Indian Creek Drive Along 43rd Street, Miami Beach, FL Ongoing Ongoing

The scope of this project consisted on drainage improvements along 43rd Street which include replacement of the existing main line with a 30" pipe, the installation of a pump station, and addition of a pollution control structure, milling and resurfacing, improvements of pavement markings, and upgrading sidewalks and curb ramps to comply with the accessibility

The scope of this project consisted on milling and resurfacing, improvements of pavement markings, and upgrading sidewalks and curb ramps to comply with the accessibility standards and requirements set forth in the Americans with Disability Act of

The scope of this project consisted on milling and resurfacing, improvements of pavement markings, and upgrading sidewalks and curb ramps to comply with the accessibility standards and requirements set forth in the Americans with Disability Act of

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

FDOT District 6 - RRR Project. SR A1A (Collins Ave) from North of

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

FDOT District 6 - RRR Project. SR A1A (Harding/Abbott Ave) from

Indian Creek Drive to South of 75th Street, *Miami Beach, FL*(3) BRIEF DESCRIPTION (*Brief scope, size, cost, etc.*) AND SPECIFIC ROLE

Lincoln Road to Indian Creek Drive, Miami Beach, FL

1990 (ADA), and minor drainage improvements.

1990 (ADA), and minor drainage improvements.

(1) TITLE AND LOCATION (City and State)

(1) TITLE AND LOCATION (City and State)

standards and requirements set forth in the Americans with Disability Act of 1990 (ADA).

C.

CONSTRUCTION (If applicable)

CONSTRUCTION (If applicable)

Ongoing

Ongoing

□ Check if project performed with current firm

□ Check if project performed with current firm

□ Check if project performed with current firm

(2) YEAR COMPLETED

PROFESSIONAL SERVICES

Ongoing

PROFESSIONAL SERVICES

Ongoing

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Traffic Engineering and Data Salman Rathore, PE 12 Collection 15. FIRM NAME AND LOCATION (City and State) The Corradino Group, Inc., Doral, FL. 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) BS (Civil Engineering), National University of Science & Technology, Professional Engineer, Florida, PE No. 75281 MS (Transportation Engineering & Planning), Michigan State University, 1999 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Proficient in the use of HCS, Synchro, TGEN and other traffic operations analysis software. Mr. Rathore's experience includes traffic impact studies, developments of regional impacts, traffic operations studies, signal / stop warrant analysis, development of traffic signal designs, accident/crash analysis and intersection improvement plans. 19. RELEVANT PROJECTS (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) City of Doral, Vanderbilt Traffic Calming Study & Alternatives, Doral, FL 2015 $oxed{\boxtimes}$ Check if project performed with current firm (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Traffic Engineer: Corradino provided traffic calming features in the Vanderbilt Park neighborhood in Doral. The objective of this study was to determine if improvements are necessary to maintain the quality of life for the residents by managing traffic concerns in an appropriate fashion to minimize through-traffic intrusion into the residential neighborhood and to maintain vehicle speeds at suitable levels. Two public involvement meetings were held to engage residents in the local area. Following traffic count and speed measurements, traffic calming measures were recommended. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Review of Traffic Impact Studies, Multiple Locations in South Florida Ongoing N/A (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Traffic Engineer: Responsible for reviewing traffic engineering studies, intersection safety analysis, crash analysis, collision diagrams and capacity analysis for a variety of traffic studies in South Florida region. As a peer reviewer for a number for cities, he has reviewed multiple traffic studies and provided comments to the City staff. He is very familiar with the land development application process and has attended a number of Planning Board meetings by responding to questions from the Board members and clarifying any issues related to the traffic study. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) Intersection Pedestrian Safety Studies, SR5 at Caribbean Blvd. Town of PROFESSIONAL SERVICES CONSTRUCTION (If applicable) 2015 N/A Cutler Bay, Cutler Bay, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm Project Manager/Traffic Engineer: The purpose of the studies was to develop improvements and perform benefit/cost analysis to identify suitable and cost effective improvements. This included analyzing the crash data, collision diagrams and identifying abnormal crash characteristics or patterns. A list of possible causes and countermeasures for each crash pattern were also developed. The crash history was quantified by using scientifically based methods such as expected value analysis, safety ratio, confidence level, statewide crash rates, or other statistical method. These actions directly mitigate the identified crash patterns and their associated probable causes. Crash benefits, operational benefits, and construction costs associated with were quantified in a benefit/cost analysis. This ensured cost effective improvements. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Española Way Street Closure Study, Miami Beach, FL 2014 N/A (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☑ Check if project performed with current firm Traffic Engineer: Evaluated the impacts of the proposed permanent closure of Española Way between Washington Ave. and Drexel Ave. in City of Miami Beach. Currently, Española Way is closed to vehicular traffic between Washington Ave. and Drexel Ave. during evening hours. Bordering the study area are Fienberg Fisher K-8 Center and Miami Beach Senior Center. This study focused on the impact of the proposed closure on the residents, accessibility of emergency vehicles, and commercial businesses in the project area. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) FDOT D6, Fatal Crash Disposition Reports, Miami, FL 2016 N/A e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm

Project Manager/Traffic Engineer: This involved investigating and analyzing the fatal crashes and identifying any geometric, roadside elements, fixed objects, or traffic control conditions, deficient pavement markings, necessary signage, etc. and making

recommendations to improve the safety and operation of the locations.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Francisco Alonso, PE Drainage Engineer 15 15 15. FIRM NAME AND LOCATION (City and State) T.Y. Lin International - Coral Gables, Florida 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) BS, 2002, Mechanical Engineering, University of Miami Professional Civil Engineer, Florida Building Code Administrator, Florida 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Building Code Administrator Florida License No. BU1870 ICC Certified Building Official Certificate No. 8288137 19. RELEVANT PROJECTS (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) FDOT District Six, SR 5/Brickell Avenue 2010 2011 Miami, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm a. Drainage Engineer of Record. Project consists of the design and construction phase services for a pavement reconstruction proposed for 1.7 miles of an existing four-lane divided highway on SR 5 (Brickell Avenue). The work includes concrete pavement design, maintenance of traffic, access management, lighting, signalization and excessive queues associated with the operations of movable bridge openings at the northern end of the project. Responsibilities for this drainage design included managing the drainage design and coordinating between the different disciplines and sub-consultants. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) SR-5/US1 Overseas Highway from MM 103 to MM 107 2009 2009 Resurfacing Monroe County, FL b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm As part of the Florida Keys Overseas Heritage Trail (FKOHT) project the firm was retained to perform professional engineering services which encompassed the milling, resurfacing and pavement marking plans from MM 103 to MM 107 along the US1 Overseas Highway. The project included drainage design, pavement, signals utilities, lighting and MOT plans. Responsibilities included overseeing the drainage design and acting as a quality control officer on said design. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) City of Miami General Engineering Contract 2002 On-going Miami. Florida (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE $oxed{\boxtimes}$ Check if project performed with current firm C. Mr. Alonso has provided professional engineering services and project management for various projects under the firms Miscellaneous Engineering Contract with the City of Miami. The projects have ranged from horizontal roadway improvement and drainage projects as well as vertical projects involving Architecture, structural, MEP design and permitting. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) FIU-Sweetwater UniversityCity Prosperity Project On-going Miami, Florida (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm d. Mr. Alonso was the lead engineer and project manager reporting directly to the FIU executive officers and the Facilities Management department for the TIGER grant concept development and the application process (and award) as well as the current Design-Build procurement, where Mr. Alonso serves as the Design Criteria Professional, Owner's Representative, and NEPA consultant. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Storm water Drainage Design: FIU Parking Garage 2003 2005 Miami Florida $oxed{\boxtimes}$ Check if project performed with current firm (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Collaborated in the civil engineering design of storm water systems for two 7-story parking garages and one 2-story public safety building encompassing over 8.5 acres. The storm water management systems were sized based on the hydrology

analysis results and estimated volumes from the parking garages roof floors.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person)							
12. NAME 13. ROLE IN THIS CONTRAC				Т	1	4. YEARS EXPERIENCE	
	Isabel Nayab, PE	Drainage Eng			a. TOTAL 22	b. WITH CURRENT FIRM 2	
15. F	IRM NAME AND LOCATION (City and State)						
	T.Y. Lin International – Fort Lauderdale	e, Florida					
16. E	DUCATION (DEGREE AND SPECIALIZATION) MS, Civil Engineering; BS, Civil Engineering			RRENT PROFESSIONA STATE AND DISCIPLIN		RATION	
				Professional Civil E	ingineer,	Florida	
	OTHER PROFESSIONAL QUALIFICATIONS (Publications, aber, Florida Engineering Society, Certifications						
		19. RELEVANT P	ROJECT	S			
	(1) TITLE AND LOCATION (City and State)				(2) YEAR (COMPLETED	
	Miami-Dade Expressway Authority (MD	X), SR 836		.PROFESSIONAL SE	RVICES	CONSTRUCTION (If applicable)	
	Operational and Capacity Improvement Miami, Florida	s Design-Build		2016		On-going	
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.	.) AND SPECIFIC ROL	.E	□ Check if project period of the period o	erformed v	vith current firm	
	Drainage Engineer. Ms. Nayab was respons permitting. This \$149M project involved ad of a limited-access expressway.						
	(1) TITLE AND LOCATION (City and State)				(2) YEAR (COMPLETED	
	SR 589 (Veterans Expressway) Widening and Resurfacing from South of Gunn Hwy. to Sugarwood Mainline Toll Plaza,			PROFESSIONAL SERVICES 2015		CONSTRUCTION (If applicable) On-going	
b.	Florida's Turnpike Enterprise, Hillsborough County, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE			Chack if project p	orformed v	with current firm	
	Drainage Engineer. Ms. Nayab was responsible for drainage post-design of roadway widening to accommodate two additional mainline travel latetal of 8 lanes (4 northbound and 4 southbound)						
	(1) TITLE AND LOCATION (City and State)					COMPLETED	
C	Orlando-Orange County Expressway Au 408 from Rouse Road to Challenger Par Resurfacing Orange County, FL			.PROFESSIONAL SE 2014	RVICES	CONSTRUCTION (If applicable) 2014	
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Drainage Engineer of Record. Ms. Nayab was responsible for the exist facilities and open and closed storm sewer systems. Responsibilities is well as assisted with plan production and signing and pavement mar from Rouse Road to Challenger Parkway.			ncluded sign evalua	ation of a ition and	Il stormwater management inventory for the project as	
	(1) TITLE AND LOCATION (City and State)					COMPLETED	
	FDOT District 4, I-95/Spanish River Interest Palm Beach County, Florida	erchange		.PROFESSIONAL SE 2010	RVICES	CONSTRUCTION (If applicable) 2010	
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Drainage Engineer of Record. Ms. Nayab was responsible for the des systems, plans production, coordination with permitting agencies, ar Report for the new three level Spanish River Interchange.				managei	ment facilities, conveyance	
	(1) TITLE AND LOCATION (City and State)					COMPLETED	
	Florida's Turnpike Enterprise, SR 821 (HEFT)/Kendall Drive Ramp Intersection Modification Miami-Dade County, FL			.PROFESSIONAL SE	RVICES	CONSTRUCTION (If applicable) N/A	
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.	:.) AND SPECIFIC ROL	.E	☐ Check if project p	erformed v	vith current firm	
	Senior Drainage Engineer. Ms. Nayab was r Responsibilities included data collection, de- coordination with the permitting agencies.						

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME

Enrique Sosa, PE

13. ROLE IN THIS CONTRACT

Electrical Engineer

14. YEARS EXPERIENCE
a. TOTAL b. WITH CURRENT FIRM
30 21

15. FIRM NAME AND LOCATION (City and State)

T.Y. Lin International - Coral Gables, Florida

16. EDUCATION (DEGREE AND SPECIALIZATION)

Master Level Courses, Biomedical Engineering, University of Miami, 1994- MS, Nuclear Engineering, North Carolina State University, 1993- BS, Electrical Engineering, Florida International University, 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida No. 53885, 1999

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Structural Engineering Institute (Charter Member)/Precast/Prestressed Concrete Institute

	19. RELEVANT PROJECTS							
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED					
	SR 836 Capacity and Operational Improvements, Miami-	.PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)					
a.	Dade Expressway Authority Miami, FL	2016	On-going					
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	$\ \square$ Check if project performed	with current firm					
	Mr. Sosa served as lighting Engineer of Record for this \$149M design-build project to add lanes and provide improvements to SR 836 from West of NW 57th Ave. to NW 17th Ave.							
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED					
	SR 23 Toll Road (First Coast Outer Beltway) Design-Build,	.PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)					
	South Segment, from SR 21 (Blanding Boulevard) to North of Argyle Forest Boulevard Jacksonville, FL	2016	On-going					
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	$oxed{\boxtimes}$ Check if project performed						
	The project was for the conversion of 7.4 miles of highway to a li							
	included the construction of a minimum four-lane limited access mai Mr. Sosa was responsible for the lighting system design, which includ							
	with the existing lighting. He was also responsible for the design Transportation) system.							
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED					
	SR 589/Veterans Expressway Section 4, Widening and	.PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)					
	Resurfacing from South of Gunn Highway to the Sugarwood	2016	On-going					
	Mainline Toll Plaza Hillsborough County, FL							
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE							
	The project was for the Design and construction of roadway widening to accommodate two additional mainline travel lanes in each direction of the Veterans Expressway for a total of eight lanes (four northbound and four southbound), resulting in one additional general use lane and one future express lane in each direction. Mr. Sosa served as electrical engineer responsible for lighting system for the length of the project. Veterans followed Turnpike authority standards which are more restrictive than FDOT.							
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED					
	Biscayne Bay Flood Relief Project	.PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)					
	Village of Miami Shores	2008	2011					
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	$oxed{\boxtimes}$ Check if project performed	with current firm					
d. 	Electrical Engineer for the professional civil engineering services provided for the construction of RCP storm sewers, exfiltration trenches, a pump station, DIP and HDPE force mains, inlets, manholes, and pavement repairs. Mr. Alonso utilized the stormwater modeling software AdICPR for Flood Hydrology and Hydraulic Modeling as the basis for the design improvements. Responsibilities included final construction plans, technical specifications, permitting and bidding assistance, and construction administration.							
,	(1) TITLE AND LOCATION (City and State)		COMPLETED					
	Overtown Greenway, NW 7th Avenue to NW 3RD StreetMiami Miami, FL	.PROFESSIONAL SERVICES 2013	CONSTRUCTION (If applicable) 2013					
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	Check if project performed	l with current firm					
	The project included the full conversion from a blighted two-lane serv oriented greenway with high-end hardscape, landscape, lighting, a drainage modifications were required to complete the work. Mr. Sosa design including calculations, power distribution design and electrical	and site furnishings. Full range was responsible for the str	roadway reconstruction and					

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Boon Chong, PE **Bridge Design** 25 13 15. FIRM NAME AND LOCATION (City and State) T.Y. Lin International - Tampa, Florida 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION ME, Structural Civil Engineering, University of Florida, 1990 (STATE AND DISCIPLINE) Professional Engineer, Florida, #48156, 1994 BS, Civil Engineering, Southern University A&M, 1988 Georgia, #34710, 2010 South Carolina, #28345, 2010 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Certifications/Training: FDOT "Load Rating Summit: LRFR for Florida's Bridges"; FICE/FDOT "AASHTO LRFD for Structural Engineer" 19. RELEVANT PROJECTS (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) City of Marco Island, Hernando Drive over Clam Bay 2010 2011 **Bridge Rehabilitation** Marco Island, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE a. ☐ Check if project performed with current firm Design Engineer and Engineer of Record. Bridge rehabilitation and improvement project to increase the useful life of the bridge. Improvements included repairing the cracked seawall and bulkhead, repairing spalling prestressed pile, replacing the riprap, relocating trees, and filling the void under the end bent, as well as resurfacing the 200-foot roadway beyond the bridge. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) CONSTRUCTION (If applicable) PROFESSIONAL SERVICES FDOT District Six, SR 826 Palmetto Expressway Section 2 2011 2013 Design-Build from South of Sunset Drive to North of SW 31st Street Miami, FL b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm The primary purpose of the project was to widen the mainline from two to three lanes, or from three to four lanes in each direction, add auxiliary lanes between all interchanges, incorporate interchange improvements including surface streets, as well as operational and safety improvements along the mainline and interchange ramps. The project also included drainage, lighting, landscaping, ITS, and signalization improvements. Responsible for all miscellaneous structures and steel curve bridge final plan preparation for the design-build team. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) FDOT District Seven, US 19 (SR 55) Post Design, 2010 2012 Clearwater, Florida (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm С. Structural Project Post Design Manager and Engineer of Record. The design of the US 19 corridor single point interchange, while satisfying traffic needs by improving the overall traffic flow, significantly reduced the width of project construction and provided a simple and compact solution for a complex transportation issue. An innovative solution was achieved by designing the steel box girder with integral pier cap strap with tension plate to be sequentially "dropped" into place. The difficult construction method was the greatest challenge of this project. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State)

CONSTRUCTION (If applicable) PROFESSIONAL SERVICES FDOT District Six, SR 826/836 Interchange (Palmetto Expressway/Dolphin Expressway Interchange) 2009 2013 Miami, Florida (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm d. Structural Project Manager and Engineer of Record. This project consisted of four continuous steel plate girder bridges with minor curve over SR 826 mainline, canal, auxiliary ramp and one 200-foot radius bridge over NW 12 Street that was designed to fit into the heart of the interchange. Steel curve bridge with LFD design and LRFD substructure with drilled shaft foundation were designed for this project. Responsible for preparing tasks from the 30% plans to final plans. He also performed the quality control and the overall bridge design. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) FDOT District Seven, SR 686 (CR 296 from East 40 Street PROFESSIONAL SERVICES CONSTRUCTION (If applicable) to West of 28 Street), Clearwater, Florida 2008 N/A (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm e. Design Engineer and Engineer of Record. The bridges in this project span across 34 Street, 30 degrees skew of 118 Avenue and a Waste Management canal, landfill and ramp A. Pre-bore piles are used throughout the landfill. The bridges are a

composite of hybrid design for steel plate girders and AASHTO prestressed beams. HS 25 loading was used for design.

The bridges are in tangent and curve with various girder radii.

CAM 17-0455

	E. RESUMES OF KEY. (Comple).	/ PERSONNEL PRO ete one Section E foi			TRACT		
12. N	IAME	13. ROLE IN THIS CO	NTRACT	г		1. YEARS EXPERIENCE	
	Roberto H. Bustamante	Bridge Design			a. TOTAL 30	b. WITH CURRENT FIRM 7	
15 F	IRM NAME AND LOCATION (City and State)				30	,	
	T.Y. LIN International – Coral Gables,	Florida					
16. E	DUCATION (DEGREE AND SPECIALIZATION)		17. CI	URRENT PROFESSION	NAL REGIST	RATION	
	BS, Civil Engineering, Florida Atlantic Universit	y, 2013	((STATE AND DISCIPL	INE)		
18. C	THER PROFESSIONAL QUALIFICATIONS (Publications,	Organizations, Training,	Awards	, etc.)			
		19. RELEVANT PR	OJECT:	S			
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	OMPLETED	
	Eller Drive Overpass Intermodal Cargo	Transfer Facility		.PROFESSIONAL SE	RVICES	CONSTRUCTION (If applicable)	
	Fort Lauderdale, FL	AND SDECIFIC DOLE		2010 ☐ Check if project p	orformod w	2015	
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Mr. Bustamante was responsible for the utilities conflicts for the new bridge improvements for the FDOT District Four. This roadway is Intermodal System connecting I-595 to Port Everglades. The roadway Lauderdale-Hollywood International Airport.			ne new vay is	\$68 million Eller Divital to Broward (Orive ICTF County an	Overpass interchange and d is part of the Strategic	
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	OMPLETED	
	SR 5/US 1 from MP 31.4 to MP 32.1			PROFESSIONAL SERVICES CONSTRUCTION (If ap			
	Big Pine Key, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE			2009 2009 ☑ Check if project performed with current firm			
b.	Mr. Bustamante's design services include maintenance of traffic. Design services we Florida Keys. A unique feature of this propeer.	ed roadways, intersere performed on th	ections e millir	s, swale drainage, ng and resurfacing	, signing, j 1.2 miles	pavement markings, and s of 2-lane roadway in the	
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	OMPLETED	
	SR 5 PD&E Glades Road to Yamato Road Boca Raton, FL			.PROFESSIONAL SE 2009	RVICES	CONSTRUCTION (If applicable) N/A	
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.			Check if project performed with current firm			
	Mr. Bustamante served as CADD operator FDOT District Four. The main study compo six lanes for a 2.8-mile section of SR 5/US	nent is to determine	the ef				
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	OMPLETED	
	Palmetto Expressway (SR 826) Expan Miami-Dade County, FL	sion Project		.PROFESSIONAL SE 2016	RVICES	CONSTRUCTION (If applicable) 2017	
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.	•		□ Check if project p			
Mr. Bustamante provided CADD design services for these projects that includes adding one additional trav direction including widening and/or replacing bridges along the corridor; increasing the shoulder widths; re and off ramps at all interchanges; improving traffic flow and safety on the surface roads connecting to the eximproved drainage, signalization, lighting and signage. Section 2 improvements were incorporated from no Street/Bird Road to just south of SW 72nd Street/Sunset Drive, and which is currently under construction.					r widths; reconfiguring on ng to the expressway; and ed from north of SW 40th		
	(1) TITLE AND LOCATION (City and State)				(2) YEAR C	OMPLETED	
	MIC-MIA Connector, Automated Peopl Miami International Airport, Florida	e Mover		.PROFESSIONAL SE	RVICES	CONSTRUCTION (If applicable) 2009	
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		☐ Check if project p	erformed w	ith current firm	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Mr. Bustamante was CADD Operator on the design and construction Mover (APM) System connecting the FDOT's new MIC facility (white mass transit, and rail systems) to Miami International Airport's la structures.			will serve as a ma	ajor transp	portation hub for highway,	

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM **Bridge Hydraulics** Mark Gosselin, PhD, PE 27 15. FIRM NAME AND LOCATION (City and State) **INTERA** Incorporated 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) PhD. Coastal and Oceanographic Engineering Professional Engineer: Florida, Louisiana MS, Naval Architecture and Offshore Structures BA, Engineering Sciences 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) 19. RELEVANT PROJECTS (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) .PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Scour Evaluation of Bridges with Unknown Foundations, FDOT District 4 2010-2016 (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Program Manager. The unknown foundations program is an initiative by the FDOT to address the federal mandate to develop plans of action for the state's unknown foundation bridges. The work began with a risk assessment of all tidally influenced unknown foundation bridges. For certain risk classifications, performed additional work, which included developing design and check event (100- and 500-year return period) hurricane storm surge induced hydraulic and scour parameters. The final stage involved the design and evaluation of scour countermeasure alternatives for the bridges deemed scour susceptible or scour critical. These countermeasure alternatives included both hydraulic countermeasures and non-destructive testing. The program encompassed four FDOT districts and involved hydraulic modeling, scour calculation, and/or vulnerability assessment at hundreds of Florida's coastal bridges. Recent work involves reevaluation of predicted scour at several bridges via application of FDOT rock scour methodologies. Cost: \$1M. (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Seawall Master Plan Development, City of Fort Lauderdale, FL 2016 (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm Project Manager. The City of Fort Lauderdale issued a task work order under its Structural Engineering Consultant Services contract to develop a Master Plan for all city owned seawalls and shoreline. The master plan included inspection of all assets, identification of any deficiencies or vulnerabilities, and development of recommendations to address these deficiencies. In a subconsulant role, INTERA was assigned inspection of all city owned shorelines. INTERA inspected shorelines at eight individual shoreline locations totaling approximately three miles. Additional responsibilities included assessing shoreline vulnerability, identifying corrective actions and providing recommendations to address potential vulnerability following sea level rise within a 25- and 50-year time frame. Cost: \$22K. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Feasibility Study to Improve Navigation through the Federal Highway Bridge over the Dania Cutoff Canal, FDOT District 4, Broward County, FL 2016 (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Project Manager. During certain phases of the tide, navigation through the Federal Highway Bridge along the Dania Cutoff Canal can be treacherous due to the high velocities that occur due to the constriction caused by the bridge. The District issued a task work order to INTERA to investigate alternatives to alleviate the high currents through the bridge. The study evaluated bank modification, fender modification, bridge pier relocation, and aids to navigation for their effectiveness, cost, and constructability. Cost \$20K. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Design Services for SR A1A Bascule Bridge #860011 over Hillsboro Inlet, 2013 Florida Department of Transportation District 4, Broward County, FL. d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Project Manager and Lead Engineer. Provided design assistance for the development of scour protection for the bascule, rest pier, and approach pier substructure elements. Work included specification of the protection type (marine mattress), extents, design calculations, and anchoring system. Work also included review of plans and specifications developed by the prime design firm. Cost: \$25K. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Coastal Engineering Support Services for the FDOT, FL 2002-Present (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Senior Engineer/PM/Engineer of Record. Modeling ocean and coastal waves and currents; analyzing tidal inlet hydraulics and sediment transport; assessing boat wake and surge; computing sediment transport and bride scour; evaluating and designing coastal hard structures and beach nourishment; evaluating hurricane landfall impacts and sea level rise on erosion, flooding, and coastal highway infrastructure; and value engineering of coastal protection schemes. Cost: >\$7 million

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM **Roland Barros Project Administration** 19 11 15. FIRM NAME AND LOCATION (City and State) KEITH AND SCHNARS - Fort Lauderdale, FL 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION B.S., Construction Management, Florida International University, (STATE AND DISCIPLINE) 2009 A.A., Civil Engineering, Broward County Community College, 2005 N/A B.S., Mechanical Engineering, Eunversidad Gran Mariscal de

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

A.A., Computer Science, Antonio J. de Sucre Polytechnic,

Ayacucho, Venezuela, 2003

Barcelona, Venezuela, 2005

FDOT CTQP Qualifications: QC Manager, Final Estimates – Levels 1 & 2, Concrete Field Technician - Level 1, Drilled Shaft Inspection, Earthwork Construction Inspection - Levels 1 & 2, Asphalt Paving - Levels 1 & 2

Professional Certifications- ACI: Concrete Field Technician – Level I, **FDOT:** Critical Bridge Construction Issues-2014,MSE Wall, Auger Cast Pile, MOT – Maintenance of Traffic, Intermediate & Advanced, Concrete Field Inspector Specification, MRP Training & Quality Management Introduction, IS 100 Introduction to the Incident Command System, IS 700 National Incident Management NIMS System Introduction, OSHA 30 hrs, HAZMAT Training, OSHA Awareness - Training 01 to 16, Nuclear Training and Safety, TROXLER #16238, EEO/DBE/OIT/ Wages Concern for Field Personnel

OTHER: Hygiene, Industrial Security and Safety Level 2 ACCROVEN S.R.L-VENEZUELA, CETEPEP-VENEZUELA State General Contractor (CGC), Paving Engineer Miami-Dade County (PE)

19. RELEVANT PROJECTS

	19. RELEVANT PROJECTS					
	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED				
	Keith and Schnars, Broward County, FL	_PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)			
		Ongoing	N/A			
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Administrator – Full re-construction of A1A from Flamingo Ave to Oakland Park Boulevard. This project includes full depth roadway re-construction, LED lighting and signalization improvements, drainage, Silva Cells and utility improvements for Broward County. Also, Assigned to 2 mill and resurfacing at Krome Avenue from 184th Street to SW 288th Street, Krome Avenue from SW 288th Street to SW 297th Street, and NW 7th Avenue from NW 8th Street to NW 36th Street. Bascule bridge rehabilitation for bridge #870660, milling and resurfacing, traffic signal and lighting, ITS, bridge widening at different location. Responsible for ensuring complete inspection per contract					
	documents, material compliance, assignment of inspection staff and interpretation	on of contract plans. (2) YEAR COMPLETED				
	(1) TITLE AND LOCATION (City and State) F.R. Aleman, FIN #249653-I-52-02. SR-826/Palmetto EXWY at Okeechobee Road Interchange, Add Lanes & Reconstruction/Rail Track, Miami-Dade County, FL	.PROFESSIONAL SERVICES 2006	CONSTRUCTION (If applicable) N/A			
b.	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE					
	(1) TITLE AND LOCATION (City and State) EBS Engineering, Miami-Dade County, FL	(2) YEAR COMPLETED				
		.PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)			
	,	2005	N/A			
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE					

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

Paul DiPaola

13. ROLE IN THIS CONTRACT

Senior Inspector

a. TOTAL b. WITH CURRENT FIRM
15 13

15. FIRM NAME AND LOCATION (City and State)

KEITH AND SCHNARS - Fort Lauderdale, FL

16. EDUCATION

12. NAME

SUNY Farmingdale, State University of New York September 1991 to December 1992 17. CURRENT PROFESSIONAL REGISTRATION

N/A

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

FDOT CTQP Qualifications: Drill Shaft Inspection, Pile Driving Inspection, Concrete Field Technician - Level I, Earthwork Construction Inspection - Levels I & 2, Asphalt Paving Technician - Levels I & 2

ACI: Field Testing Technician - Level 1

FDOT: Concrete Field Inspector Specification, Site Manager Training – LIMS, TROXLER Nuclear Training and Safety #16238 HAZMAT Training, IMOT – Maintenance of Traffic Intermediate, FDEP Stormwater, Erosion and Sedimentation Control Inspector MSE Wall Inspection, CBT Auger Cast Pile, OSHA 30 Safety Training

AMEC: Fall Protection, Confined Space Training

	19. RELEVANT PROJECT	S		
			2) YEAR COMPLETED	
a.	(I) TITLE AND LOCATION (City and State)	PROFESSIONAL	CONSTRUCTION (If applicable)	
	SR-AIA from Oakland Park Boulevard to Flamingo Avenue, Broward County, FL	SERVICES Ongoing	N/A	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☑ Check if project	ct performed with current firm	
	Providing CEI services for the Multi-phase Reconstruction of Subgrade, base and both structural and friction Coarse asphalt, Drainage installation, lighting, signalization, striping, new ADA ramps, Brick paver sidewalks and Silva Cell installation.			
		(2) YEAR COMPLETED		
b.	(I) TITLE AND LOCATION (City and State)	PROFESSIONAL SERVICES 2015	CONSTRUCTION (If applicable) N/A	
	SR-9/I-95 from Myrtle Avenue Bridge to Pedestrian Bridge North of Golfair Boulevard Interchange, Jacksonville, FL			
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm Providing CEI services for the milling existing asphalt, structural and friction coarse asphalt paving, striping and guardrail installation.			
C.		(2) YEAR COMPLETED		
	(I)TITLE AND LOCATION (City and State) FLL Airport Runway Expansion, Broward County, FL	PROFESSIONAL SERVICES 2015	CONSTRUCTION (If applicable)	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☐ Check if project	ct performed with current firm	
	Provided CEI inspection for installations of drainage, water main, force main, signage, sheet pile wall and paving with concrete and asphalt for the runway expansion project.			
		` '	COMPLETED	
d.	(I) TITLE AND LOCATION (City and State)	PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable)	
	SR-7/NW 2 nd Avenue from NW 176 th Street to 1200 ft. South of NW 215 th Street, North Miami, FL		N/A	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☑ Check if project	ct performed with current firm	
	This 2-mile resurfacing milling and resurfacing project includes slope correction, sidewalk and median brick pavers installation, signalization mast arms, drainage correction, lighting, minor bridge repair, and traffic separator correction/widening.			

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Ramon Llana, El **CSS** 32 <1 15. FIRM NAME AND LOCATION (City and State) KEITH AND SCHNARS - Fort Lauderdale, FL 16. EDUCATION 17. CURRENT PROFESSIONAL REGISTRATION B.S., Civil Engineering, Florida International University, 1984 N/A A.A., Civil Engineering, Miami-Dade College, 1979 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) FDOT CTQP Qualifications: Final Estimates – Levels I & 2, Asphalt Paving Technician - Level I, Earthwork Construction Inspection -Levels I & 2 FDOT: ATSSA Worksite Traffic Supervisor Certification, MOT Maintenance of Traffic, Base Testing Certified, International Municipal Signal Association, MSE Wall Certification, MEW-Basic/Multiline Earth Work, Traffic Signal Seminar, TROXLER Nuclear Training and Safety, HAZMAT Certification 19. RELEVANT PROJECTS (2) YEAR COMPLETED (I) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** NE 13th Street, Fort Lauderdale, FL N/A Ongoing a (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☑ Check if project performed with current firm Contract Support Specialist - Mr. Llana will serve as CSS for reconstruction of NE 13th Street from NE 8th Avenue to FEC R/R. The project includes adding bike lanes, removal of existing traffic signal and construction and new roundabout, bio-swales and new street lighting. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES K&S Final Estimates Quality Assurance Engineer** N/A Ongoing h. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☑ Check if project performed with current firm Contract Support Specialist - Mr. Llana is assigned to various projects with K&S' CEI Group to perform Quality Assurance of final estimates, documentation procedures and other critical CEI functions on an as needed basis. (2) YEAR COMPLETED PROFESSIONAL (I)TITLE AND LOCATION (City and State) CONSTRUCTION (If applicable) **SERVICES** N/A City of Miami, FL 2016 C. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm Project Engineer - Mr. Llana served as Project Engineer on projects covering the reconstruction of different city streets, drainage, circle construction at Intersections, landscaping. He was responsible for all project coordination and supervision, including documentation of all measurements and computations, supervising contractor's monthly estimates and final estimate package. (2) YEAR COMPLETED (I) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** Reconstruction of NW 25th Street, Miami-Dade County, FL N/A 2016

Contract Support Specialist - This project includes the reconstruction of NW 25th Street and the construction of the Viaduct over the Palmetto Expressway. Mr. Llana was responsible for all project documentation, which included among other things correspondence, construction contract changes (SA's, work orders, etc.), design issues and plans submittals, measurements and computations tracking,

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

preparation of monthly estimates and final estimate package.

☐ Check if project performed with current firm

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Aretha Fung-A-Wing Project Engineer 5 5 15. FIRM NAME AND LOCATION (City and State) Garth Solutions, Inc., 7951 Riviera Boulevard, Suite 411, Miramar, FL 33023 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) **B.S.** Construction Management 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) 19. RELEVANT PROJECTS (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Miramar Police Station, 2014-2015 Miramar, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Worked as Project Engineer on the construction of the new Police station in Miramar, FL. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Broward Health North 2016-2017 Ft Lauderdale, FL b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Works as Project engineer on Broward Health North Expansion Project (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) .PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Las Olas Corridor Improvement 2017- ongoing C. Ft Lauderdale, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Project engineer for the new Las Olas Corridor (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Patricia and Phillip Frost Museum of Science 2015-2016 Miami, FL d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Project Engineer on 250,00 sqft, state-of-the-art, energy efficient facility (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) .PROFESSIONAL SERVICES CONSTRUCTION (If applicable)

e.

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☐ Check if project performed with current firm

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Colin Henderson **Environmental Permitting** 30 23 15. FIRM NAME AND LOCATION (City and State) T.Y. Lin International - Coral Gables, Florida 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) MS, Environmental Engineering, Florida International N/A University, 2000 BS, Wildlife Biology, University of California, Davis, 1986 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) OSHA Hazardous Materials Site Safety Supervisor, DOT HM-181 Hazardous Materials Handling, FDOT Water Quality Impact Evaluation, FDOT Traffic Noise Analysis, FDEP Qualified Stormwater Management Inspector; Member: National Association of Environmental Professionals; South Florida Association of Environmental Professionals South Florida - Board of Directors 19. RELEVANT PROJECTS (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) **Smokehouse Bay Bridge** 2015 2015 Marco Island, Florida (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm Environmental Scientist responsible for the environmental studies and permitting for the replacement of the Smokehouse Bay Bridge which lies within designated Critical Habitat for the endangered West Indian manatee and within the range of the endangered smalltooth sawfish. The replacement bridge allows for increased vertical clearance and improved navigation for boaters. The design also reduces bottom erosion and provides for improved water quality and circulation. Parks on both sides of the bay will be connected with safe pedestrian paths both above and below the bridge. Permitting was performed through the USACE, SFWMD and US Coast Guard. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) **Chokoloskee Bridge Replacement** Everglades City, Florida 2014 2014 (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm Environmental Scientist responsible for the environmental studies and permitting for the replacement of the Chokoloskee b. bridge on the causeway connecting Chokoloskee Island, the southernmost community on the west side of Florida, with Everglades City. This bridge crosses environmentally sensitive Chokoloskee Bay which is designated Critical Habitat for both the endangered West Indian manatee and the endangered smalltooth sawfish. The project is situated along the western extent of the Big Cypress National Preserve, these waters are Outstanding Florida Waters (OFW) and designated Class II waters (shellfish propagation or harvesting). Permitting for this project involves the US Coast Guard, SFWMD, USACE, USFWS, and NMFS (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Long Key Bridge Monroe County, Florida 2011 2011 C. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm Benthic survey of the 2.3 mile bridge to assess biological impacts associated with the proposed replacement of its 102 piers. Identify hard coral and seagrass communities impacted by proposed construction activities. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) US 1 Improvements between Florida City and Key Largo, 2009 2009 **Design and Permitting** Monroe County, Florida (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm d. Project Manager for the permitting of the widening of 20.4 miles of US 1 located in wetlands just east of Everglades National Park leading to the Florida Keys. Acquired all necessary regulatory permits, design of regionally significant mitigation program, preparation of permit applications and support documents, and response to regulatory agency request for additional information. Participated in interagency coordination meetings involving the USACE, SFWMD, Miami-Dade DERM, FDEP, USFWS, USEPA, Everglades National Park, Florida FWC, NMFS, and Florida Keys National Marine Sanctuary (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PD&E Study for Lower Matecumbe Key Intersection PROFESSIONAL SERVICES CONSTRUCTION (If applicable) **Improvement** 2007 2007 Monroe County, Florida (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Mr. Henderson served as project environmental scientist for this project that addresses the operational and safety concerns of turn lanes and intersections while maintaining consistency throughout the Florida Keys. The firm was responsible for identifying and evaluating properties for contamination.

LE. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 12. NAME Aaron Quesada, GISP 13. ROLE IN THIS CONTRACT Environmental Permitting 14. YEARS EXPERIENCE a. TOTAL 12 b. WITH CURRENT FIRM 12 5

15. FIRM NAME AND LOCATION (City and State)

T.Y. Lin International – Coral Gables, Florida

16. EDUCATION (DEGREE AND SPECIALIZATION)
MS, Environmental Science, School of Public and Environmental Affairs, Indiana University, 2005
BA, Biology, DePauw University, 2002

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
Florida Stormwater, Erosion, and Sedimentation

Florida Stormwater, Erosion, and Sedimentation Control Inspector Training and Certification Program, #25656, 2011

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

	19. RELEVANT PROJECT	S					
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED				
	. ,	.PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)				
	West Avenue Bridge Project Development and Environment Study Miami-Dade County, Florida	2012	N/A				
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Provided environmental services to evaluate the construction of a Canal. Tasks included data collection, GIS services, NEPA analysis Categorical Exclusion Type II. Additional duties involved assisting reports such as an endangered species biological assessment, effiand QC.	s, and documentation requ y with the preparation of a	est Avenue over the Collins ired for the production of a uncillary documentation and				
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED				
	FDOT District Six, SR 916/NW 138 Street Roadway Improvement, Miami, Florida	PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) 2013				
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☐ Check if project performed	with current firm				
	Provided data collection, GIS, and efficient transportation decision-making process services, with an emphasis on streamlining environmental tasks.						
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED				
	FDOT District Six, SR 907/Alton Road Project Development	.PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)				
C.	and Environment Study Miami, Florida	2012	2012				
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm Provided data collection, GIS, and efficient transportation decision-making process services, with an emphasis on streamlining environmental tasks.						
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED				
	FDOT District Six, US Route 1 Wildlife Mortality Survey,	.PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)				
	Miami, Florida Miami, Florida	2009	2009				
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Performed biweekly field visits to identify, record, and document deceased wildlife along an 18-mile stretch of roadway and right-of-way. Work included identifying wildlife with the aid of wildlife field guides and recording its position with the use of a GPS device, and monitoring constructed wildlife crossings using motion sensing camera equipment. Recorded wildlife was integrated into a geographic database and mapped for future reference and incorporation into reports for the client.						
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED				
	FDOT District Six, NW 42 Court Extension Project	.PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)				
	Development and Environment Study Miami, Florida	2010	2010				
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Prepared an Advance Notification package and a State Environmen conditions with respect to existing roadways, noise- and vibration-socioeconomic and environmental conditions, and historic propertie overview of several factors that could have potentially influenced w	sensitive receptors, transit the study area and pro	eports summarized existing facilities and services, ovided a comprehensive				

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 12. NAME David Gjertson, PLA, ASLA 13. ROLE IN THIS CONTRACT Landscape Architect 14. YEARS EXPERIENCE a. TOTAL 34 b. WITH CURRENT FIRM 5

15. FIRM NAME AND LOCATION (City and State)

T·Y·LIN International – Fort Lauderdale, Florida

Bachelor of Landscape Architecture, University of Wisconsin, 1976 (S7 Lice Flo Gee Soo	RRENT PROFESSIONAL REGISTRATION TATE AND DISCIPLINE) Censed Landscape Architect in the States of: Orida #LA0001141,1987 Eeorgia #LA001589,2009 Outh Carolina #1091, 2009 Outh Carolina #1588,2009
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^{18.} OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

	19. RELEVANT PROJECT					
	(1) TITLE AND LOCATION (City and State) St. Petersburg Downtown Master Plan - Stadium Plaza and Streetscape St. Petersburg, FL	.PROFESSIONAL SERVICES 2013	COMPLETED CONSTRUCTION (If applicable) 2013			
a.	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE					
1	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED			
	Florida Department of Transportation (FDOT), US 64 Highway Beautification Bradenton, Florida	.PROFESSIONAL SERVICES 2008	CONSTRUCTION (If applicable) 2009			
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	$\hfill\square$ Check if project performed	with current firm			
	Mr. Gjertson served as Lead Consultant and Project Manager for this project. The project was for 15-miles of state-owned roadway and was titled "Gateway to Manatee–Landscape Beautification." It featured landscaping and irrigation according to FDOT guidelines and specifications. An emphasis was placed on the utilization of native plants and water conservation. Several innovation methods for applying irrigation were explored including; multiple shallow wells, deep aquifer wells and application of reclaimed water through the use of stand pipes and water trucks.					
	(1) TITLE AND LOCATION (City and State)		COMPLETED			
	I-395 Urban Design Project Miami, Florida	.PROFESSIONAL SERVICES 2013	CONSTRUCTION (If applicable) N/A			
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Mr. Gjertson served as Lead Consultant and Urban Design Project Mathis section relate to the public and private realm urban design elementarea design, gateways, open space design, transit oriented develop and built form. The context of the I-395 Reconstruction Project is un corridor master plan situated below an elevated roadway and bridge	nts Including; streetscape d ment principles, pedestriar ique from an urban design	primary issues addressed in esign, storm water retention a connectivity, site planning			
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED			
	Brickell Avenue Landscape Enhancements & Multi-Use Trail Miami, Florida	PROFESSIONAL SERVICES 2013	CONSTRUCTION (If applicable) 2014			
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Beautification project for Brickell Avenue extending from 25th Road installation features preservation of large existing trees and the replatrees. An emphasis was placed on the addition of flowering shrubs at the adjacent residential properties. Also included in the project is a residential properties.	acement of aging canopy tr nd ground covers to enhand	ue landscape design and ees with large specimen			
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED			
6	Martin Luther King Street/NW 62nd Street Median Landscape Enhancement Florida	PROFESSIONAL SERVICES 2013	CONSTRUCTION (If applicable) 2014			
е.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Landscape and irrigation design for a Martin Luther King Street/62nd S Avenue. Project includes preservation of existing canopy and palm tree groundcovers. The project also includes the design and implementation	es and installation of floweri	2th Avenue to NW 6th ng shrubs and			

	E. RESUMES OF KEY. (Comple).	PERSONNEL PRO ete one Section E for			TRACT		
12. N	IAME	13. ROLE IN THIS CO	NTRACT	Т	1	14. YEARS EXPERIENCE	
	Charles E. Serig, AIA	Project Architect			a. TOTAL 30	b. WITH CURRENT FIRM	
15. F	IRM NAME AND LOCATION (City and State) T.Y. LIN International – Coral Gables,	Florida					
1/ [·	Tiorida	17 (1	URRENT PROFESSION	UAL DECIS	TDATION	
	DUCATION (DEGREE AND SPECIALIZATION) Bachelors of Architecture Louisiana State Unive	ersity 1986		(STATE AND DISCIPL		TRATION	
	Bachelors of Architecture Louisiana State Only	513ity, 1700	,	AIA, Architect, Flor	ida, No.	14514	
18. C	THER PROFESSIONAL QUALIFICATIONS (Publications,	Organizations, Training,	Awards,	, etc.)			
		19. RELEVANT PR	OJECT:	S			
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	North Terminal Development Miami International Airport, FL			.PROFESSIONAL SE 2015	RVICES	CONSTRUCTION (If applicable) 2015	
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.	.) AND SPECIFIC ROLE		☐ Check if project p	erformed v	with current firm	
	Mr. Serig assisted with the development of a regional commuter facility with 24 RJ and civil/site projects including the Regional (Completion Project and several maintenand	d ATR gates. Mr. Ser Commuter Facility, E	ig mar 3-C Ap	naged the work site eron, A-B Apron C	e services	for various North Terminal	
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Pompano Beach Tri-Rail Station Impro			.PROFESSIONAL SE	RVICES	CONSTRUCTION (If applicable)	
	Operations Center, South Florida Regional Transportation Authority (SFRTA)		n	On-going		On-going	
	Pompano Beach, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm						
b.	Mr. Serig is currently heading up the CE&I team responsible for the daily observation reporting and coordination for the construction of the SFRTA's new Operations Center. The campus includes constructing a new LEED certified Tri-Rail station with crossover pedestrian bridge, a three story 80,000 square foot operations center building and a four story 450+ caparking garage for staff and Tri-Rail patrons. The Station will be 100% powered by an array of photo voltaic cells configured as parking canopy on top of the parking garage. All three structures are constructed from architectural and structural precases panels and the Operations building and Garage are supported by 70 deep auger cast piles. The station facility is phased to maintain daily rail operations with no interruption to the current passenger schedules.					ED certified Tri-Rail station and a four story 450+ car hoto voltaic cells configured ctural and structural precast	
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Running Repair Facility in West Palm I Maintenance Facility All Aboard Flori Orlando, FL		cle	.PROFESSIONAL SE	RVICES	CONSTRUCTION (If applicable) 2017	
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		☐ Check if project p	erformed v	with current firm	
G.	Mr. Serig provided architectural design for t documents for the new intercity passenge Vehicle Maintenance Facility (VMF) in Orla North/South operating segments of the transformed into primarily a layover facility	r rail system's West ando. The new RRF newly introduced 24	Palm will se 40-mile	Beach Running Re erve as the primar e intercity passen	epair Faci y mainte ger rail o	lity (RRF) and the ultimate nance facility for the initial operation. The RRF will be	
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
	Miscellaneous Improvements Package Palm Beach International Airport, Florida	•		.PROFESSIONAL SE	RVICES	CONSTRUCTION (If applicable) 2004	
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc. Mr. Serig was the design architect for the Immigration, and served as project manag of the airport's Communications and Cer installation of upgraded and expanded sec emergency power and significant communications.	Palm Beach Internat ger for the FAR Part ntral Control facility urity equipment and	tional A 107 Se and t monit	ecurity improveme the Airport Operat tors, I.D. processin	F.I.S. Facents and continuous and co	ilities for U.S. Customs and communications remodeling ces. This project included system, smoke evacuation,	
	(1) TITLE AND LOCATION (City and State)				(2) YEAR	COMPLETED	
e.	Cargo Building 22226 (708), Miami-D Department Miami International Airport, Florida	ade Aviation		.PROFESSIONAL SE	RVICES	CONSTRUCTION (If applicable) 2002	
€.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		☐ Check if project p	erformed v	with current firm	
	As the field architect for the construction International Airport, Mr. Serig was respondent involving complex levels of schedules.	onsible for extensive	e coor	dination with four	adjacent	t and ongoing construction	

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)							
12. NAME 13. ROLE IN THIS CONTRACT 14. YEARS EXPERIENCE					RS EXPERIENCE		
Rafael L	agos, P.E.	Chief Engineer			a. TOTAL		b. WITH CURRENT FIRM
					23		11
15. FIRM	I NAME AND LOCATION (City and State	te)					
Marlin E	Engineering, Inc Fort Lauderdale,	FL					
16. EDU	CATION (DEGREE AND SPECIALIZATI	ON)	17. C	URRENT PROFES	SIONAL RE	GISTRA	ATION (STATE & DISCI-
Master	of Science in Civil Engineering, Flo	rida International	PLIN	≣)			
Universi	ty, Miami, FL, 1996; Bachelor of S	cience in Civil	Flor	ida Professional	Engineer	Lic. No	. 51412
Enginee	ring, Universidad del Norte, Barraı	nquilla, Colombia, 1985					
		19. RELEVANT P	ROJE	стѕ			
	(1) TITLE AND LOCATION (City and S	tate)			(2) YEAR	COMPL	ETED
	Krome Avenue from SW 8th Street to	Kendall Drive		PROFESSIONAL S	ERVICES	CONST	RUCTION (if applicable)
	Miami, FL			Ongoin	g		
a.	(3) BRIEF DESCRIPTION (Brief scope Senior Roadway Engineer: This is Dade County. It includes major per for the development of the all de coordination for the project.	s a major reconstruction ermitting activities due to	proje its pi	ect widening SR roximity to sensi	994 from	n four inds. Mi	r. Lagos is responsible
	(1) TITLE AND LOCATION (City and S	tate)			(2) YEAR	COMPL	ETED
	SR 805 - Dixie Hwy from South of So	uthern Blvd to SR 80 to Noi	rth of	PROFESSIONAL S	ERVICES	CONST	RUCTION (if applicable)
	Belvedere Rd, FDOT District 4			2009			
b.	(3) BRIEF DESCRIPTION (Brief scope Senior Roadway Engineer. Milling for the milling and resurfacing of electronic delivery and specification	g and resurfacing project a 1.052 mile corridor, p	t. Mr. repar	Lagos' respons ation of signing	sibilities in & paveme	cluded ent ma	
	(1) TITLE AND LOCATION (City and S	tate)			(2) YEAR	COMPL	.ETED
	SR 713 - Kings Highway from East of S	panish Lakes Blvd. to SR 5/	US 1	PROFESSIONAL S	ERVICES	CONST	RUCTION (if applicable)
	FDOT District 4			2009)		
c.	(3) BRIEF DESCRIPTION (Brief scope Senior Roadway Engineer. Mr. La marking, signalization and traffic of and Final Drainage Report, prepa delivery.Performed utility coordina	gos was responsible for control plans. Responsibil aration of the roadway p	the d lities i	evelopment of r ncluded prepara	oadway de ation of the	esign, s e Comn	nunity Awareness Plan
	(1) TITLE AND LOCATION (City and S	tate)			(2) YEAR	COMPL	ETED
	SR 811 - Dixie Highway from NE 26th	Street to McNab Rd		PROFESSIONAL S	ERVICES	CONST	RUCTION (if applicable)
	FDOT District 4			Ongoin	g		
d.	(3) BRIEF DESCRIPTION (Brief scope Senior Roadway Engineer. Respor corridor. Also involved were the p specification package, Communit	nsibilities included final ro preparation of signing &	oadwa paver	ay design for the ment marking p	milling an lans, estin	d resui nate, e	electronic delivery,
	(1) TITLE AND LOCATION (City and S	tate)			(2) YEAR	COMPL	ETED
	SR 834/Sample Road and SR 811/D $$	xie Highway Minor Design		PROFESSIONAL S	ERVICES	CONST	RUCTION (if applicable)
	Safety Improvements FDOT District 4	<u> </u>		2015			
e.	(3) BRIEF DESCRIPTION (Brief scope Engineer of Record: Signalization Road and SR 811/Dixie Highway.	improvements (mast a	rm up	grade) project a	at the inte	rsectio	

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)							
12. NAME 13. ROLE IN THIS CONTRACT 14. YEARS EXPERIENCE						ARS EXPERIENCE	
Lazaro I	Fleitas, PSM	Senior Surveyor & Mapper		a. TOTA	L	b. WITH CURRENT FIRM	
					2	7	9
	NAME AND LOCATION (City and Sta						
	Engineering, Inc Fort Lauderdale,		l				
	CATION (DEGREE AND SPECIALIZAT	· '					STRATION (STATE) - Florida 6518 -2006
_	n and Drainage Engineer, Higher I	~ I	1 1016	essional Sulveyo	i Q ivia	pper	- 1 lolida 0518 -2000
	, Havana, Cuba, 1989; Topograph	·					
Reynos	o Polytechnic Institute, Havana, Cu	ba, 1980					
18. OTH	ER PROFESSIONAL QUALIFICATIONS	S (Publications, Organizations,	Trainin	ng, Awards, etc.)			
		19. RELEVANT PRO	JECTS	6			
	(1) TITLE AND LOCATION (City and S	State)		(2)) YEAR	COMP	LETED
	SR 968/SW 1st Street Bridge		PR	ROFESSIONAL SERV	ICES	CONS	TRUCTION (if applicable)
	Miami, FL			2014			
а.	(3) BRIEF DESCRIPTION (Brief scope Project Surveyor. SR 968/SW 1st 2nd Ave. Overall project size inclu Terrain Model), alignment verifica	Street from 150' West of ce ding the side streets is appra- tion, cross sections, topogra	enter li ox. 1 r	line of SW 6th Avmile. Within this	e. to 1 project	50' Ea t, prov	vided a full DTM (Digital
	(1) TITLE AND LOCATION (City and S	State)		(2)) YEAR		
	SUE at RickenBacker Causeway & M	iami Seaquarium	PR	ROFESSIONAL SERV	ICES	CONS	TRUCTION (if applicable)
	Miami, FL			2011			
b.	(3) BRIEF DESCRIPTION (Brief scope Mr. Fleitas was the Survey Project use of vacuum to excavate for th utility. Two soft digs would be per	Manager responsible for the purpose of physically mea	e direc Isuring	ction of all surve g vertical locatio	y activi n, as t	ties. T	
	(1) TITLE AND LOCATION (City and S	State)		(2)) YEAR	COMP	LETED
	SUE for Miami Shores Village		PR	ROFESSIONAL SERV	ICES	CONS	TRUCTION (if applicable)
	Miami Shores, FL			2013			
C.	(3) BRIEF DESCRIPTION (Brief scope Survey Project Manager. Provided on all existing utilities that may co	Ground Penetrating Radar (GPR) a	and Subsurface	Utility	Engin	ormed with current firm eering (S.U.E.) Services
	(1) TITLE AND LOCATION (City and S	State)		(2)) YEAR	COMP	LETED
	SR 834 / Sample Road Broward County, FL		PR	ROFESSIONAL SERVI	ICES	CONS	TRUCTION (if applicable)
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Surveyor. Horizontal/vertical control, baseline survey, Right of Way survey, topographic/DTM, cross sect and signal light survey. The design survey was to extend 800 feet south of center line of SR 834 / Sample Road to feet north from center line of SR 834 / Sample Road along SR 811 / Dixie Highway and 1,000 feet west of center of SR 811 / Dixie Highway to 1,000 feet east from center line of SR 811 / Dixie Highway along SR 834 / Sample Road along SR 811 / Dixie Highway along SR 834 / Sample Road sample Road along SR 811 / Dixie Highway along SR 834 / Sample Road s				ic/DTM, cross sections / Sample Road to 700 feet west of center line			
	(1) TITLE AND LOCATION (City and S			(2) YEAR	COMP	PLETED
	SR 811 - Dixie Highway from NE 26th FDOT District 4	Street to McNab Road	PR	ROFESSIONAL SERV	ICES	CONS	TRUCTION (if applicable)
e.	(3) BRIEF DESCRIPTION (Brief scope Lazaro was the Survey Project M establishment of vertical and hor updates for the aerial photogram	anager responsible for the dizontal control, digital terrain	directi	tion of all survey	activit	ies. T	

		OF KEY PERSONNEL Complete one Section				т	
12. NAN	IE	13. ROLE IN THIS COI	NTRACT		14.	YEARS EX	KPERIENCE
Eduardo	o Vazquez, EI, CBI	Project Manager			a. TOTAL		b. WITH CURRENT FIRM
		Lead Certified Bridge	e Inspecto	or/Diver	18		16
15. FIRN	I NAME AND LOCATION (City and Sta	te)				•	
Marlin E	Engineering, Inc Fort Lauderdale	, FL					
16. EDU	CATION (DEGREE AND SPECIALIZAT	ION)					STATE & DISCIPLINE)
Bachelo	or of Science in Civil Engineering, I	Major in Structures					A-NHI - 130078 - Dection Techniques
Univers	ity of Havana, Havana, Cuba, 199:	L					Concepts for
			Bridge I	nspectors - 2	2000 PADI/R	escue Div	ver Certifications
					MA Failure and		
				aining - 201!		- 2014	Confined Space
18. OTH	ER PROFESSIONAL QUALIFICATION	S (Publications, Organiz	<u> </u>				
		,	,	3,	, ,		
		19. RELEVAN	NT PROJE	CTS			
	(1) TITLE AND LOCATION (City and S				(2) YEAR	COMPLET	ED
	Consulting Services for Bridge Maste	er Plan		PROFESSION	AL SERVICES	CONSTRU	CTION (if applicable)
	Ft. Lauderdale, FL			20	015		
a.	(3) BRIEF DESCRIPTION (Brief scope Mr. Vazquez led this assignment						ed with current firm Tural evaluation and
	reports for the City's 52 bridges	These reports identi	ify and qu	uantify the c			
	whether the bridge structure req	<u> </u>	tion or re	placement.			
	(1) TITLE AND LOCATION (City and S					COMPLET	
	West Palm Beach I-95 Asset Manage FDOT District 4	ment bridge inspection			AL SERVICES	CONSTRU	CTION (if applicable)
b.					going		
D.	(3) BRIEF DESCRIPTION (Brief scope Project Manager, In association v			ROLE X Check if project performed with current firm zquez is the Project Manager for topside routine bridge			
	inspection, including segmental k	oridge structures, insp	ection of	overhead si			
	poles (HMLPs) and underwater ir	spection for all applic	able stru	ctures.			
	(1) TITLE AND LOCATION (City and \$	State)			(2) YEAR	COMPLET	ED
	MDX Routine Structure Inspections			PROFESSION	AL SERVICES	CONSTRU	CTION (if applicable)
	Miami-Dade County, FL			Ong	going		
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager. Mr. Vazquez is currently leading this assignment for Marlin Engineering. It entails the structure of th						
	Project Manager. Mr. Vazquez is underwater and topside inspection						
	coordination with MDX and the Ir			120 Overne	au Sigii Struct	ures. Dut	ies iliciade contract
		•					
	(1) TITLE AND LOCATION (City and S				(2) YEAR	COMPLET	ED
	Underwater Bridge Inspection for Tu	пріке		PROFESSION		CONSTRU	CTION (if applicable)
	Florida Turnpike Enterprise				going		
d.	(3) BRIEF DESCRIPTION (Brief scope						ed with current firm
	Senior Bridge Inspector. Mr. Vazq and analysis, and report process						
		8			(00	o.c., 0,000	,-
	(1) TITLE AND LOCATION (City and S					COMPLET	
	Florida Keys Asset Management Cont FDOT District 6	Idu		PROFESSION		CONSTRU	CTION (if applicable)
					013		
e.	(3) BRIEF DESCRIPTION (Brief scope Senior Bridge Inspector. Mr. Vazo						ed with current firm
	contract. This contract included of	ver 35 bridges, along	US-1, in I	Monroe Cou	nty, and entail	ed the ur	nderwater structural
	inspection and scour evaluation of	of the substructure con	mponents	of these bri	idges in contac	ct with the	e water.

		OF KEY PERSONNEL Complete one Section				Т	
12. NAME 13. ROLE IN THIS CONTRACT				14.	YEARS E	XPERIENCE	
Omar P	orras, CBI	Senior Certified Brid	ge Insped	ctor /	a. TOTAL		b. WITH CURRENT FIRM
		Commercial Diver			30		12
15. FIRM	I NAME AND LOCATION (City and Stat	te)					
Marlin E	Engineering, Inc Fort Lauderdale,	FL					
16. EDU	CATION (DEGREE AND SPECIALIZATI	ION)	17. CUR	RENT PROFES	SIONAL REGIS	TRATION ((STATE & DISCIPLINE)
Underw	ater Bridge Inspection New Mexic	co State University			ector , #0036		
1994							or Bridge Inspection ridges for Bridge
					ertification		
			Strength	nening and re	epairing conc	rete struc	ctures Fracture
					chniques for		
					National Brid try Training -		ent Training – 2014
18 OTH	ER PROFESSIONAL QUALIFICATIONS	(Publications Organiz	<u> </u>	<u>·</u>		2010	
10. 0111	ENT NOT ESSIONAL GOALII ISATISNO	o (i abilications, Organiz	ations, m	anning, Awaras	, 610.)		
		19. RELEVAN	NT PROJE	стѕ			
	(1) TITLE AND LOCATION (City and S				(2) YEAR	COMPLET	ΓED
	Underwater Bridge Inspection for Flor	rida Turnpike		PROFESSIONA	AL SERVICES	CONSTRU	JCTION (if applicable)
	Florida Turnpike Enterprise			Ong	oing		
a.	(3) BRIEF DESCRIPTION (Brief scope						ed with current firm
	Certified Bridge Inspector. For this Mr. Porras performs underwater						
	structures from milepost 0 to 199		our surve	y and analys	ois, and repoi	t proces.	Sing on OS turnpine
	(1) TITLE AND LOCATION (City and S	· , ,			(2) YEAR	COMPLET	ΓED
	West Palm Beach I-95 Asset Manager	ment Bridge Inspection		PROFESSIONA	AL SERVICES	CONSTRU	JCTION (if applicable)
	FDOT District 4			Ong	oing		
b.	(3) BRIEF DESCRIPTION (Brief scope						ed with current firm
	Certified Bridge Inspector. Mr. Po						
	bridge structures, inspection of ovinspection for all applicable structures.		es, inspe	ction of nigh	mast light po	ies (HiviL	.PS) and underwater
					(0) 1/2 4 5		
	(1) TITLE AND LOCATION (City and S Air Force Bases Underwater Inspection			PROFESSION	. ,	COMPLET	
	Various Locations)113		PROFESSIONA		CONSTRU	JCTION (if applicable)
c.					joing		
C.	(3) BRIEF DESCRIPTION (Brief scope Certified Bridge Inspector. This co	e, size, cost, etc.) AND S entract entails the unc	PECIFIC F Perwater	ROLE L inspection of			ed with current firm S Air Force Bases in
	Virginia, North Carolina, California					agnout o	O / III T OTCC Bases III
	_	-					
	(1) TITLE AND LOCATION (City and S Consulting Services for the Bridge Ma					COMPLET	
	Fort Lauderdale, Florida	aster i idii		PROFESSIONA	AL SERVICES)15	CONSTRU	JCTION (if applicable)
d.	·						
u.	(3) BRIEF DESCRIPTION (Brief scope Certified Bridge Inspector. Project					•	ed with current firm
	bridges. These reports shall iden						
	bridge structure requires repair, re	ehabilitation or replac	cement.				
	(1) TITLE AND LOCATION (City and S USAF Underwater Bridge Inspection C					COMPLET	
	Various Locations	onli act		PROFESSIONA		CONSTRU	JCTION (if applicable)
			DEC:	<u> </u>	010		
e.	(3) BRIEF DESCRIPTION (Brief scope Certified Bridge Inspector. Mr. F						ed with current firm and analysis report
	processing on structures located a						
	Air force Rase/Naval Weapon Stat	ion SC Travis Air force	Baca C	and IT Fuet	ie V/A		

		OF KEY PERSONNEL Complete one Section				Т	
12. NAM	E	13. ROLE IN THIS CONTRACT				YEARS E	XPERIENCE
Reinald	o Padrino, CBI	Senior Certified Brid	ge Insped	ctor /	a. TOTAL		b. WITH CURRENT FIRM
		Commmercial Diver			31		5
15. FIRM	NAME AND LOCATION (City and Sta	te)				•	
Marlin E	Engineering, Inc Fort Lauderdale,	, FL					
16. EDU	CATION (DEGREE AND SPECIALIZAT	ION)					STATE & DISCIPLINE)
Coastal	School of Deep Sea Diving 1977	7			ector , #0024		.1 OSHA Fall
			Protecti	on Bridge M	lanagement I	nspectior	Session - 1999
							TIS Review – 1998
					Inspectors - 1		986 Engineering ational Bridge
			Element				Entry Training -
			2015				
18. OTH	ER PROFESSIONAL QUALIFICATIONS	S (Publications, Organiz	ations, Tra	aining, Awards	s, etc.)		
		19. RELEVAN	NT PROJE	стѕ			
	(1) TITLE AND LOCATION (City and S				(2) YEAR	COMPLET	
	Underwater Bridge Inspection for Tur	npike		PROFESSIONA		CONSTRU	ICTION (if applicable)
	Florida Turnpike Enterprise				going —		
a.	(3) BRIEF DESCRIPTION (Brief scope Senior Certified Bridge Inspector.						ed with current firm
	the underwater bridge inspection						
	system).						
	(1) TITLE AND LOCATION (City and S West Palm Beach I-95 Asset Manage					COMPLET	
	FDOT District 4	ment bridge inspection		PROFESSIONA		CONSTRU	ICTION (if applicable)
b.		oine cost stall AND C	DECIFIC F		going		
D.	(3) BRIEF DESCRIPTION (Brief scope Senior Certified Bridge Inspector.						ed with current firm ino is a team leader
	for topside routine bridge inspec	ction, including segm	ental ridg	ge structures	s, inspection	of overhe	ead sign structures,
	inspection of high mast light pole	s (HMLPs) and under	water ins	pection for a	II applicable s	structures	5.
	(1) TITLE AND LOCATION (City and S				` '	COMPLET	
	Florida Keys Asset Management Cont	tract		l		CONSTRU	CTION (if applicable)
	FDOT District 6)13		
c.	(3) BRIEF DESCRIPTION (Brief scope						ed with current firm
	Senior Certified Bridge Inspector leader for the underwater portion						
	County.	·			J	J	
				T			
	(1) TITLE AND LOCATION (City and S Consulting Services for the Bridge Ma			BBOEFGGION	. ,	COMPLET	
	Fort Lauderdale, Florida			PROFESSIONA 20)15	CONSTRU	CTION (if applicable)
d.	(3) BRIEF DESCRIPTION (Brief scope	size cost etc) AND S	PECIFIC F			ct performe	ed with current firm
	Senior Certified Bridge Inspecto	r. Project included th	e individ	ual underwa	nter structura	l evaluat	ion and reports for
	the City's 52 bridges. These repo						
	whether the bridge structure requ	лгеѕ герап, гепавіна	don or re	ріасеттеті. т	nciuueu uivin	g/ video ii	ispecting services.
	(1) TITLE AND LOCATION (City and S	State)			(2) YEAR	COMPLET	TED
	MDX Routine Structures Inspections	•		PROFESSIONA			CTION (if applicable)
	Miami-Dade County, FL			Ong	going		
e.	(3) BRIEF DESCRIPTION (Brief scope						ed with current firm
	Senior Certified Bridge Inspector. underwater and top side inspection						ntails the structural
	and top olde mopeout	J S.I.agoo and		0 0 0 0 1 1 1	- 3.5.1 0010		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME Angela L. Alba, PE

13. ROLE IN THIS CONTRACT

Geotechnical Engineering

a. TOTAL b. WITH CURRENT FIRM

18 3

15. FIRM NAME AND LOCATION (City and State)

AREHNA Engineering, Inc., Coral Springs, FL

16. EDUCATION (DEGREE AND SPECIALIZATION)
Bachelor of Science, Civil Engineering
University of Puerto Rico
Master of Science, Civil Engineering (Geotechnical)

Massachusetts Institute of Technology

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer, Florida Registration No. 58538

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

Ms. Alba has provided geotechnical engineering services on numerous geotechnical explorations over the past 17 years, recently serving as the Geotechnical Discipline Lead for the I-595 Corridor Improvement project in Broward County, Florida, which is the first Public-Private-Partnership project awarded by FDOT. Ms. Alba has been involved in the planning, analysis, execution, and review of geotechnical projects ranging from roadway and railways to complex roadway bridge and tunnel projects to commercial high-rise buildings, school projects, and other local municipality projects. Ms. Alba has performed evaluations for retaining walls, drainage structures, shallow foundations, driven piles, drilled shafts, augercast piles, micropiles, and pressure injected footings. Ms. Alba experience has also included finite element analysis, slope stability evaluations, soil nail wall design, and evaluation of geosynthetics applications, and geotechnical ground improvement techniques.

19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED	
	I-595 Express Corridor Improvements Project (P3),	.PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
	FDOT District 4 and Turnpike, Broward County, FL	2009-2010		
	•	☐ Check if project performed v	vith current firm	
a.	Senior Geotechnical Engineer - Ms. Alba served as the Geotechnical Disc projects in Florida, which consists of improvements to 10.5 miles of I-59 system in the I-595 median, including a total of 65 bridge replacements such as steel sheet pile bulkheads for the adjacent North New River Canal MSE walls, concrete cantilever retaining walls, overhead signs, a toll ga provided timely feedback to the contractor regarding project schedules, including Interdisciplinary Plan Reviews, resulting in direct cost savings a quickly regarding project deficiencies, including CSL testing and Pile Driving performed reviews of the PDA and CAPWAP results and provided technical	cipline Lead for one of the lat 5 associated with a new to or widenings and numerou , drainage outfall structures ntry, highmast lights, and budget and contract issues and the avoidance of project ng Analyzer (PDA) load test direction for issues arising	rgest highway transportation lled reversible express lanes us miscellaneous structures, s, temporary retaining walls, mast arm signal poles. She , and engineering concerns, ct down-time. Advised client ts and verification tests. She in the field.	
	(1) TITLE AND LOCATION (City and State)	. ,	COMPLETED	
h	SR 84/ I-595 at NW 136th Avenue, District 4, Broward County, FL	PROFESSIONAL SERVICES 2016 - Present	CONSTRUCTION (If applicable)	
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	□ Check if project performed v	vith current firm	
	Senior Geotechnical Engineer - Ms. Alba is serving as the Senior Geoproject that includes new overhead sign structures and turn lanes.	otechnical Engineer for this off-system bridge widening		
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED	
	Jewfish Creek Replacement Bridge, FDOT District 6, Key Largo, FL	.PROFESSIONAL SERVICES 2005 - 2008	CONSTRUCTION (If applicable)	
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Geotechnical Engineer - Ms. Alba provided geotechnical engin Granite/Jacobs Design Build Team for the US-1 Highway bridge over Jew consisted of replacement of Jewfish Creek Bridge, 1 ½ -mile-long briwidening of 5 miles of approach road.	fish Creek Bridge in Monroe	testing and in support of the County, Florida. The projec	
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED	
	5th Street Bascule Bridge Replacement FDOT District 4, FL	.PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
d.		2004 - 2010		
u.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Geotechnical Engineer - Ms. Alba also provided geotechnical ir ring infiltrometer, corrosivity testing, and borehole exfiltration testing. Mr.		age design, including double	
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED	
	Districtwide Geotechnical Services Contract FDOT District 4, Florida	PROFESSIONAL SERVICES 2014	CONSTRUCTION (If applicable)	
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Contract Manager - Ms. Alba served as the Contract Manager/ Project Project Manager, scope development, proposal preparation, providing tec exploring engineering/ design alternatives that could reduce project costs	hnical oversight, and invoic	ommunications with FDOT's	

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person)

12. NAME	13. ROLE IN THIS CONTRACT	14. YE	EARS EXPERIENCE
	13. ROLL IN THIS CONTRACT	a. TOTAL	b. WITH CURRENT FIRM
Amanda Pereira, PE	Soils & Material Testing	22	4.5

15. FIRM NAME AND LOCATION (City and State)
ARENA Engineering, Inc.

16. EDUCATION (DEGREE AND SPECIALIZATION)
BS, Civil Engineering, University of South Florida

17. CURRENT PROFESSIONAL REGISTRATION
(STATE AND DISCIPLINE)
Professional Engineer, Florida Registration No. 67784

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

Ms. Pereira has over 21 years of progressive experience in the fields of geotechnical engineering and construction material testing and inspection. Her experience includes coordination and oversight of subsurface explorations, geotechnical report preparation, shallow and deep foundation inspections and testing, multi-story threshold inspections, review, quality control and reporting of field and laboratory testing for soils, concrete, asphalt and structural steel during the construction phase on a variety of projects. Her experience has been gained both in the public and private sector on a variety of infrastructure projects including urban and rural roadways, airports, water and wastewater facilities, pipelines, commercial and private buildings, subdivisions, site suitability and due diligence studies and commercial sites.

	19. RELEVANT PROJEC	TS			
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED		
	FDOT District 7 Materials Testing Contract District 7, FL	.PROFESSIONAL SERVICES 2014 - Present	CONSTRUCTION (If applicable)		
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☐ Check if project performed v	with current firm		
	Project Engineer – Serves as Materials Testing Project Manager overse order contract. The purpose of the testing is verification of the material project Manager overse		erformed under this task		
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED		
	DBPB – District 7 Push Button Contract District 7, FL	PROFESSIONAL SERVICES 2016 - Present	CONSTRUCTION (If applicable)		
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☐ Check if project performed v	with current firm		
	underground storage vault is proposed for stormwater management. The Sarasota County, Florida. In addition, some roadway and utility improve prepared along with an estimate based on the scope.				
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED		
	FDOT - D7 Adrian Avenue & Gladys Street Tampa, FL	.PROFESSIONAL SERVICES 2016 - Present	CONSTRUCTION (If applicable)		
C.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE				
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED		
	I-75 Interchange at University Ave. and Fruitville Road Design Build, FDOT District 1, Sarasota County	.PROFESSIONAL SERVICES 2015	CONSTRUCTION (If applicable)		
d.	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE				
	(1) TITLE AND LOCATION (City and State)	(2) YEAR	COMPLETED		
	(1) TITLE AND LOCATION (City and State) I-95 Widening	.PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)		
	Cocoa, FL	2014 - 2015			
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager - AREHNA's scope of services includes providing Qual density testing for embankment, pipe backfill and MSE wall backfill and f bridge decks, approach slabs and columns.		ction services which includes		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Kenneth Hardin Historical Resources 38 15. FIRM NAME AND LOCATION (City and State) Janus Research, Inc Tampa, FL. 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) M.A. Cultural Resource Management Register of Professional Archaeologists B.A. Psychology and South Asian Studies Florida Archaeological Council Florida Trust for Historic Preservation 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) 19. RELEVANT PROJECTS (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Venetian Causeway; Miami, FL. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☐ Check if project performed with current firm This project consisted of a historical documentation survey of two bascule spans and three stringer bridges. Kenneth Hardin served as Project Manager. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Ocean Avenue Bridge; Lantana, FL. □ Check if project performed with current firm (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE b. Janus Research conducted a cultural resources assessment survey of this bridge and adjacent historic resources. Following the identification and evaluation phases, it was determined this bridge was not eligible for inclusion in the National Register of Historic Places (NRHP), due to alterations and commonality. Kenneth Hardin served as Project Manager (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Flagler Memorial Bridge; Palm Beach, FL. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm This bridge was determined eligible for inclusion in the National Register of Historic Places, and was also considered a contributing resource to the surrounding commercial area. Janus Research prepared a marketing plan for the bridge and assisted with the implementation of the mitigation measures. Kenneth Hardin served as Project Manager (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) Sunset Island Bridge; Miami, FL. 1996 (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm This bridge consists of four separate bridges linking the Sunset Islands in Biscayne Bay to Miami Beach. The historic structures survey conducted by Janus Research for the proposed bridge improvement project resulted in the identification and recording of four historic structures built prior to 1945. Kenneth Hardin served as Project Manager (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL SERVICES CONSTRUCTION (If applicable) e.

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☐ Check if project performed with current firm

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Survey, Mapping, Right-of-Way Robert K. Krisak, PLS 38 37 Engineering 15. FIRM NAME AND LOCATION (City and State) KEITH AND SCHNARS - Fort Lauderdale, FL 16. EDUCATION (DEGREE AND SPECIALIZATION) 17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Registered Professional Surveyor & Mapper, FL #4641 A.A.S., Forestry, Paul Smith's College, 1977 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Florida Society of Professional Surveyors and Mappers; International Who's Who of Professionals 19. RELEVANT PROJECTS (2) YEAR COMPLETED I) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** N/A Districtwide Surveying and Mapping Services, Ongoing FDOT District 4, FL a. ((3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE **⊠Check** if project performed with current firm Mr. Krisak served as Quality Assurance Program Manager to ensure the high quality of our survey staff and deliverables for this continuing services miscellaneous contract in which we provide the district design surveys, parcel and right of way stake outs, digital terrain models (DTM), geodetic control, control surveys, right-of-way mapping, right of way (monumentation) surveys, maintenance mapping and parcel sketches. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** City of Riviera Beach Continuing Services Contract, Riviera N/A Ongoing Beach, FL h. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Mr. Krisak serves as Project Manager for this continuing Survey Services Contract. To date, a Topographic Survey of 5.67+/- miles of City streets has been performed. Services included power/utility poles, overhead wires, asphalt, curbing, driveways, fences, trees/hedge lines, manholes, drainage structures including inverts, and surface features of utilities. Boundary and Topographic Surveys along with Sketches and Descriptions were also performed at Dan Calloway Park (Parcel 6) and Barracuda Bay /Fire Station (Parcel 7). (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** N/A City of Miami Miscellaneous Survey Contract, Miami, FL Ongoing (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Mr. Krisak serves as a Project Manager while working on projects for the City. He has managed several Boundary and Topographic Surveys for City projects such as Miami Fire Training Facility, Douglas Park, Stearns and Martell Areas, and Little Haiti Soccer Park. Sketch and Descriptions were also performed at Stearns and Martell Areas. (2) YEAR COMPLETED (I) TITLE AND LOCATION (City and State) **PROFESSIONAL** CONSTRUCTION (If applicable) **SERVICES** Utility Undergrounding Consultant Services, Sunny Isles, FL N/A Ongoing d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Mr. Krisak serves as Project Manager for Survey Services for the Utility Undergrounding Consultant Services contract with Sunny Isles. Survey services included Design Surveys along Collins Avenue; Design Survey of 80+ FPL proposed easement sites; Preparation of Sketch

and Descriptions; Design Surveys of portions of 189th Street, 178th Street, Atlantic Boulevard, Northeast 170th Street; Right of Way

verification of 186th Street, 185th Street, 183rd Street, Atlantic Boulevard, and 178th Street.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Benjamin Hoyle, PSM Survey, Mapping, Right-of-Way 16 Engineering 15. FIRM NAME AND LOCATION (City and State) KEITH AND SCHNARS - Fort Lauderdale, FL 17. CURRENT PROFESSIONAL REGISTRATION 16. EDUCATION Registered Professional Surveyor & Mapper, FL #6769 B.S., Engineering Technology, University of Central Florida, 2008 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) N/A 19. RELEVANT PROJECTS (2) YEAR COMPLETED (I) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** City of Riviera Beach Continuing Services Contract, Riviera N/A Ongoing Beach, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☑ Check if project performed with current firm Mr. Hoyle served first as Field Crew Supervisor for this continuing Survey Services Contract and now will move forward as a Project Surveyor. To date, a Topographic Survey of 5.67+/- miles of City streets has been performed. Services included power/utility poles, overhead wires, asphalt, curbing, driveways, fences, trees/hedge lines, manholes, drainage structures including inverts, and surface features of utilities. Boundary and Topographic Surveys along with Sketches and Descriptions were also performed at Dan Calloway Park (Parcel 6) and Barracuda Bay /Fire Station (Parcel 7). (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** Utility Undergrounding Consultant Services, Sunny Isles, FL N/A Ongoing b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☑ Check if project performed with current firm Mr. Hoyle served as Field Crew Supervisor for Survey Services for the Utility Undergrounding Consultant Services contract with Sunny Isles. Survey services included Design Surveys along Collins Avenue; Design Survey of 80+ FPL proposed easement sites; Preparation of Sketch and Descriptions; Design Surveys of portions of 189th Street, 178th Street, Atlantic Boulevard, Northeast 170th Street; Right of Way verification of 186th Street, 185th Street, 183rd Street, Atlantic Boulevard, and 178th Street. (2) YEAR COMPLETED (I)TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** Fort Lauderdale - Hollywood International Airport, Broward N/A Ongoing County, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☑ Check if project performed with current firm Mr. Hoyle serves as Field Crew Supervisor to provide a variety of services under a miscellaneous survey services contract for the Fort Lauderdale/Hollywood International Airport expansion project. Services also included the verification of horizontal and vertical control, asbuilt of columns, layout and verification of settlement plates and MSE wall, preparation of sketch and legal descriptions for easements relative to Part 77 surfaces, preparation of digital terrain model surfaces, and volume calculations (2) YEAR COMPLETED (I) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** Town of Miami Lakes Miscellaneous Survey and Mapping N/A Ongoing Services Contract, Miami Lakes, FL d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE □ Check if project performed with current firm Mr. Hoyle serves as Project Surveyor for the Town of Miami Lakes Contract. He has supervised the Field Crew and Office Staff for a

Topographic Survey for a Beautification Plan on NW 67th Avenue.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person) 14. YEARS EXPERIENCE 12. NAME 13. ROLE IN THIS CONTRACT a. TOTAL b. WITH CURRENT FIRM Jason Weiss Survey, Mapping, Right-of-Way 21 1 Engineering 15. FIRM NAME AND LOCATION (City and State) KEITH AND SCHNARS - Fort Lauderdale, FL 16. EDUCATION 17. CURRENT PROFESSIONAL REGISTRATION AutoCAD Drafting, McFatter Technical Center, Davie, FL N/A 18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Trimble Dimensions Conference, Las Vegas, NV Advance AutoCAD, CAD Centers of Florida OSHA 10 Fall Protection Certified Scaffold Erector 19. RELEVANT PROJECTS (2) YEAR COMPLETED (I) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** Keith and Schnars, Fort Lauderdale, FL N/A Ongoing a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☑ Check if project performed with current firm Field Crew Supervisor - Manage all aspects of field operations for a large survey firm. Oversee the field aspect of various types of survey projects such as FDOT Right-of-Way and stakeout, private client surveys, construction staking and quantity reporting. Responsible for deliverables to clients such as As-Builts, monthly quantity reporting, and other sketches and surveys as requested. (2) YEAR COMPLETED (1) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** Utility Undergrounding Consultant Services, Sunny Isles, FL N/A Ongoing (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☑ Check if project performed with current firm Mr. Weiss serves as Field Crew Supervisor for Survey Services for the Utility Undergrounding Consultant Services contract with Sunny Isles. Survey services included Design Surveys along Collins Avenue; Design Survey of 80+ FPL proposed easement sites; Preparation of Sketch and Descriptions; Design Surveys of portions of 189th Street, 178th Street, Atlantic Boulevard, Northeast 170th Street; Right of Way verification of 186th Street, 185th Street, 183rd Street, Atlantic Boulevard, and 178th Street. (2) YEAR COMPLETED (I)TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** Fort Lauderdale - Hollywood International Airport, Broward N/A Ongoing County, FL C. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE ☑ Check if project performed with current firm Mr. Weiss serves as Field Crew Supervisor, supervising several Field Crews in a variety of survey services for the runway extension. Services included: Right-of-Way determination and stakeout, monthly Quantity Survey and Volume Calculation, Pile As-Built surveys, Control Surveys, verification of control and construction stake out. (2) YEAR COMPLETED (I) TITLE AND LOCATION (City and State) PROFESSIONAL CONSTRUCTION (If applicable) **SERVICES** Town of Miami Lakes Miscellaneous Survey and Mapping N/A Ongoing Services Contract, Miami Lakes, FL d.

Mr. Weiss serves as Field Crew Supervisor for the Town of Miami Lakes Contract. He has supervised the Field Crew and Office Staff for

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

a Topographic Survey for a Beautification Plan on NW 67th Avenue.

□ Check if project performed with current firm

		E. RESUMES OF KEY PERS	SONNEL PROPOSED I Section E for each			
					14. YEARS EXPERIENCE	
12. NAME Yvonne Garth 13. ROLE IN THIS CONTRA Public Involvement		ACT	a. TOTAL 25	b. WITH CURRENT FIRM		
15.	FIRM NAME AND LOCATION (C	ity and State)				
Gar	th Solutions Inc., 7951 Rivie	era Boulevard, Suite 411	; Miramar, FL 330	23		
16.	EDUCATION (DEGREE AND SPE	CIALIZATION)	17. CURRENT PRO	FESSIONAL REGISTRATION (STATE AND DISCIPLINE)	
B.S.	Journalism & Marketing					
	OTHER PROFESSIONAL QUALIFIC	CATIONS (Publications, Org	ganizations, Training	, Awards, etc.)		
			Relevant project:			
	(1) TITLE AND LOCATION (City New Water Treatment & Wat			(2) VEAG	R COMPLETED	
	Davie, Florida	er keciamation raciity		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)	
a.	(3) BRIEF DESCRIPTION (Brief s	cope, size, cost, etc.) AND) SPECIFIC ROLE	2013 Check if proje	ct performed with current firm	
	Provided public outreach ser facility.					
	(1) TITLE AND LOCATION (City			(2) YEAR COMPLETED		
	Ft. Lauderdale Airport Expans Fort Lauderdale, Florida	sion Program		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)	
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		2009 - presently ongoing Check if proje	2018 projected ect performed with current firm		
	As a member of the Program Terminal 4 expansion program	Management team, prov	vide public outreacl			
	Broward County Convention	Center Expansion Master	Plan Study	(0) \/5 45	0.004.001.5750	
	Fort Lauderdale, Florida			PROFESSIONAL SERVICES	COMPLETED CONSTRUCTION (if applicable)	
	(0) 20155 250 201071044 (0.4.6.		00501510 0015	2014	n/a	
	(3) BRIEF DESCRIPTION (Brief s Worked with master plannin diverse group of stakeholders	g team to organize and f			ect performed with current firm and obtain feedback from a	
	(1) TITLE AND LOCATION (City and State) School Board of Broward County - SMART Capital Improvement Program		ovement Program	(2) YEAR COMPLETED		
	Broward County, Florida (countywide)		overnent Flogram	PROFESSIONAL SERVICES 2015 – presently ongoing	COMPLETED CONSTRUCTION (if applicable) 2021 projected	
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE As a member of the Owner Representative team, responsible for developing outreach program to support the \$800 million SMART initiative in 230 school		ng and implementing com	ct performed with current firm munications and public		
	(1) TITLE AND LOCATION (City	and State)				
	North County Neighborhood Broward, FL	Improvement Project		(2) YEAF PROFESSIONAL SERVICES	COMPLETED CONSTRUCTION (if applicable)	
	biowaid, it			2013 - 2015	2015	
e.	(3) BRIEF DESCRIPTION (Brief's Worked with construction maphase. Also provided project	anagement firm to implen	nent a community re	elations program througho	ct performed with current firm ut the multi-year construction	

20. EXAMPLE PROJECT KEY NUMBER

1

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

Complete one Section F for each project.)

21. TITLE AND LOCATION (City and State)

Venetian Causeway Bridge Rehabilitation
Design-Build
Miami, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES
2016

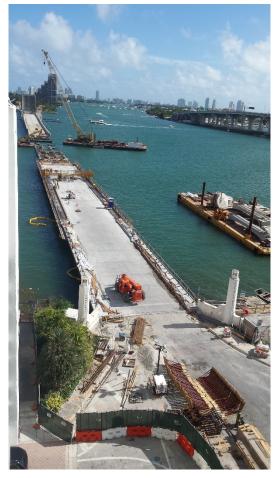
2016

23. PROJECT OWNER'S INFORMATION				
a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER		
Miami-Dade County Public Works GLF Construction-Client	William Junkin	(305) 371-5228		

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

T.Y. Lin International (TYLI) was the lead designer for GLF Construction on this \$12M design-build project that encompassed the complete demolition and replacement of the westernmost 731 feet of the existing Venetian Causeway bridge from Miami's mainland to the outer islands. The project included the removal and disposal, in an artificial reef, of the bridge's westernmost superstructure and substructure, including the first abutment, existing bulkhead and the expansion joint at the end of the cantilevered beams and replacing these with a new complete bridge superstructure, substructure, approach roadway and lighting.

The replacement bridge replicates the existing architecture of the current structure, which is listed on the National Register of Historic Places, and provides a seamless connection to the remaining bridge. The superstructure consists of precast arched beams and railings with unique aesthetics. The substructure consists of bents supported on drilled shaft foundations. Due to the need to close the bridge to traffic, an expedited schedule of nine months was met by the design-build team.



	25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT				
a.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
b.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
C.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
d.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		

20. EXAMPLE PROJECT KEY NUMBER

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

2

21. TITLE AND LOCATION (City and State)

Smokehouse Bay Bridge Marco Island, Florida

22. YEAR COMPLETED CONSTRUCTION (If applicable) PROFESSIONAL SERVICES 2014 2016

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Marco Island	Timothy Pinter, PE	(239) 389-5018

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

T.Y. Lin International (TYLI) is prime contractor on the \$8 million Smokehouse Bay Bridge. The City of Marco Island (jewel of the Florida Gulf Coast and located adjacent to the City of Naples) selected five companies to present designs for a replacement of the current Smokehouse Bay Bridge. The two bridge structure currently in place will be at the end of its useful life in 2013/2014. TYLI design removed the center support allowing better navigable space for boaters while increasing the mean high water elevation to 13.7 feet. The highest clearance submitted for this project. The additional clearance allowed



for the creation of an inviting space under the bridge for pedestrians, bicyclists, and fisherman. Parks on both sides of the bay will be connected with a safe pedestrian path above and below.

	25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT				
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
a.	T.Y. Lin International	Ft. Myers, Florida	Prime Consultant		
b.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
D.					
C.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
d.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
u.					

20. EXAMPLE PROJECT KEY NUMBER

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

Complete one Section F for each project.)

3

21. TITLE AND LOCATION (City and State)

Chokoloskee Bridge Replacement

Everglades City, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES
2014

CONSTRUCTION (If applicable)
2015

23. PROJECT OWNER'S INFORMATION					
a. PROJECT OWNER	c. POINT OF CONTACT TELEPHONE NUMBER				
Collier County Department of Transportation	Marlene Messam	(239) 252-5773			

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

T.Y. Lin International was selected to replace the 57-yearold, 200-foot long Chokoloskee bridge on the causeway Chokoloskee Island, the southernmost connecting community on the west side of Florida, with Everglades City. Chokoloskee Bridge is the only means of surface transportation to residents and therefore it is their only hurricane evacuation route and the client required that twoway traffic and pedestrian access be maintained at all times during construction. An ACROW 3000 Series temporary bridge with sidewalk will be utilized to allow for the removal and replacement of the existing bridge in a similar horizontal alignment while maintaining safe pedestrian and vehicular flow.



This bridge crosses environmentally sensitive Chokoloskee Bay which is habitat to protected species including red and black mangroves, manatees, and smalltooth sawfish. Utility coordination required the design and permitting of a replacement water main and pile design to avoid conflicts with the existing subaqueous sewer mains. Full replacement of the bridge will provide improved vertical clearance for boats, improved pedestrian safety and facilities, and installation of scour protection to insure that the bridge and adjacent roadway can withstand the 100 year storm event.

Services for this project included roadway, bridge, utility, flexible pavement, transportation, scour control, and drainage design services in addition to environmental engineering and permitting services. Permitting for this project involves the US Coast Guard, South Florida Water Management District, Florida Department of Environmental Protection, US Army Corps of Engineers, US Fish and Wildlife Services, and the National Marine Fisheries Service.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT				
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE	
a.	T.Y. Lin International	Ft. Myers, Florida	Prime Consultant	
b.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE	
C.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE	
d	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE	
d.				

20. EXAMPLE PROJECT KEY NUMBER

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

Complete one Section F for each project.)

Δ

21. TITLE AND LOCATION (City and State)

22. YEAR COMPLETED

PROFESSIONAL SERVICES
2016

2016

Escambia County, Florida

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Florida Department of Transportation-District Three	Sandra Lamb, PE	(850) 277-1411

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

T. Y. Lin International served as the prime consultant for this rural two-lane bridge replacement project. Our design team implemented the use of the Geosynthetic Reinforced Soil–Integrated Bridge System (GRS–IBS) for the substructure and a Florida Slab Beam (FSB) system for the superstructure. These design innovations combined to result in a savings for the District of \$562,000 over the use of a conventional flat slab bridge. Another innovation was the use of a temporary bridge to facilitate maintenance of traffic during construction.



	25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT				
-	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
a.	T.Y. Lin International	Orlando, Florida	Prime Consultant		
b.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
c.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
d.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		

20. EXAMPLE PROJECT KEY NUMBER

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

Complete one Section F for each project.)

21. TITLE AND LOCATION (City and State) .Design-Build of New West Avenue Bridge over Collins Canal		22. YEAR COMPLETED		
		PROFESSIONAL SERVICES 2016		CONSTRUCTION (If applicable) On-Going
	NFORMATION			
a. PROJECT OWNER b. POINT OF CONTACT NAME			c. POINT OF CONTACT TELEPHONE NUMBER	
City of Miami Beach Bergeron Land Dev Inc./Brian Landis, El		elopment,	. (954) 6	680-6100

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

Keith and Schnars is the lead designer of this new West Avenue Bridge crossing the Collins Canal from 17th Street to Dade Boulevard. The project includes the design and construction of West Avenue between 17th Street and Dade Boulevard and the complete reconstruction of Dade Boulevard from the Venetian Causeway Bridge to Alton Road. A new closed drainage system has been designed in cooperation with the adjacent City of Miami Beach Sunset Harbor redevelopment projects that installed new area wide storm water pumping facilities. The work includes new traffic signals at the Dade Boulevard intersections with Sunset Harbor Drive, Bay Road and West Avenue; signing and pavement markings; A new Dade Boulevard decorative lighting system; ADA upgrades; and a Pedestrian Bridge that crosses the Collins Canal connecting from Lincoln Court to Dade Boulevard in the vicinity of Sunset Harbor Drive. Utility coordination was also performed to limit the construction impacts to existing utilities in the corridor.

The West Avenue Bridge is a unique bridge design which utilizes pre-tensioned Florida Slab Beams, with a 6" thick concrete deck slab, supported on 18-in diameter auger cast piles. Florida Slab Beams are a new FDOT developmental design concept that were selected to minimize the structure depth and thereby maximize the low member clearance over water while minimizing the impact to roadway elevation. Auger cast piles, a non-standard Florida bridge construction procedure, were selected for this project to eliminate the possibility of vibration damage to existing buried FPL transmission lines running between the piles of the north end bent and also eliminate vibration concerns regarding a newly constructed Residence Inn hotel located adjacent to the south end bent construction. Standard driven pile construction was not an acceptable option for this project. The bridge has a span length of 61 feet, a width of 66 feet, and a skew angle of 30° at both end bents. The bridge will accommodate three lanes of traffic, two through lanes and one left turn lane, bicycle lanes, and 10 ft. wide sidewalks. Architectural features include arched precast fascia panels on both sides and a City of Miami Beach option for decorative traffic barrier railings.

We assisted in the preparation of permit documents as well as coordinating reviews with the local governing bodies including Miami-Dade County, the Florida Department of Transportation, and the Army Corps of Engineers.

	25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT				
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
a.	Keith & Schnars	Fort Lauderdale	Construction Administration/Inspection		
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
b.	Bergeron Land Development	Davie	Lead Contractor		
С.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
<u> </u>					
d.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		

20. EXAMPLE PROJECT KEY NUMBER

CEY NUMBER

6

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

Complete one Section F for each project.)

PROFESSIONAL SERVICES CONSTRUCTION (If applicable)
Ongoing Ongoing

		Ongoing		Ongoing
23. PROJECT OWNER'S INFORMATION				
a. PROJECT OWNER City of Miami	b. POINT OF CONTACT NAME Hector Badia	-	c. POINT OF CO	ONTACT TELEPHONE NUMBER

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

21. TITLE AND LOCATION (City and State)

Bird Ave. Roadway Improvements, (Miami, FL)

The Corradino Group and its subconsultants provided all management, engineering analysis and plans preparation services required for the design and preparation of a complete set of construction contract plans for the reconstruction of Bird Ave. from US 1 to Aviation Ave. The proposed improvements include roadway reconstruction, milling and resurfacing, signalization, new drainage system, on-street parking improvements and widening to include bike lanes.

This project was designed in a densely-urbanized corridor that is lined with both residential and commercial properties. This environment provided our design team with several distinct challenges. The large amount of utilities (overhead and underground) required extensive coordination with the utility companies in order to coordinate the location of the new drainage system and also the required utility relocations in order to accommodate the new roadway section.

Another challenge was the minimization of the impacts to the existing private properties that exist along both right-of-way lines. This required extensive geometric evaluation by the Corradino Design Team and coordination with the property owners and City of Miami staff.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT (1) FIRM NAME (3) ROLE (2) FIRM LOCATION (City and State) a. The Corradino Group, Inc. Doral, FL Roadway Support (1) FIRM NAME (2) FIRM LOCATION (City and State) (3) ROLE b. (1) FIRM NAME (2) FIRM LOCATION (City and State) (3) ROLE c. (1) FIRM NAME (2) FIRM LOCATION (City and State) (3) ROLE d.

20. EXAMPLE PROJECT KEY NUMBER

7

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

Complete one Section F for each project.)

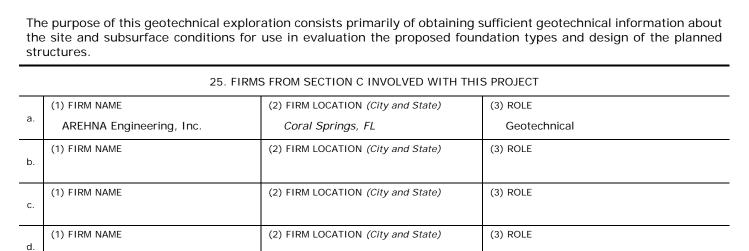
21. TITLE AND LOCATION (City and State)		22. YEAR COMPLETED						
SR 84/ I-595 at NW 136th Avenue, Di County, FL	strict Four, Broward	PROFESSIONAL S 2016 - P		CONSTRUCTION (If applicable)				
23. PROJECT OWNER'S INFORMATION								
a. PROJECT OWNER	b. POINT OF CONTACT NAME		c. POINT OF CONTACT TELEPHONE NUMBER					
Florida Dept. of Transportation	Matt Gisondi, PE		954.677	7.7038				

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

AREHNA is providing geotechnical engineering sub-consultant services for the SR 84 / I-595 at NW 136th Avenue Bridge Widening and intersection improvements project for the Florida Department of Transportation (FDOT), which includes geotechnical explorations for the bridge widening over the North New River Canal.

This project consists of traffic flow/traffic capacity improvements and addresses the short term operational and safety conditions and include the following modifications to the intersection:

- Widen or replace the NB Bridge over the North New River Canal to accommodate the triple rights on NW 136th Avenue from WB SR-84 and widen or replace the SB Bridge over the North New River Canal to allow a third SB thru lane on NW 136th Avenue;
 - River Canal to allow a third SB thru lane on NW 136th Avenue;
 Adding a WB to NB right turn lane from SR 84 to NW 136 Avenue to provide triple rights;
- Reconstruct the traffic separator under the overpass to increase storage for SB to EB left turns;
- Install overhead signs on NW 136 Avenue to direct southbound traffic to I-595 East and SR 84 East; and
- Convert a northbound thru lane to a NB left turn lane at SR 84 Westbound.



20. EXAMPLE PROJECT KEY NUMBER

8

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

Complete one Section F for each project.)

21. TITLE AND LOCATION (City and State)		22. YEAR COMPLETED				
Scour Evaluation of Bridges with Unknown Department of Transportation, District 4	Foundations, Florida	PROFESSIONAL S 2010-2		CONSTRUCTION (If applicable)		
	23. PROJECT OWNER'S	INFORMATION				
a. PROJECT OWNER	b. POINT OF CONTACT NAME		c. POINT OF C	ONTACT TELEPHONE NUMBER		
Florida Department of Transportation,	Daniel Gonzalez, PE		(954) 777-4678			
District 4	Structures Maintenance					
	Department of Transp District IV	portation -				

In response to the FHWA memorandum that state DOT's address bridges with unknown foundations within the scour evaluation program, the Florida Department of Transportation (FDOT) Central Office contracted a panel of experts (including INTERA Incorporated [formerly OEA, Inc.]) to develop a procedure for addressing these unknown foundations bridges. The procedure included methodologies for screening the large number of unknown foundations bridges in Florida and estimating the embedment depths as well as recommendations for performing non-destructive testing. INTERA's involvement in development of the procedure included revision of the current FHWA procedures for determining lifetime probability of failure and risk for unknown foundation bridges. This revision resulted in a procedure applicable to both riverine and tidal bridges and reflected probabilities and risks customized to State of Florida Bridges. Application of the procedure allowed classification of all of Florida's Bridges into three categories: high lifetime risk of failure (bridges in this category proceed directly to development of a Plan of Action (POA) and assessment of scour countermeasures), medium risk (embedment depths are estimated and the bridges undergo the conventional scour assessment) and low risk (bridges are classified as low risk and a POA is developed). In addition to the risk assessment INTERA also developed a novel methodology and an accompanying software for predicting unknown foundation depths and pile loads using artificial neural networks.

As subconsultant to Parsons, FDOT District 4 contracted INTERA to apply the procedure to the District's bridges. The work performed by INTERA began with a risk assessment of all tidally influenced unknown foundation bridges. For certain risk classifications, INTERA performed additional work which included developing design and check event (100- and 500-year return period) hurricane storm surge induced hydraulic and scour parameters. This information provides the inputs for the structural evaluation of the bridges' stability. The final stage involved the design and evaluation of scour countermeasure alternatives for the bridges deemed scour susceptible or scour critical. These countermeasure alternatives included both hydraulic countermeasures and non-destructive testing. The bridges evaluated under this program comprised locations throughout the District from Broward to Indian River Counties. Notably, work also included a Phase 1 and 2 scour evaluation of the South Ocean Bridge Drive (Bridge 865775). Cost: \$1M.

	25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT								
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE						
a.	INTERA Incorporated	Gainesville, FL	Scour Analysis						
b.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE						
C.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE						
d.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE						

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

F. EXAMPLE PROJECTS W QUALIFICA (Present as many projects as reque Complete on	20.EXAMPLE PROJECT KEY NUMBER 9				
21. TITLE AND LOCATION (City and State) BROWARD COUNTY CONVENTION CENTER EXPANSION MASTER PLAN STUDY FT LAUDERDALE, FL			22. Completed 2015		
		PROFESSI	ONAL SERVICES	CONSTRUCTION (If applicable)	
	MATION				
a. PROJECT OWNER Broward County Convention Center	b. POINT OF CONTACT NAME Carlos Puentes		c. POINT OF CO NUMBER 954-765-5900	ONTACT TELEPHONE	

Nestled along the intra-coastal waterways of Fort Lauderdale, FL., the hi-tech, 600,000 sq. ft Broward County Convention Center is one of the few ocean-front convention centers in the USA. To support the aggressive growth occurring in Broward County, FL and to meet the greater demands of continuing to offer a first-class convention center experience for every customer, the decision was made to significantly expand the convention center and to include a new convention center headquarter hotel. Subsequently, HKS Architects was hired to lead the Master Plan Study to support Broward County's development of the approximately 44-acre convention center site.

Scope of Work:

Garth Solutions, Inc. (GSI) was hired by HKS to develop and lead the comprehensive and multispoked Public Outreach & Stakeholder Coordination efforts for this Master Plan Study. Specific deliverables included:

- Coordinate, attend and facilitate multiple open house sessions, stakeholder meetings and workshops
- Track, document, and respond to stakeholder correspondence, comments and questions
- Prepare stakeholder summary of findings report
- Participate in Broward County Task Force and related project meetings
- Support requested Broward County Commission updates
- Lead general support related to public outreach throughout the master plan development process & project schedule

GSI was successfully able to support these deliverables throughout an aggressive project schedule that required the engagement of several locally impacted HOA's, retail and hospitality stakeholders as well as several grassroots organizations & governmental agencies at the Municipal, County and State levels.

	25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT									
a. (1) FIRM NAME (2) FIRM LOCATION (City and State) (3) ROLE Public Involutions, Inc Miramar, FL										
b.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE							
C.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE							
d.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE							
e.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE							

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

20. EXAMPLE PROJECT KEY No.

10

21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED			
Districtwide General Planning Consultant (GPC)		PROFESSIONAL SERVICES		CONSTRUCTION (If applicable)
Broward, Palm Beach, Martin, St. Lucie, & Indian Rive	Ongoing			
	23. PROJECT OWNER	r's information		
a. PROJECT OWNER	b. POINT OF CONTACT NAME c. POI			OF CONTACT PHONE NUMBER
FDOT District 4	Chon Wong		954.777.4	659

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

Marlin Engineering provides a wide range of transportation planning services for five counties under FDOT District 4. Tasks include:

- Transportation Planning and Traffic Analysis Review
- Traffic Data Collection
- Interchange Proposal Review and Development
- Project Traffic Development & Forecasting
- Access Management studies
- Development of Regional Impact (DRI) reviews
- PD&E Study reviews
- IJR, IMR, and IOAR studies
- Microscopic Simulation studies
- Field Inspections / On-Site Services and Support
- Model Application Support
- · Geographic Information System (GIS) Support
- Traffic Count Support
- · Quality Level of Service (LOS) Assessment Support
- Access Management Support
- Public Involvement
- Congestion Management Support

Determination and evaluation of future travel demand has been conducted at over 300 intersections and corridors, including sections of I-95 and Kings Highway. Marlin Engineering has also prepared detailed statistical analyses of the accuracy of past project traffic forecasts to assist the Department in developing a forecast range to guide decision making for capacity improvement projects.

Marlin Engineering has reviewed several large scale DRIs and NOPCs since 2008, including the Southwest Annexation Area in St. Lucie County. This area is home to four large DRIs that are projected to generate more than 300,000 combined gross daily trips by 2030. We evaluated their combined impact upon I-95 and the adjacent roadway network, as well as three interchanges and overpasses in the area.

Cost: Task Work Order Based

	25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT							
a.	(1) FIRM NAME	(3) ROLE						
	Marlin Engineering, Inc.	Fort Lauderdale, FL	Transportation Planning, Traffic Engineering					
b.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE					
C.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE					
d.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE					

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS 28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below first, before completing 26. NAMES OF KEY PERSONNEL 27. ROLE IN THIS CONTRACT table. Place "X" under project key number (From Section E, Block 12) (From Section E, Block 13) for participation in same or similar role.) 9 10 2 5 James Kanter, PE Project Manager Joseph Yesbeck, PE Principal-in-Charge QA/QC & Constructability Atiq Alvi, PE Х Х Х Х Review QA/QC & Constructability Joe Gomez, PE Review Carlos Alcantara, PE Roadway Χ James Rosales, PE Structures Construction Jorge Ortiz, PE Administration/Inspection Juan Sotero, PE Maintenance of Traffic Χ Marvin Guillen, PE Maintenance of Traffic Carlos Verson, PE Signing & Pavement Markings Traffic Engineering & Data Salman Rathore, PE Collection Francisco Alonso, PE Drainage Isabel Nayab, PE Drainage Enrique Sosa, PE Lighting & Electrical Boon Chong, PE Structures Roberto Bustamante, PE Structures Mark Gosslin, PhD, PE Χ Scour Analysis Rolando Barros Administration Paul DiPaola Senior Inspector CSS Ramon Llana, El Aretha Fung-A-Wing Project Engineer Colin Henderson Environmental/Permitting Х Х Aaron Quesada Environmental/Permitting Χ Architecture/Landscape David Gjerston, RLA Architecture Architecture/Landscape Charles Serig, RA Architecture Rafael Lagos, PE **Utility Coordination & SUE**

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN THIS CONTRACT (From Section E, Block 13)	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below first, before completing table. Place "X" under project key number for participation in same or similar role.)									
		1	2	3	4	5	6	7	8	9	10
Lazaro Fleitas, PPSM	Utility Coordination & SUE										
Eduardo Vazquez, EI, CBI	Underwater Inspection										
Omar Porras, CBI	Underwater Inspection										
Reinaldo Padrino, CBI	Underwater Inspection										
Angela Alba, PE	Geotechnical							х			
Amanada Pereira, PE	Soils & Material Testing										
Kenneth Hardin	Historical Resources										
Robert Krisak, PLS	Survey, Mapping, ROW										
Benjamin Hoyle, PSM	Survey, Mapping, ROW										
Jason Weiss	Survey, Mapping, ROW										
Yvonne Garth	Public Involvement									х	

29. EXAMPLE PROJECT KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)					
1	Venetian Causeway Bridge Rehabilitation Design-Build	6	Bird Avenue Roadway Improvements (Corradino)					
2	Smokehouse Bay Bridge	7	SR 84/I-595 at NW 136 th Avenue (Arehna)					
3	Chokoloskee Bridge Replacement	8	Scour Evaluation of Bridges with Unknown Foundations (Intera)					
4	SR 97 Over Sandy Hollow Creek Bridge Replacement	9	Broward County Convention Center Expansion Master Plan Study (Garth)					
5	Design-Build of New West Avenue Bridge over Collins Canal	10	Districtwide General Planning Consultant (Marlin)					

For additional information on the firm's services and capabilities, please reference Firm Qualifications and Experience, Organizational Profile and Project Team, References, and Sub-Consultants.

I. AUTHORIZED REPRESENTATIVE The foregoing is a statement of facts.	
31. SIGNATURE	32. DATE
Julyanta	2/23/2017
33. NAME AND TITLE	

James Kanter, PE – Unit Manager

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (If any) RFQ-2017-001-EH

	((If a firm has branch		- GENERAL omplete for e				ng work.)	
2a. FIRM (OR T.Y. Lin		FFICE) NAME		, , , , , , , , , , , , , , , , , , ,			3. YEAR ESTABL 1954		DUNS	93-1552
2b. STREET								5. OWNE	L ERSHIP	
500 W.	Cypress C	Creek Road					a. TYPE	0. 0		
Suite 33	30						Corporation			
2c. CITY				2d. STATE	2e. ZIP CC					
Fort Lai	uderdale			FL	3330	9	b. SMALL BUSINE	ESS STATU	JS	
6a POINT OF	CONTACT	NAME AND TITLE					Not Certified	t		
oa. I Olivi Ol	CONTACT	NAME AND THEE					7. NAME OF FIRM	A (If block 2a	is a hranch	office)
James I	Kanter. PE	E, LEED AP, Senior A	ssociate/U	nit Manager			T.Y. Lin Inte	•		sinoc)
6b. TELEPHO				L ADDRESS						
954.491	1 5556		lam	es.kanter@ty	din com					
334.43	1.0000	8a. FORMER FIRM			IIII.COIII		8b. YR. ESTABLIS	SHED	8c DUN	S NUMBER
N/A		00.10121111	10 (0) (11	uy/			0011111201712210	,,,	00.20.1	0.1101112_11
									80-181	-9996
					_					
	9 F	EMPLOYEES BY DISCIPI	INF				OFILE OF FIRM'S			
	1					<u>ANNUAL A'</u>	VERAGE REVEN	UE FOR L	AST 5 YE	
a. Function Code		b. Discipline	c. No. of (1) FIRM	Employees (2) BRANCH	a. Profile Code		b. Experienc	e		c. Revenue Index Number (see below)
02	Administra	ative	138	3	A05	Airports; N	Navaids; Airport Li	ghting; Ai	rcraft	6
06	Architects		22		A06	Airports; 7	erminals; & Hang	ers; Frieg	ht	7
08	CADD Te	chnician	70		B02	Bridges				10
12	Civil Engi	neers	167	4	C10	Commerc	ial Building; (low r	ise); Shop	ping	7
15		ion Inspector	45	1	C15	Construct	Construction Management			7
16		ion Manager	22	6	E02	Educational facilities, classrooms			5	
21	Electrical	•	13		H07	Highways; Streets; Airfield Paving; Parking			9	
24		ental Scientist	4		P05	Planning (community, regional, areawide,			5	
29	GIS Speci	alist	2		R03	Railroad and Rapid Transit			9	
30	Geologist		1		R04		nal facilities (parks		5)	5
32	Hydraulic	•	3		R06		tion (Buildings; St			5
38	Land Surv	veyor e Architect	12 5	1	S09 T03		Design; Special S ransportation Eng			6 7
42		al Engineer	18	'	W02		ources, hydrology		otor	5
47		Urban/Regional	13	2	201		ion Engineering	, groundw	alei	5
48	Project M		24		201	Construct	ion Engineering			
56		ions Writer	3							
57	Structural		161							
58	Technicia	n/Analyst	14							
60	Transport	ation Engineer	32	2						
	Other Em	ployees	86	1						
	TOTAL		855	20						
11. ANNUAL A	AVERAGE PE REVENUE FOR LAST				PROFESSION	NAL SERVICE	ES REVENUE INDE			
(Insert re		number shown at right)	2. \$10	s than \$100,000 0,000 to less tha			6. \$2 million to 7. \$5 million to	less than	\$10 million	
a. Federal Wo	rk	6		0,000 to less that 0,000 to less that	. ,		8. \$10 million 9. \$25 million			
b. Non-Federa	al Work	10	· ·	nillion to less tha			10. \$50 million			
c. Total Work		10						_		
				UTHORIZED F foregoing is a						
a. SIGNATU	IRE							DAT	E	
	4	Marina						02/	06/17	
c. NAME AN	ID TITLE									

James Kanter, PE, LEED, AP, Senior Associate/Unit Manager

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (If any) RFQ-2017-001-EH

PART II - GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)								
2a. FIRM (OR BRANCH OFFICE) NAME				3. YEAR ESTABLISHED	DUNS NUMBER			
T.Y. Lin International	1954 11-593-1552							
2b. STREET				5. OWN	5. OWNERSHIP			
201 Alhambra Circle, Suite 900				a. TYPE Corporation	a. TYPE			
2c. CITY		2d. STATE	2e. ZIP CODE	Corporation				
Coral Gables	Gables FL 33134				b. SMALL BUSINESS STATUS Not Certified			
6a. POINT OF CONTACT NAME AND TITLE		- Not Gertined						
Francisco Alonso, PE – Associate Vice President/Unit Manager				7. NAME OF FIRM (If block 2a is a branch office) T.Y. Lin International				
6b. TELEPHONE NUMBER	6c. E-MAI	L ADDRESS						
954.308.3374	Fran	cisco.alonso	@tylin.com					
8a. FORMER FIRM NAME(S) (If any)				8b. YR. ESTABLISHED	8c. DUNS NUMBER			
N/A					80-181-9996			
					00-101-9990			

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of (1) FIRM	Employees (2) BRANCH	a. Profile Code	b. Experience	c. Revenue Index Number (see below)
02	Administrative	138	14	A05	Airports; Navaids; Airport Lighting; Aircraft	6
06	Architects	22	2	A06	Airports; Terminals; & Hangers; Frieght	7
08	CADD Technician	70	11	B02	Bridges	10
12	Civil Engineers	167	15	C10	Commercial Building; (low rise); Shopping	7
15	Construction Inspector	45	2	C15	Construction Management	7
16	Construction Manager	22	1	E02	Educational facilities, classrooms	5
21	Electrical Engineer	13	4	H07	Highways; Streets; Airfield Paving; Parking	9
24	Environmental Scientist	4	2	P05	Planning (community, regional, areawide,	5
29	GIS Specialist	2		R03	Railroad and Rapid Transit	9
30	Geologist	1	1	R04	Recreational facilities (parks, marinas)	5
32	Hydraulic Engineer	3		R06	Rehabilitation (Buildings; Structures;	5
38	Land Surveyor	12		S09	Structural Design; Special Structures	6
39	Landscape Architect	5		T03	Traffic & Transportation Engineering	7
42	Mechanical Engineer	18	8	W02	Water resources, hydrology, groundwater	5
47	Planners: Urban/Regional	13	2	201	Construction Engineering	5
48	Project Manager	24	6			
56	Specifications Writer	3				
57	Structural Engineer	161	12			
58	Technician/Analyst	14	8			
60	Transportation Engineer	32	6			
	Other Employees	86	1			
TOTAL		855	95			

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

(Insert revenue index number shown at right)

1. Less than \$100

a. Federal Work	6
b. Non-Federal Work	10
c. Total Work	10

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than \$100,000

\$100,000 to less than \$250,000
 \$250,000 to less than \$500,000

\$250,000 to less than \$500,000
 \$500,000 to less than \$1 million
 \$1 million to less than \$2 million

6. \$2 million to less than \$5 million

7. \$5 million to less than \$10 million

8. \$10 million to less than \$25 million

9. \$25 million to less than \$50 million

10. \$50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

February 6, 2017

c. NAME AND TITLE

SIGNATURE

Francisco Alonso, PE | Associate Vice President

AUTHORIZED FOR LOCAL REPRODUCTION

STANDARD FORM 330 (6/2004) PAGE 6

State of Florida Department of State

I certify from the records of this office that T.Y. LIN INTERNATIONAL is a California corporation authorized to transact business in the State of Florida, qualified on June 12, 1975.

The document number of this corporation is 834521.

I further certify that said corporation has paid all fees due this office through December 31, 2016, that its most recent annual report/uniform business report was filed on February 25, 2016, and that its status is active.

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

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Twenty-fourth day of August, 2016



Secretary of State

Tracking Number: CU4377378621

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

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

State of Florida

Board of Professional Engineers

T. Y. Lin International



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

Expiration: 2/28/2017

Audit No: 228201703378

CA Lic. No:

Exhibit 32017

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ORGANIZATIONAL PROFILE AND PROJECT TEAM



Organizational Profile and Project Team

THE TYLI TEAM

The key to making this project a success is the experience of the project team, the interaction among the team members, and the close and continuous communication with the City of Fort Lauderdale and other outside agencies throughout the design and construction administration process. To achieve this success, T.Y. Lin International (TYLI) has structured a team for this contract whose members are not only experts in their respective fields, but who also approach their work with innovation and state-of-the-art technology – and have an excellent understanding of the proposed project. Each member has been selected because of their unique skill set – "playing strengths" to offer the City the right team that will deliver a successful project. Our organizational chart (included in the Firm Qualification and Experience section) describes the team's structure, key individuals, and assigned roles.

As the Prime Consultant, TYLI will lead the team and be responsible for the successful delivery of the project. The following summarizes each team member firm and their assigned roles on this project.

T.Y. Lin International

- » Project Management
- » Quality Assurance
- » Bridge Design
- » Lighting and Electrical Engineering
- » Architecture
- » Permitting and Environmental
- » Landscape/Streetscape
- » Scheduling
- » Cost Estimating
- » Visualization/3D

Keith & Schnars:

- » Construction Administration and Inspection Services
- » Constructability Reviews
- » Surveying, Mapping, Right of Way Engineering

The Corradino Group

- » Roadway Design
- » Signing, Marking & Lighting
- » Traffic Engineering

Garth Solutions

- » Construction Administration Support
- » Public Involvement

Marlin Engineering

- » Traffic Data Collection
- » Utility Coordination
- » Subsurface Utility Engineering
- » Underwater Inspections

Arehna Engineering

- » Geotechnical Engineering
- » Soils & Materials Testing

Janus Research Group

» Historical Resources/SHPO Coordination

Interra

» Scour Analysis

THE PROJECT TEAM

We have put together a team of highly qualified and uniquely experienced individuals to successfully deliver this project to the City of Fort Lauderdale. A summary of some our key personnel is described below. For more detailed information on each of the individuals listed on our Organizational Chart and their notable experience, please refer to the attached Standard Form 330.

James M. Kanter, PE, LEED AP - Project Manager

Mr. Kanter is a LEED certified professional with over 30 years of experience in the planning, design, permitting, and construction management of South Florida projects. He has successfully overcome a variety of engineering challenges in his roles as Project Manager and Lead Engineer for municipal clients. This experience helps to manage full spectrum, multidisciplined teams through all project development phases. His specific municipal expertise includes project management, infrastructure planning/engineering, stormwater utility master planning/engineering, traffic planning/engineering, general roadway design, and utilities.

Mr. Kanter has the technical, planning, and organizational expertise to ensure that the South Ocean Bridge Drive project is completed on-schedule, on-budget, and to the complete satisfaction of the City and its residents.

Mr. Kanter brings the following experience and benefits to the City and the South Ocean Bridge Drive project:

- » Committment to excellence he is a Florida Professional Engineer with experience managing successful projects involving bridges that require multi-disciplined teams.
- » Experience in the planning and design of bridges in urban environments, with unique challenges and stakeholders, such as the Historic Steel Bridge Preservation project at NW 54th Street and East 1st Avenue in Miami Springs.
- » A unique sensibility to form and function that is required when engineering a bridge within the context of an upscale community, such as Harbour Inlet. With 9 years of service on the Miami-Dade County MPO Transportation Aesthetic Review Committee, and an architectural degree, he has the unique ability to balance both functional and aesthetic requirements.
- » Experience working with municipal clients and understanding their unique needs. This knowledge was gained when working on the City of Fort Lauderdale's Downtown Walkability Project, several Neighborhood Capital Improvement Projects for the City of Miami Beach, and for the Town of Medley on the NW 116th Way Bridge Design-Build Project over the C-6 Canal.

Joseph Yesbeck, PE, LEED AP - Principal-in-Charge

Mr. Yesbeck is a Florida Registered Professional Engineer with 39 years of professional experience. He has held several senior management roles including Project Director for the I-75 and Pembroke Road Interchange PD&E study and the Oakland Park Boulevard Transit Alternative Analysis in Broward County. He has served as Project Manager for multiple projects including providing planning services for the South Florida Regional Transportation Authority, and the Bascule Bridge over the South Fork of the New River PD&E Study.

Atiq Alvi, PE - QA/QC Manager

Mr. Alvi is a Florida Registered Professional Engineer with over 26 years of professional experience. He has served on the Transportation Research Board, Structural Fiber Reinforced Polymers Committee; Bridge Preservation Sub-Committee; Bridge Life-Cycle Cost Analysis Sub-Committee; Bridge Aesthetics Sub-Committee; and Non-Destructive Testing Sub-Committee. He will serve as a vital member of the team, as evidenced by his background with projects such as the Technical Advisor and Quality Assurance Manager on the \$1.5 million FDOT District 7 Districtwide Bridge Engineering Contract.

Joe Gomez, PE - Constructability Reviews

Mr. Gomez is a Florida Registered Professional Engineer with over 39 years of professional experience. Mr. Gomez received the Jay W. Brown award for Outstanding Managerial and Leadership Abilities by the FDOT. His background serving as Project Manager for the FDOT Dade and Monroe Counties Districtwide Traffic Operations and Safety Studies project, Senior Project Manager for the I-395 corridor improvements project are but a few examples where he demonstrated an attention to detail required for QA/QC and constructability reviews.

Carlos Alcantara, PE - Roadway Task Leader

Mr. Alcantara is a Florida Registered Professional Engineer that has over 15 years professional experience. Mr. Alcantara's expertise in roadway design is evident by his commitment to a wide range of projects in roadway design, maintenance of traffic, utility coordination, signalization, signing and pavement marking design and plan preparation. Signature municipal project experience includes the design and preparation of contract documents for the City of Hialeah Roadway Improvement Program.



James Rosales - Bridge Design Task Leader

Mr. Rosales, a Florida Registered Professional Engineer, has over 25 years of professional experience. Mr. Rosales brings a wealth of knowledge to bridge design having worked on projects such as the NW 25th Street Viaduct over the Palmetto Expressway and the final design of the substructure for all bridges along the I-595 express lanes into Port Everglades (Broward County).

Jorge Ortiz - Construction Administration/Inspection Task Leader

Mr. Ortiz is a Florida Registered Professional Engineer with over 34 years professional experience. Mr. Ortiz was awarded the Urban Project Award for quality construction on the US-1/Biscayne Boulevard project. Mr. Ortiz has overseen multiple Construction Engineering Inspection projects including five projects along US-41 in Lee and Charlotte Counties and construction management of a 50-mile safety improvement of I-75 from Broward County to Collier County Florida.

Juan Sotero - Maintenance of Traffic Technical Lead

Mr. Sotero is a Florida Registered Professional Engineer with over 13 years professional experience. Mr. Sotero is a member of the Civil Engineering National Honor Society and he is an Environmental Engineering Honorary. His experience includes the City of Hialeah's Roadway Improvement Program and Miami Beach roadway improvement projects. Mr. Sotero will bring his much-lauded engineering experience to his project role as Maintenance of Traffic Technical Lead.

Collin Henderson - Permitting/Environmental Technical Lead

Mr. Henderson is a 30-year veteran of the environmental permitting industry. He has successfully completed multiple complex projects, such as the replacement of the Smokehouse Bay Bridge in Marco Island, the Chokoloskee Bridge in Everglades City, and a benthic study of the Long Key Bridge in Monroe County. He has demonstrated his commitment to excellence having amassed five professional certifications and having served on the South Florida Association of Environmental Professionals Board of Directors.

Angela Alba - Geotechnical Engineering Technical Lead

Ms. Alba is a Florida Registered Professional Engineer with over 18 years' experience. She will serve as the geotechnical lead for this contract. Ms. Alba has served as the Geotechnical Discipline Lead for the P3, I-595 Express Corridor, which had a combined geotechnical budget of over \$9 million. Currently, Ms. Alba is serving as the Geotechnical EOR for approximately 5 miles of widening along SR-710/ Beeline Highway and Turnpike Overpass in Palm Beach County and several Districtwide Minor Project Design/Production Support contracts. Ms. Alba served as the Contract Manager/Project Manager for the District 4 Districtwide Geotechnical services contract (Contract No. C9C96) and is currently providing geotechnical engineering services on the I-4 Ultimate project.

Yvonne Garth - Public Involvement Technical Lead

Ms. Garth is a certified Charrette Planner and has over 25 years of experience providing diverse services to local, national, public, and private entities in all aspects of business development, marketing, advertising, public relations, economic development, outreach, diversity program consulting, and more. In recognition of her accomplishments, Yvonne was recipient of Diversity Plus Magazine's "Woman of Power" award for 2009. Ms. Garth has provided public outreach on project such as New Water Treatment & Water Reclamation Facility in Davie, the Fort Lauderdale-Hollywood International Airport Expansion Program, the Broward County Convention Center Expansion, and the Broward County North County Neighborhood Improvement Project.



PERSONNEL ROLES

Firm	Personnel	Role on the Project	Level of Involvement
T.Y. Lin International	James Kanter	Project Manager, Roadway Engineer	100%
T.Y. Lin International	Francisco Alonso	Drainage Engineering	30%
T.Y. Lin International	Isabel Nayab	Drainage Engineering	30%
T.Y. Lin International	Colin Henderson	Environmental Science & Permitting	20%
T.Y. Lin International	Aaron Quesada	Environmental Science & Planning	15%
T.Y. Lin International	David Gjertson	Landscape Architecture & Architecture	15%
T.Y. Lin International	Charles Serig	Landscape Architecture & Architecture	15%
T.Y. Lin International	Enrique Sosa	Lighting & Electrical	30%
T.Y. Lin International	Atiq Alvi	QA/QC Review & Constructability	10%
T.Y. Lin International	Joe Yesbeck	Principal-in-Charge	5%
T.Y. Lin International	James Rosales	Bridge Design-Task Leader	90%
T.Y. Lin International	Bong Chong	Bridge Design	60%
T.Y. Lin International	Roberto Bustamante	Bridge Design	60%
Keith & Schnars	Joe Gomez	Constructability Review	10%
Keith & Schnars	Roland Barros	Construction Administration/Inspection-Project Administrator	60%
Keith & Schnars	Paul DiPaola	Construction Administration/Inspection-Senior Inspector	30%
K& Keith & Schnars	Ramon Llana	Construction Administration/Inspection	25%
Keith & Schnars	Robert Krisak	Surveying and Mapping	10%
Keith & Schnars	Benjamin Holye	Surveying and Mapping	10%
Keith & Schnars	Jason Weiss	Surveying and Mapping	10%
Keith & Schnars	Jorge Ortiz	Construction Administration/Inspection	10%
Corradino Group	Carlos Alcantara	Roadway Engineering-Task Leader	80%
Corradino Group	Juan Sotero	Maintenance of Traffic	75%
Corradino Group	Marvin Guillen	Maintenance of Traffic	75%
Corradino Group	Carlos Verson	Signage and Marking	10%
Corradino Group	Salman Rathore	Traffic Engineering	15%
Garth Solutions	Yvonne Garth	Public Involvement	15%
Garth Solutions	Aretha Fung-A-Wing	Construction Administration/Inspection	25%
Marlin Engineering	Rafael Lagos	Utility Coordination	20%
Marlin Engineering	Lazaro Fleitas	Utility Coordination	20%
Marlin Engineering	Julie Vers	Underwater Inspection	10%
Marlin Engineering	Ed Vazquez	Underwater Inspection	10%
Marlin Engineering	Omar Porras	Underwater Inspection	10%
Marlin Engineering	Reinaldo Padrino	Underwater Inspection	10%
Marlin Engineering	James Spinks	Traffic Data Collection	10%
Marlin Engineering	Dalila Fernandez	Traffic Data Collection	10%
Arhena Engineering	Angela Alba	Geotechnical Engineering	30%
Arhena Engineering	Amanda Pereira	Soils & Material Testing	20%
Janus Research	Kenneth Hardin	Historical Resources	5%
Intera	Mark Gosselin	Scour Analysis	5%

APPROACH TO SCOPE OF WORK



Approach to Scope of Work

PROJECT UNDERSTANDING

An important factor in judging project success is achieving balance between aesthetic enhancements with functional and constructible solutions.



South Ocean Bridge Drive

Objectives

The TYLI team understands the City of Fort Lauderdale's needs to provide a safe and lower maintenance alternative to the existing South Ocean Bridge Drive over the Marion River. Harbour Inlet neighborhood resident access to Seabreeze Boulevard (A1A) via Mayan Drive and secondary access for Harbour Inlet/Harbour Beach residents is provided by the bridge. Some of the City's objectives include:

- » Reduce the maintenance frequency/cost and extend design-service life to "mitigate premature degradation or corrosion, enhance service life, and improve durability".
- » Reduce safety risks to the traveling public.
- » Minimize any construction impacts (inconveniences) to the residents of Harbour Inlet and other stakeholders, including the Church by the Sea and School and the neighbors living in Harbour Beach.

The intent of our design is to provide for current and longterm growth to continue the resident's/visiting public prosperity and enhanced quality of life.

Constructability Issues

The replacement of the South Ocean Bridge Drive over Lake Mayan presents a variety of constructability challenges that our team will need to address with the selected Contractor. There are two options for constructing the replacement of this bridge - 1) Construct the bridge in halves, or 2) Complete closure of the bridge. Each of these methods have their advantages and disadvantages.

- of the existing structures, it appears that this 2-lane bridge can be cut in half along the approximate center. This would allow the contractor to demolish one side of the bridge while one lane reversible traffic is maintained on the bridge itself. In order to control traffic, temporary signals would be installed at each approach to the bridge with a timed signal that would allow traffic only in one direction to cross the existing 1-lane bridge during each signal cycle.
 - Advantages: Local traffic would not need to be rerouted to access either side of the bridge.
 - Disadvantages: Overall construction duration would be longer and there would be additional MOT costs associated with the temporary signals.
- Construct with a Full Bridge Closure: This method would allow the contractor obstructed access to the bridge. Once the existing utilities that are strapped to the west side of the bridge are relocated, demolition would be done in a single phase and then new sub-structure and super structure work would follow. The utilities may have to be placed on a temporary support structure while the bridge is demolished and the new bridge constructed if the ultimate design calls for placing them on the bridge in the same location as in the existing condition. However, it may be more effective to relocate them permanently whether subaqueous (under the canal bottom) or with their own permanent support structure.
 - Advantages: Construction duration would be reduced at least by 50 percent. The risk of accidents within the Work Zone would be reduced since the bridge would be completely closed off to vehicular, bicycle, and pedestrian traffic.
 - *Disadvantages:* The Harbor Beach residents would be the most impacted during the full closure. Residents on Grace Drive and Marion Drive would have to drive south to SE 19th Place (Barbara Drive) then turn right at SE 23rd Avenue to exit out to SE 17th, either to go west or north on SR A1A.
- Other Constructability Issues: Regardless of which option is chosen to construct the bridge, the actual construction of it will be difficult due to the lack of available right-of-way for staging of equipment and personnel. More than likely, construction will need to take place from the water on barges on the west side of the bridge. The waterway connects to the Intracoastal Waterway (ICWW) allowing for transport of equipment and materials. Given the short spans of the bridge, it may be possible to precast elements and then have them

brought in by barge and assembled on site. However, it will require blocking of local recreational marine traffic during many of these operations, which will necessitate, at the very least, consultation with the United States Coast Guard (USCG) and possible permit with restrictions on closure times.

» During construction, particular attention will be paid to any impacts on the public and the local residents. TYLI pro actively addresses this concern by providing "public friendly" field staff and/or "complaint coordinators". This staff will insure that any inconveniences to the public (dust, debris, access obstruction, incidental damage, etc.), which typically occur during construction are minimized and addressed promptly.

TYLI attributes its corporate longevity and success to the unique ability of our technical staff to combine engineering expertise/sound judgment with ongoing stakeholder involvement and public awareness in its municipal projects. This design philosophy has resulted in successful municipal projects completion on time and on budget and a repeat client-base.

Expedited Process

The TYLI team understands the need of a pragmatic, well-structured and elaborate methodology to expedite the South Ocean Bridge Drive replacement project. On-time completion of the project is a paramount goal to us as your consulting engineers, planners, and architects.

To expedite the project schedule, it is essential to first engage all interested parties to share information and ideas in a series of workshops. This process must be conducted in parallel with a public involvement plan that tailors to the specific project and local needs. We strongly believe that this is the best way to quickly reach an achievable consensus. On the completion of the planning phase, we will proceed to develop the construction documents focusing on reducing time, controlling costs, ensuring quality, and minimizing delays. The planning phase concludes with a construction management plan to eliminate foreseeable impacts and reduce risk.

DATA COLLECTION & PROJECT DEVELOPMENT

General

Key stakeholder involvement and buy-in is at the heart of every successful project. Successful planning outcomes are generated through resourceful and productive interaction among the client and their staff, key public agency staff, community and neighborhood representatives, the general public and the planning team.

Therefore, to ensure project success, TYLI's project planning phase focuses heavily on interactive workshops. Furthermore, consistent and effective communication with the City, business leaders, the general public, with sponsor support, is the key to reach common goals and vision. Each workshop is a fundamental component of a planning process that is geared toward achieving successful public consensus amongst a broad and diverse cross section of the community.

Project Kick-Off Meeting

The project will begin upon receipt of written authorization to proceed. The initial project goal will be to establish a project vision with the sponsors followed by forging a City staff and stakeholder consensus plan. This begins with a project kick-off meeting that includes the TYLI team and City staff (sponsors). The purpose of this meeting will be to: introduce the TYLI team to the City staff, review the City's goals for the project, and to discuss preliminary project schedules and construction budgets. Further, we will present our wider, proposed public involvement plan for approval and review tentative public presentations/design workshop dates.

Subsequently, we will prepare a meeting summary and draft project schedule for review and approval by the City's project manager. Other initial activities include the development of a project work plan and assignment of the quality control team.

Data Collection Activities

To prepare for the design workshop and to familiarize ourselves more with the project area, we will begin collecting available data (e.g., property plats, topographic survey, utility plans, and site and aerial photos).

- Surveying: At the notice to proceed, we will begin compiling available survey and right-of-way information. Using the collected data TYLI will develop a work scope for the surveyor, underwater inspection of the bulkheads, and develop a geotechnical exploration plan. We anticipate that commissioning additional survey data to verify critical field conditions will be required. To assure efficient survey dissemination we propose to perform the survey in Civil 3-D format. In this project early stage, the TYLI team will make every reasonable effort to collect pertinent project sans unforeseen existing conditions that may not be identified at this stage.
- » Mapping: The analysis work phase will include base information preparation including a site and context base map. Using these base maps, we will develop a site analysis drawing series documenting project area issues for the community and region. The site analysis



map illustrates information two types: a) a built features map(s) that documents existing built features (property ownership, buildings, parking areas, pathways, utilities, transportation systems) b) a natural features map(s) that document existing hydrology, topography, vegetation, sensitive environmental areas. These maps will be the basis for further City and public discussions.



- Geotechnical data collection: A project design and construction geotechnical exploration will be performed in accordance with the FDOT Soils and Foundations Handbook (SFH) and the RFP requirements. Team member AREHNA is familiar with the subsurface geotechnical conditions along the planned project. A USDA Broward County Soil Survey review indicates that the predominant surficial soils along the project limits are classified as Urban Land and Arents-Urban land complex; typically characterized as gravelly sands and sands. Preliminary general vicinity subsurface information suggests anticipated subsurface conditions typically consisting of gravel/sand/silt mix underlain by alternate layers of sand, cemented sand, shell fragments, and sandstone; additionally, organic material may be encountered at the site.
- conceptual Geotechnical Exploration Plan outlining our proposed exploration plan will be reviewed with the City Engineer for concurrence. Utility clearance and coordination, as well as applicable right-of-way permits, will be performed prior to field activities. A laboratory testing program will be conducted to verify soil properties and the data will be incorporated into a 'Cross Section Soil Survey' sheet to provide guidance on soil suitability. Report of Core boring sheets will be prepared for all structures. Upon completion of the geotechnical explorations and associated lab testing, geotechnical analyses and recommendations will be presented in geotechnical reports in accordance with the FDOT S&FH and Structures Manual.
- » Based on a review of the available project information and our experience on similar projects, the primary geotechnical considerations that we have identified for this project are as follows:



- Potential impacts due to proximity of the existing residential and seawall structures to the construction activities will be evaluated in accordance with FDOT PPM Volume I Chapter 34 and Section 108 of the Standard Specifications (Protection of Existing Structures) and RFQ requirements and recommendations for settlement and vibration monitoring will be provided.
- Reduction of vibration levels in the selection of bridge foundation system and construction procedures.
- In order to minimize the effects of vibrations during pile driving operations, we plan to analyze various foundation options and installation procedures to minimize the impacts such as: steel piles vs. prestressed concrete piles (smaller pile hammer and initial pile sections can be vibrated in), lower capacity 18-inch piles, preforming of pile holes, use of temporary casing to preform pile holes, and performing dynamic testing on all production piles. Alternatives to be evaluated include augercast piles, and drilled shafts using non-vibratory method for temporary steel casing installation, such as rotary or oscillatory methods.
- Mitigation of potential deformations due to roadway compaction operations may include use of static compaction instead of vibratory compaction.
- We will evaluate use of non-vibratory methods for installation of temporary sheetpile walls, if needed, such as the Press-in method, which utilizes static loading to penetrate the sheets instead of vibration.
- Areas of unsuitable soils encountered during the geotechnical exploration will be delineated and recommendations will be provided in accordance with Standard Index Nos. 500 and 505.

Turning Movement Counts and Approach Volume Counts: The TYLI team has Miovision Video Collection Units (VCUs) and more than 40 JAMAR Turning Movement Boards. Our VCUs have allowed the team to quickly collect vehicle Turning Movement Counts, bicycle and pedestrian and classification data within a limited amount of time, provide a backup for each count conducted for post-processing review, provide DVD copies for permanent records and be non-intrusive to the roadway. Our post-processing software allows the TYLI team to simultaneously collect both Turning Movement Counts and Approach Counts, which is a cost savings to the Department.

When road tubes need to be laid, we understand that it is important to select a location that will give the most accurate and useful data possible. We always:

- Avoid curves, if possible
- Don't set at driveways adjacent to the bridge approaches
- Don't set by the Church By The Sea school, avoiding high pedestrian traffic areas
- Avoid setting close to intersections, if possible because counters require vehicles of constant speed above 30mph to work properly
- Always set road tubes perpendicular, tensioned evenly and at the proper spacing dependent upon the roadway classification
- Adjust the debounce setting
- Ensure road tubes are of the same length and condition for vehicle classification counts
- Check road tubes for punctures and feel for an air pulse
- Ensure the counter is secured in a proper location
- Ensure hoses are taped down with minimal bounce
- Use our Trimble GEOXT GPS machines that record PDOP to ensure that if a site needs to be revisited, we know the exact location
- Utilize FDOT certified safety procedures, as defined by the Traffic Monitoring Handbook
- Supplemental data collection: In many instances, risk can be minimized (but not eliminated) through the performance of additional investigation, testing, data collection and evaluation. The cost of these studies must be weighed against the potential project savings and the risk tolerance of the client. Supplemental data collection activities to minimize risk for this project may include:



- Underwater bridge inspection to evaluate bulkheads and channel clearance.
- A hydrographic survey of the bridge approaches and underwater structure as part of a larger scour analysis.
- A Phase I "due diligence" environmental evaluation of the site to identify "recognized environmental conditions" and potential wetlands
- Based on the Phase I environmental evaluation, additional environment assessment may be required to include: wetlands delineation and historical resources identification
- Possible subsurface evaluation to support utility identification and location efforts

PURPOSE & GOALS OF PUBLIC OUTREACH PROGRAM

We believe that nurturing client and community involvement and understanding is the first step in the successful implementation of this bridge project. We reach out to involve the client and the constituent community in every aspect of the planning and design of the bridge. We welcome input throughout the process because that input educates us on the issues, facts and realities we might otherwise have missed. This participation builds a strong ownership of the plan and ultimately of the built environment.

For a bridge replacement to be successful, all interested groups need to feel that their interests are being met even though each has a different agenda. Our role will be to identify commonalties and conflicts – maximizing the former, minimizing the latter.

The approach TYLI proposes acknowledges the importance of open collaboration and communication between the City, business interests, its residents and the consultant team. From our experience on similar projects, such as the Smokehouse Bridge, Venetian Causeway Bridge, and Chokoloskee Bridge Replacement, we strongly believe that inviting all interested parties to share information and ideas is the best way to achieve consensus plan.



The ultimate goal of the public outreach plan is to maintain an open line of communication that will encourage cooperation from the community, ensure responsiveness to community needs and help mitigate disruptive impact to stakeholders in both the Design and Construction Phases. Key goals include:

- » Enhance public confidence and support of the improvement project.
- » Implement an inclusive public communication effort that addresses the needs and concerns of affected residents, local businesses, visitors, and other interest groups while meeting the project goals.
- » Provide factual and clear information to impacted target audiences.
- » Provide convenient ways for stakeholders to obtain updates, as well as convey any concerns or questions.

Key Audiences

The TYLI team will work collaboratively with the City to develop an inclusive stakeholder list of residents, businesses and other relevant entities. The initial focus will include but not be limited to the following key audiences:

- » Residents in surrounding communities (in particular Harbour Inlet and Harbour Beach)
- » Local organizations and businesses (i.e. Quarter Deck, Elbo Room, etc.)
- » Other interest groups (i.e. visitors the Church by the Sea and residents of community)

Outreach Approach

Our outreach approach centers on inclusion. We begin with a comprehensive and inclusive list of all stakeholders that could potentially be affected by the project. We then follow through with meaningful and ongoing communication through the term of the project.



For the South Ocean Bridge Drive project, we recommend a two-phased public outreach strategy – Phase one during

the Design stage and Phase two during construction implementation.

Phase One - Design Phase

As the team develops the plan and design options for the project, it is imperative to engage and incorporate feedback from affected stakeholders. During the design phase, we typically encourage stakeholders to participate in small-group workshops that are structured to promote candid, inperson conversations that would inform them of our planning process. We believe this helps build trust in the community with our team and reinforces the goodwill of the City. The comments, opinions and suggestions gathered through the sessions are factored into our thinking for design options.

We envision a series of three community workshops during the planning and design phase:

- Workshop 1: Planning & Analysis Early in the planning process, a workshop will be held to provide stakeholders a chance to share their thoughts and concerns with the design team. The format will promote a free exchange of ideas and the chance to discover important dynamics that will inform our design process.
- Workshop 2: Design Exploration Midway through the design process, a second interactive workshop will be held to validate initial findings and to measure reactions to initial design options. Feedback will be captured and evaluated as part of the process to finalize the design recommendations.
- Workshop 3: Design completion Once the design process is complete, a third meeting will be held to share the final design option with stakeholders. This will also be an opportunity to convey what stakeholders can expect during the construction phase and how they can remain informed.

Phase Two - Construction Phase

Once construction begins, the focus of the public outreach will be to inform stakeholders of what they can expect during implementation. Our team will leverage multiple communication methods to notify stakeholders of the progress of construction; alert them of any traffic impacts, and ensure accessibility should residents need to communicate any concerns. Communication tools that we intend to leverage include but are not limited to: dedicated concern hotline, social media, text alerts, email alerts, signage, direct mail and continued participation at neighborhood association meetings. Additionally, we will work closely with the City's public information office to post pertinent information via City communication channels, including the City website and social media accounts.

FINAL DESIGN, ENGINEERING AND CONSTRUCTION ADMINISTRATION

General

Based upon bridge concept approval obtained in the project development phase the TYLI team will proceed to final design and engineering. It is in the engineering phase that the construction documents for the project will be developed and permitting efforts will be implemented. During this phase we anticipate three formal milestone submittals for review and approval.

Tactics for Expedited Project Delivery

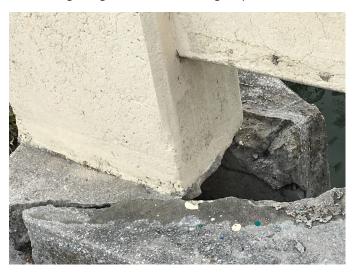
Once the preferred alternative is approved by the City, with stakeholder concurrence, the TYLI team will implement the following expediting tactics:

- » Perform infrastructure expenditure related risk assessment to understand the investment cost that will be required to construct the bridge and supporting infrastructure.
- » Perform overall value-engineering to control program construction costs, reduce construction time and minimize impacts to the neighborhood.
- Define optimal project construction phasing of the project: the TYLI Team will schedule and undertake a team brainstorming session to develop a project work program based on the following key objectives: a) prioritized infrastructure implementation based on project need, stakeholder schedules, utility company relocation and or implementation and permitting lead times and b) minimize Harbour Inlet, the Church by the Sea, the neighboring homes, and condominium tower residents construction impacts.
- » Planned engineering design submittals will be made at 60%, 90%, 100%, and a final development phase Construction Documents prepared to include:

Bridge Design

The 4-span existing concrete bridge is over 60 years old, classified as "Functionally Obsolete", and has outlived its design service life. It has a total bridge length of 80 feet (four 20-foot spans). The concrete deck superstructure is supported on cast-in-place, reinforced concrete T-beams supported by intermediate pile bents. The wearing surface has an asphalt overlay. The bridge has been posted to limit heavy weight traffic and its structural appraisal is slightly better than the minimum tolerable adequacy limits. The bridge rails are substandard and the west side of the bridge has a shoulder

that connects to sidewalk paths at both ends of the bridge, pedestrian use this shoulder as means for crossing the bridge resulting in an unsafe condition. Upon visual inspection, it was noted that the bridge has been subject to some repairs in the past and there are signs of distress especially on the seawalls adjacent to the bridge. Combination of factors, including: age, loading restrictions and current condition of the existing bridge, warrants the bridge replacement.



Our bridge replacement approach envisions a reduction on number of spans (2-span bridge) for the same bridge length. This will have the advantage of providing a wider horizontal clearance; hence, a safer traffic of boats under the bridge. Another important aspect of consideration will be the selection of the foundation type, and construction requirements that minimize vibration and settlement of the surrounding structures, especially the existing seawalls.

The vertical profile of the bridge will be maintained as to minimize impacts to the approaching roads and residences. The bridge cross section will make provisions for a raised sidewalk for safe pedestrians crossing. The use of ABC implementing precast elements will be the utmost consideration with the goal of reducing construction time and minimizing disruption to the community. Bridge design will be based on the most current FDOT practices for structures located in saltwater/corrosive environments with the objective of provide a long-lasting structure.

Constructability Issues

The South Ocean Drive Bridge replacement presents a variety of constructability challenges that our team will need to address with the selected Contractor. Issues include access issues related to closing/restricting bridge access. Other Constructability Issues include a lack of available right-of-way



for staging of equipment and personnel, blocking of marine traffic, and the impact of public works projects on residents as construction progresses.

Traffic Control Plan & Traffic Signalization: A properly planned, efficient, practical and well executed Traffic Control Plan (TCP) will be project critical. The TYLI Team, has extensive experience in the development of safe and cost effective Traffic Control Plans for roadway and bridge construction projects in residential areas and have made several site visits.

The Harbor Inlet Neighborhood which lies just north of the subject bridge has only one access point from SR A1A. The access is a gated access just south of the SR A1A and Harbor Inlet Drive intersection. The Harbor Beach Neighborhood which lies just north of the subject bridge has two access points from SR A1A. These access points are at Mayan Drive (non-gated) and at Harbor Beach Parkway (gated). Because the access to these neighborhoods is so limited and the subject bridge serves as the only internal connection between the two neighborhoods we have analyzed two separate TCP approaches for this project which would need to be further vetted with input from both City staff and both neighborhoods.

The first option, is to reconstruct the existing bridge in phased construction which would allow for traffic to be maintained throughout construction. The bridge would effectively be constructed in two phases and would leave one lane operational during both phases. Effective traffic management over the bridge would be maintained using temporary signals on each side of the bridge. The signal would allow NB traffic to cross the bridge while SB is kept at a stop and then SB traffic would cross the bridge while the NB traffic is kept at a stop. Temporary signalization is the only viable way to maintain traffic on the bridge as a 24-hour flagging operation is not feasible for the period that the bridge will be under construction. One significant disadvantage of this option is that the construction period for the bridge replacement, intermediate piers, end bents and seawalls will be significantly elongated as the contractor must work around the traffic being kept on the bridge. Pedestrian traffic can be accommodated using this option.

The second option, is to completely close S. Ocean Drive between Mayan Drive and Marion Drive. While this option eliminates the connectivity between the two neighborhoods, it drastically increases the efficiency in which the contractor can replace the subject bridge. The decrease in construction time also decreases the period in which the neighborhoods are inconvenienced by the construction operations. The closure of S. Ocean Drive will be made via the use of Type III Barricades at both Mayan Drive and Marion Drive. PCMS

boards will be placed along SR A1A in advance of and during the construction to notify the traveling public of the bridge closure. Two driveways on the south side of the bridge will be impacted by this closure. The single family residential driveway on the west side of S. Ocean Drive can be closed as this driveway is a circular driveway with access from Marion Drive. The driveway on the east side of Ocean Drive is to the multi-unit residential building named The Town Houses of Harbor Beach. This driveway will need to be maintained for the residents of this unit as there is no other access to this portion of the building. The contractor will also be required to notify the residents of each neighborhood through flyers of the anticipated bridge closure. Because the access points from SR A1A may see additional traffic due to the bridge closure, the contractor will be required to coordinate signal timing modifications with Broward County Traffic Engineering Division (BCTED) and FDOT where necessary during construction. Pedestrian and bicycle traffic cannot be accommodated on the bridge on this option and will be directed to SR A1A.

Both options will be discussed with City Staff and the two neighborhoods to determine which option is the most desirable and then the TCP will be designed using the latest MUTCD, FDOT and City Design Standards. The TCP will be approved by the City during design and the Contractor will also need to acquire a City Permit prior to beginning construction operations.

Signal Timing

For the signal timing modifications at the intersection of Harbour Inlet Drive and A1A (Seabreeze Boulevard), TYLI will use Synchro for signal system optimization. TYLI will analyze various traffic signal control alternatives and determine the optimal strategy using the measure of effectiveness produced by the Synchro program as a guide; resulting in improved phasing, cycle length, and splits. In developing the optimum control parameters, TYLI will take into consideration all Broward County system requirements (i.e. cycle length, minimum greens, etc). Optimization of the signal operation will be evaluated for each candidate geometric modification and each potential combination of modifications.

Environmental and Permitting

We have carefully reviewed the project requirements, inspected the site, and contacted resource agencies to gain the best possible understanding of your goals and the environmental and permitting issues surround the project. Our goal is to develop a project for the City that minimizes impacts to the environment, that is permittable by the regulatory agencies, and that is beneficial and functional for the City and its residents.

TYLI's professionals and team members have vast marine and coastal infrastructure environmental/permitting experience for dredging, drainage, and utility relocation. TYLI is well versed in environmental laws and regulations; as well as coordinating with the various regulatory agencies.

We will work closely with the following agencies that have regulatory authority over the project: USCG, SFWMD, USACE, and Broward County EPGMD. TYLI has been involved with these agencies throughout Florida on a number of roadway and bridge projects and most importantly we understand the regulatory process that leads to a permittable project. It is expected that a General Environmental Resources Permit would be obtained from the SFWMD under 62-330.443, FAC for minor bridge alteration and replacement for municipalities. Likewise, it is expected to qualify for the USACE nationwide Permit 15 (US Coast Guard Approved Bridges). The project does not lie within any special drainage districts.

Coordination with all regulatory agencies will be essential to meeting project needs. It is essential to get the applicable agencies on board early in the process and keep them informed throughout the process. This allows critical issues to be identified and addressed quickly and effectively. TYLI's basic approach to assist the City in obtaining Federal, State and local regulatory approvals includes:

- » Site visits to collect pertinent data and identify potential design and permitting issues;
- » Pre-application meetings to familiarize the regulatory agencies with the proposed plan, establish permit requirements, and to gain preliminary approvals;
- » Develop plans and permit application information accurately and completely;
- » Submit permit applications to the regulatory agencies;
- » Maintain constant contact with the permit reviewers during the review process in order to address concerns quickly without the formal issuance of a Request for Additional Information (RAI).

The reviewing agencies will require the submittal of a benthic survey as a component of the permit application packages to determine the areal extent of seagrass and other sensitive benthic resources within the project area, if any. Seagrass surveys will be performed during the summer growing season (June 1 – September 30), in accordance with the NMFS Johnson's Seagrass survey protocol. The Mayan Lake Canal is also frequented by West Indian manatees and lies within the consultation areas of several listed species such as the American crocodiles, Atlantic coastal plants, piping plover as

well as wood stork core foraging areas. The project corridor consists of bulkhead on either side of the waterway with landscape vegetation consisting of Sabal Palms, sea grapes, and various exotics species which does not support desirable nesting or foraging habitat by these species. Wildlife surveys will be conducted to evaluate the potential wildlife utilization of the project area by manatees and other protected species. Provisions will also be included for the contractor to adhere to the "Standard manatee conditions for in-water work" and "Sea Turtle and Smalltooth sawfish construction guidelines" to protect these species during construction.



To reduce waste and to foster sustainability initiatives, The TYLI team will evaluate the re-use of the demolished bridge's structure rubble for environmental mitigation of impacts using this material to restore ocean reef habitats as coordinated with Broward County.

Aesthetics

Our team understands that the design of landscape/ architectural elements are beneficial to the goal of retaining the project area's identity and attitude. As such, we believe that the inclusion of the landscape and architectural design in the engineering and planning process will be key to the success of this endeavor. To this end, TYLI will incorporate bridge features for hardscape and landscape elements that will complement the look and feel for design motifs of adjacent community developments. TYLI priorities in this regard are the safety of the traveling public; stewardship of environmental, cultural, and historical resource; integration of the transportation network into the adjacent landscape; and enhancement of the aesthetic quality of the transportation network.





- » Streetscape Design: The TYLI team will be responsible for the design and documentation of the area development streetscape for the project. The hardscape documentation will include plans, details, schedules and specifications for paving, rails and bridge appurtenances. Our goal is to provide a design theme expressed through the use of contextual hardscape and landscape elements. Aesthetic streetscape features will be designed with sustainability and aesthetics in mind including local materials and proven construction techniques.
- Landscape Planting Design: The TYLI team will be responsible for design and documentation of sustainable landscape planting for the project. The landscape documentation is anticipated to include plans, details, schedules and specifications for tree, shrub and groundcover plantings. These plantings will be specified to be as low maintenance as possible to minimize water consumption and to meet the aesthetic requirements of the project. Our design team will create a strong, consistent and recognizable landscape design theme for the South Ocean Bridge Drive Bridge and approach. Plant material selection is important and we will provide a consistent use of plant materials, trees and other plant materials that have distinctive colors and textures fitting with the existing neighborhood. Placement of landscape materials will support creation of a "Gateway".
- » Landscape Irrigation Design (Optional Service): The TYLI team will design an automatic landscape irrigation system for the project should the City's Arborist and stakeholders require plantings that require scheduled watering. If so required, we will retain the services of Irrigation Consultant Services, Inc. – who successfully completed the engineering of the irrigation system for the NE 13th Streets Project that is currently in construction.

Grading and Drainage Design

The TYLI team will be responsible for site grading design and

stormwater system modifications. This design will coordinate elevations in both the vehicular and pedestrian areas with the existing grades and proposed subsurface utility work. Project grading should be compliant with the design parameters established in the city's stormwater master plan, and current ADA accessibility requirements. The stormwater engineering design will include complying with the 2014 City adopted roadway flood protection criteria for a 10 year / 24-hour storm and all associated permit agencies' requirements.

Utility Coordination

In its preliminary investigation, the TYLI Team has requested a utility design ticket from Sunshine State One-Call of Florida (SSOCOF) and determined that there are five active utilities within the project limits; Comcast Cable, City of Fort Lauderdale, Florida Power and Light, TECO People GAS and AT&T Distribution. In our field review, we confirmed, that there will be two major conflicts during the construction of the new structure. Presently, AT&T Distribution is anchored to the west side of the bridge and FPL and Comcast are currently mounted on existing wooden pole facilities along the east side. The utility coordination team will work diligently to identify potential utility conflicts during the early stages of design, in an effort to resolve and/or mitigate utility concerns. We will determine if these utilities lie within easements along the right-of-way and if it is determined that they are there by permit, reimbursement will be required. We will work with affected utilities and assist them in the development of utility work schedules to relocate them prior to or during construction and minimize the lead time for the engineering and replacement of the existing wood poles for new facilities. As the utility coordinator, our goal will be to ensure that all utilities are either in no-conflict or relocated in accordance with the utility work and construction schedule.



We will coordinate with FPL on any potential undergrounding of the existing facility understanding that consensus from the local residents will have to obtained before the City of Fort Lauderdale can move forward with this type of initiative.

Lighting Design

The TYLI team will assess the existing public lighting in the project area and the desired improvements to the lighting identified during the primary phase. TYLI will prepare a lighting plan that identifies locations, fixture types and design intent for traffic, landscape and pedestrian area lighting.

Electrical Design

The TYLI team will be responsible for design of electrical service modifications to support lighting enhancements within the project area. We will support the City coordinating with Florida Power & Light (FP&L) for the existing overhead power distribution lines adjustment along the east edge of the bridge and south approach crossing. We anticipate these modifications will be performed by FP&L or others. Relocated utilities may be placed on a temporary support structure if the ultimate design calls for restoring them to the new bridge. It may be more effective to relocate them permanently (subaqueous, under the canal bottom) or within their own permanent support structure.

Traffic Engineering

The TYLI team will be responsible for the design modifications to the signalization at the intersection of Harbour Inlet Drive and Seabreeze Boulevard that may be required by the South Ocean Drive Bridge replacement. These signal timings modifications would be made to accommodate increased traffic accessing Harbour Inlet from Harbour Drive and the west end of Mayan Drive.

Demolition

The TYLI team will be responsible for preparing the plans and documents for the necessary demolition of the bridge and approach roadway embankments. As part of our sustainability initiative we will propose re-use of the structure rubble for environmental mitigation if possible serving the restoration of ocean reef habitat. We will coordinate these efforts with City staff and Broward County. Once the existing bridge utilities are relocated, demolition would be done in a single phase. New sub-structure and super structure work would follow.

Cost Estimating

The TYLI Team has the qualifications and experience to perform cost estimate in-house and among the team members.

Value Engineering

A team of engineers, cost estimators and construction professionals will convene regularly to meet for value engineering sessions that will evaluate key infrastructure elements of this project. The TYLI team is well aware of the City's goal to deliver a quality product within the allotted construction budget. Our team will search for cost savings opportunities that facilitate quality construction of the final product. At the conclusion of each session, a value-engineering memo with recommendations and cost-analysis to justify the proposed modification(s) to the original approved design concepts will be submitted to the City for review and approval. Once approved, the construction plans will be modified accordingly.

Progress Reports

During the design and construction document phase TYLI will prepare monthly progress and status reports for the City. These reports are anticipated to include assessments on schedule, budget, completion percentage, coordination items and a running list of action items. TYLI will be responsible for coordinating and issuing these reports with input provided from each of the disciplines.

Meetings

As described in our project approach we believe this project will be highly interactive and the team will is structured in a manner to facilitate continuous, open lines of communication. It is anticipated that the team will have weekly coordination meetings during this phase of the project.

BIDDING, AWARD & CONSTRUCTION ADMINISTRATION SERVICES

Our team has extensive experience in working with complex bridge projects. We will provide appropriate senior level inspection staff to be able ensure that the Contractor is building the project in accordance to the contract documents, that all sampling and material testing is complied with, and in the event, that this project is eligible for Local Agency Program (LAP) funding, that the appropriate documentation and paperwork is completed to ensure fill reimbursement to the City of Ft. Lauderdale. At a very minimum our construction administration team will perform the following:

- » Independent Constructability Review prior to start of Construction
- » Utility Pre-Construction Conference
- Attend Homeowners Association meetings, City commission briefings and other public meetings as necessary
- » Meet with individual homeowners as requested by the City's Project Manager
- Review and process all Shop Drawings



- » Review and Process all request for Information (RFIs)
- » Review Contractor's proposed work schedule
- » Inspect all elements of the work
- » Attend required permit coordination meetings with the Contractor and the City
- » Perform EEO audits if LAP funded

The following tactics will be used to assure a smooth transition from engineering to construction of the project:

- » A bid document checklist will be prepared and reviewed by the TYLI Team quality control team prior to use. The list will define all the documents and plans required for the bidding and maintain a list of addenda to make sure that the bid documents are current.
- » Daily e-mail and phone coordination between the construction administration and engineering task leaders is essential to coordinate contingencies and last minute requests by the City's project manager and procurement office.
- » During construction conference call action meetings between the engineering and construction administration task leaders to manage outstanding contractor questions during bidding.
- Weekly wrap-up face-to-face meeting with City staff, project manager, engineering, construction administration task leaders leading up to the bid date to identify outstanding issues and develop, and action plan for resolution.
- » During construction, weekly coordination meetings will be attended by the construction administration task leader. The assigned project controls staff member will maintain minutes of meeting and weekly submittal logs. The engineering task leader should be available to attend these meetings if so required. Constant communication between the engineer and construction administrator is vital to help notify the engineer well in advance when the engineer should be present.
- » Preparation of Bid Documents: At the conclusion of the 100% Construction Document package, the TYLI team will provide the City with plans and technical specifications in required City format to be issued for bids.
- » Pre-Bid Conference: The TYLI Team project manager and/or the construction administration task leader will

- attend a pre-bid conference for the project with staff to document the proceedings and issue minutes of meetings and note any questions asked by bidders that may require issuance of addenda.
- » Bidding Assistance: Following the pre-bid conference, the TYLI team will then remain available throughout the bid period to provide clarification and interpretation.
- » Bid Review: At the City's request the TYLI team will also review and comment on the Contractor bid submissions. We understand that our team will provide the City with our comments and recommendations, but that all final decisions, regarding Contractor selection and award, will be made by the City.
- » Pre-Construction Conference: Following the award of the project construction contract, the TYLI team's construction administration team and project manager will participate in a pre-construction meeting with City and selected Contractor. It is anticipated that the purpose of this meeting will be to discuss the construction schedule and sequencing as well as any open coordination items brought up by the Contractor.
- » Off-Site Construction Administration: Throughout the course of the construction period the TYLI team will coordinate the review and approval of the required shop drawings, submittals, samples and mock-ups. We will also be available to review contractor proposed alternates and substitutions and if of sufficient favorable impact to incorporate these is demonstrated. Alternates and substitutions will only be entertained if they can be shown to directly benefit the City and/or Project.
- On-Site Construction Administration: During the course of construction members of the TYLI team will make biweekly visits to the site to observe the progress of the work. If possible, it may be beneficial to coordinate these trips to coincide the routinely scheduled construction progress meetings with the Contractor. The average site visit is anticipated to be two to four hours depending on the stage of construction. Following each site visit the TYLI team, will prepare a Field Report noting the status of work in place, deficiencies and stored materials.
- Review of Pay Requests: At the City's request the TYLI team will also review and comment on Contractor pay requests and change order requests throughout the construction period. Requests will be monitored and reviewed based upon the status of the installation reviewed in the field. It is understood that the TYLI team will provide our recommendations to the City staff who will then have final approval of all pay requests.

- » Status Reports: During the construction period of this project, the TYLI team will prepare status reports for the City on a bi-weekly basis. These reports will assess the status of completion relative to schedule, the status of change orders relative to budget and tracking logs for RFI's and submittals.
- » Project Closeout: At a point at which the General Contractor believes they have reached substantial completion they may request that the TYLI team perform a punch walk review to identify deficient items that will need to be repaired or replaced prior to final buy-off.
- File Transfer: Throughout the course of the project TYLI will maintain organized files of all project documentation and correspondence. These files will be kept a series of binders that will be turned over to the City at the completion of the project. At that time TYLI will also transmit to the Owner digital files for all drawings.
- » Risk Mitigation: A detailed method to address cost overruns, schedule delays, and scope creep is to develop a Risk Register. A risk register is prepared when developing the project scope and is used to focus on the key scope items that might present a risk to the scope, schedule or budget.

A matrix is developed showing in rows A-E the likelihood of an event occurring, ranging from an almost certain occurrence to a rare occurrence. The "consequences" columns indicate the severity of consequences if the event occurs with a range from "minor" to "catastrophic". Developing the register is somewhat subjective, but based on past experiences; reasonable assumptions can be made for likelihood and consequences. For example, the project team should consider the potential for a hurricane during construction.

APPROACH TO PROJECT QUALITY

Quality is essential on all engineering projects. TYLI is committed to delivering work products that meet or exceed industry standards and the City's expectations. To accomplish this, we begin each project with the preparation of a Quality Management Plan (QMP).

The OMP is built on three foundational elements:

- » Communication
- » Commitment of all the individual team members
- » Clear Expectations

All team members will be required to follow the quality control and assurance processes contained in a unified QMP. With regards to the commitment of each team member, we strive to maintain a culture of accountability where each team member is invested in the overall project outcome. We encourage team members to be proactive and not to take anything for granted. We also strive for team continuity throughout a project.

TEAM COORDINATION AND COMMUNICATION

TYLI will hold meetings with our team members as necessary throughout the life of each task order. These meetings will include all assigned staff, including sub-consultants. Interim reports and updates will be sent by email or by use of our FTP sites, which will be made available to all the assigned staff. Each sub-consultant project manager will provide weekly progress reports to TYLI's Project Manager. Minutes of all progress meetings will be distributed for comment. Coordination is a critical element for a successful project and we recognize that keeping the City informed of project issues will lead to more effective resolutions. We propose to conduct monthly progress meetings with your Project Manager and/ or Task Order manager to review project status, prepare for upcoming meetings, identify data and coordination needs, review comments, and other project elements that could potentially impact project development. Regular communication will be essential to pro-actively Identify and address any possible delays to the schedule or impacts to the budget and ensure that the deliverables meet your goals. We will provide you with monthly project progress reports which document our progress, future activities and other critical project items. In addition, there will likely be required coordination between our team members and consultants involved in other City projects. We will fully cooperate with the other City consultants to ensure that overall City objectives are met in a timely manner. With all of our projects we disseminate and exchange information via email, websites, FTP sites, and interactive websites. All activities are identified in a Work Plan that is prepared for each task order, which is coupled with the task schedule and continuously monitored, so that assignments are completed in an efficient and timely manner.

APPROACH TO SCHEDULING METHODOLOGY

Our experience over the past 60 plus years working on bridge projects with local municipalities has given us a keen understanding and ability to perform work efficiently getting it right the first time. We pride ourselves on managing our schedules effectively and that working for public clients is to be entrusted with the taxpayers' dollars, a responsibility we take very seriously. We pledge to the City that once we agree on the project schedule and budget we will perform to exceed your expectations.



We will maintain control of the project schedule from the NTP to submittal of final deliverables and will conduct biweekly meetings with all personnel involved in the project. TYLI uses Microsoft Project and Primavera as our primary scheduling tools. In some instances, and/or with certain staff and assignments, simple Excel spreadsheets and progress reports are appropriate. At the onset of a task, we will develop a schedule in accordance with your requirements and objectives for your review. Once the task is underway, the schedule will be reviewed regularly by our Project Manager and Task Managers to ensure the project stays on track. The schedule will be adjusted as needed to accommodate the needs of the City. We will optimize the time needed to accomplish the project by allocating resources according to the demands imposed by the schedule and addressing critical path items in a logical sequence. A mitigation plan and take action to address budget issues.

TYLI will control the schedule at two levels:

- » Overall project schedule, including required staff for ongoing projects
- » Specific task level, including required staff for a given assignment.

To ensure the accuracy of tasks contained in TYLI's project schedule, the following will be investigated:

- » Critical Path Actual required staff availability versus performed work
- » Resources/Utilization Actual versus anticipated expended staff hours
- » Milestones Deliverable dates
- » Schedule Feedback Collectively evaluated by discipline leaders
- » Potential Delays Identify potential delays and assess additional staff requirements
- » Evaluate Completion Percentile figure based on staff hours to complete

Our proposed schedule methodology (time line) for this project is presented at the end of this section. The project was developed using Microsoft Project based on business days (i.e., 20 business days is equal to one month). The total construction time for the bridge is estimated at 160 business days, or 8 months. The project will be divided in three parts:

- » Data Collection and Project Development
- » Design
- » Bid, Award, and Construction Administration

During the first two phases the critical path items are public outreach, environmental data collection, analysis and permitting together followed by the City's approval of the preferred alternative, preparation of the final plans and construction phasing. Environmental permitting is routinely a long lead activity with a high risk for delay. The TYLI team will pay particularly close attention to expediting the environmental permitting process to ensure these are in place prior to contract award and notice-to-proceed with construction. The third and last phase, bid, award, and construction of the bridge, and punch list resolution are all critical items during the construction phase – particularly the punch list resolution phase.



Another long-lead item are the utility relocations. The critical path could shift to the utility coordination and relocations of the AT&T ducts currently strapped on to the west side of the existing bridge and replacement of existing FPL power distribution lines. This would occur if the total time to negotiate an agreement, engineer (by others), and install/relocate these should lengthen beyond the estimated 180 days (9 months). Work on this task will commence as soon as possible, once all data collection and preliminary work program are identified.

BUDGET CONTROL

Project schedule, scope, and budget are interlinked and actively tracked once a task has been undertaken. TYLI will track project expenditures versus the agreed upon schedule. This, combined with the Project Manager's knowledge of the project progress, provides a snapshot of how the schedule is progressing compared to the project budget. This proactive approach for project control allows the Project Manager to monitor progress and take action to avoid overruns well in advance of the situation becoming critical. In the event there are unavoidable budgetary issues, TYLI's Project Manager will develop a mitigation plan and take action to address issues.

As projects are engineered, we will control construction budgets by evaluating the constructability and construction cost of the project elements assigning a separate team to perform value engineering assigned based on the scope and magnitude of the project. This effort will be performed once the project attains a certain milestone of completion. We propose a value engineering be performed on the project immediately following the City's approval of the recommend alternative and before we begin the development of final plans and construction documents. At this juncture the project is configured and detailing begins. Before the design team continues to finalize the project we will verify that there is no alternative solution that is easier and cheaper to build. We have been very successful at controlling cost on our projects employing this on-going method learned through our extensive design-build project experience. A formal value engineering process approach is, of course, very beneficial for large scale projects; however, a scaled down approach at the right time in project development will help keep this bridge replacement project within budget.

CURRENT WORKLOAD AND AVAILABLE RESOURCES

Staffing Plans

We recognize the importance of workload projections. It is a practice of TYLI to review our workload projections weekly as part of our project management procedures. This includes evaluating project objectives, scopes, firm personnel resources and type of services to be performed, and its commitment to on-going clients. On a regular basis subconsultant firms will be asked to provide TYLI with a status of their staff projected availability for this contract. We have no doubt that we have assigned sufficient staff to successfully perform on this project.

We recognize the importance of workload projections and conduct them weekly to balance demand between various projects using resource leveling spreadsheets as part of our project management procedures. This balancing exercise includes evaluating project objectives, scopes, staff resources, and types of services to be performed. We ask that our sub-consultant partners do the same when they're involved in a task order. In South Florida, TYLI has 115 transportation professionals, 20 of which are located locally in Fort Lauderdale. Additionally, TYLI has the support of nearly 2,500 professionals nationally and internationally to provide additional resources and expertise as-needed. Our subconsultant partners also provide an additional 100+ technical professionals in South Florida ready to serve the City on this contract. With the TYLI team's depth and resources, we are fully able to assign sufficient staff to manage the concurrent assignments required by this bridge replacement project to meet the City's needs.

Current Workload

The TYLI team brings depth of staff and resources sufficient to provide the City with the full range of services required by this project. We are available to start work immediately on this project. Our team's Project Manager is not currently assigned to any major project – and devote 100% of his attention on the successful completion of this bridge replacement project. In addition, the TYLI team has sufficient capacity to undertake the various assignments described in the Scope of Services. Though each member firm has its assigned role for this contract, we have overlapping capabilities, which allow us to draw from the team's resources to address contingencies that may arise during the project's development. In addition to the TYLI team providing depth and redundancy in skill sets, team members have ample availability to accomplish their assignments through the contract period.

AVAILABLE FACILITIES, TECHNOLOGIES, AND OTHER RESOURCES

Project management and a major portion of the work for this bridge replacement contract will be performed out of TYLI's Fort Lauderdale office, supported by Coral Gables, as well as other South Florida locations, as needed. The work performed by our sub-consultants will also be performed from local office locations.

In addition to industry standard tools and technology, the TYLI team will provide the City with access to state-of-theart and cutting edge equipment and software applications needed for transportation facility analysis, planning, design, programming, and implementation. A description of some of the TYLI team's tools and technologies follows:

CADD Capabilities

TYLI utilizes Computer Aided Design and Drafting (CADD) tools such as MicroStation and AutoCAD—as well as Geopak, Civil 3D, Auto TURN, GuidSIGN and Synchro in design of roadways, maintenance of traffic (MOT) plans, Signing and Pavement markings, and traffic control devices—to develop design deliverables. TYLI also uses ArcGIS to import and export georeferenced data such as traffic volumes, roadway descriptions, aerial, environmental resources, and land uses for analysis, display, and design purposes. TYLI has expertise to process, analyze, and visualize engineering drawings in three dimensions (3D) in real-world situations to better estimate capital costs and improve designs before projects are advanced for implementation and construction.



Traffic and Transportation Engineering Software

- Pedestrian and Bicycle Microsimulation: To overcome the limitations of tools traditionally used for conducting traffic operational analysis and evaluate bicycle/ pedestrian improvements, the TYLI team will use Viswalk pedestrian and bicycle microsimulation software. Viswalk is unique in that it models bicycle and pedestrian behaviors and their interaction with other modes of transportation in real-world situations. Information and measures of effectiveness produced from VisWalk can be used to verify the design and implementation of ADA compliance, bicycle/pedestrian safety, and to develop traffic control plans.
- Traffic Operational Analysis: The TYLI Team uses Synchro/Sim Traffic and CORSIM microsimulation models as well as the High Capacity Manual (HCM), 2010 Edition and Highway Capacity Software (HCS) 2010 for conducting operational and queuing analysis. We anticipate performing these analyses at the intersections of neighborhood streets Harbour Inlet Drive and Mayan Drive with SE 17th Street/Seabreeze Boulevard/A1A as appropriate. The Synchro software uses the HCM methodology to determine intersection capacity and level of service (LOS). Simulation will be performed using the SimTraffic software and/or CORSIM to provide a detailed look at the simulated traffic flow and queue along the intersections and mainline corridors. SimTraffic will be mainly used for data input quality control, quality assurance and visual confirmation of the traffic behavior. Simulation parameters will be used as measures of effectiveness.
- » Geographical Information Systems (GIS): The TYLI team has made a dedicated commitment to embrace Global Positioning System (GPS), Geographic Information Systems (GIS) mapping, and digital imaging technologies, and to stay on the leading edge of new technologies and advancements. Our capabilities in this area include state-of-the-art equipment, image processing software, unique in house databases, and specialized personnel.

Infrastructure Design and Planning

Structural Design: TYLI's software and hardware capabilities are numerous and provide us with the resources necessary to tackle any structural design. The software list includes LeapBridge, MDX, SAP, FB Pier, MIDAS, ET Culvert, and FDOT programs, Lpile, ENERCALC, Merlin Dash, CSI Bridge, TANGO and MathCAD. TANGO is time-dependent analysis software used by complex bridge engineering firms around the world. This wide variety enables the correct tool to be used for the design

- or analysis of all elements of a structure girders, piles, piers, bearings, decks, etc. These tools allow for a load rating analysis to a more intricate one like finite element modeling, which is often used to determine the behavior of an entire structural system or individual members. The software available is not just limited to bridge structures but is also used for pole foundations and sign structures. The hardware used includes computers to quickly process the design or analysis
- Electrical: TYLI uses the SKM Power*Tools for Windows (PTW) for electrical engineering used to create oneline diagram system models and to run various studies on them to check their performance, safety and manageability. The program has the capability to be used in many types of electrical studies, such as:
 - Performing load flow analysis to calculate the voltage drop on feeder and transformer branches, voltage on each bus, projected power flow, and losses in the power system;
 - Performing electrical coordination studies;
 - Arc Flash Evaluation where the incident energy and arc flash boundary for each location in a power system is calculated.



Lighting Design: For lighting design, TYLI will use AGi32 Lighting Analysts Illumination engineering software. AGi32 is an industry standard software tool that can be used to predict the photometric performance of selected luminaries or daylight penetration in a simulated environment. AGi32 is capable of a number of lighting specific computations aside from the basic incident illuminance (fc/lux) on any real or imaginary surface including evaluating different types of fixtures to improve energy efficiency and increase sustainability. The software can also compute pavement luminance for roadway and bridge applications per IESNA-RP-8-2000, RP-22-2011 and several international standards;



Glare Rating and Unified Glare Rating (CIE metrics for discomfort glare evaluation); and Daylight Factor on any real or imaginary surface.

- Hydraulic Calculations: TYLI is proficient with the HASS package, which assists in determining water supply adequacy based on system demand and distribution piping. With HASS, hydraulic analysis in accordance with NFPA13,13D, 13R, 14,15,20,24,750 and other standards, calculating any connection of nodes and pipes can be accurately performed. For hydraulic calculations, HASS can utilize either the HazenWilliams formula or the Darcy-Weisbach formula, using total or normal pressure friction loss considerations. Darcy-Weisbach is used where specified (e.g., antifreeze systems, water-mist systems, flow of foam concentrate and other liquids), while Hazen-Williams Is used for sprinkler systems (grids, trees, and loops), water spray fixed systems, standpipe systems, yard main (hydrant) systems, AFFF systems, and any other flow of water through pipes under pressure; systems with multiple sources, multiple pumps (with a tank, reservoir, or public main), or multiple fixed pressure loss devices or multiple riser feeds. With either formula, there is no limit to the K-factor of the flowing nozzle, pressure reducing valve or sprinkler. It can readily adjust pipe sizes as the design is optimized.
- Stormwater/Drainage Calculations: We will prepare drainage calculations and associated hydraulic modeling using the Interconnected Pond Routing (ICPR) model by Streamline Technologies, Inc. and/or the Automated Storm Sewer Analysis & Design (ASAD) software by Hiteshew Engineering Systems, as applicable.

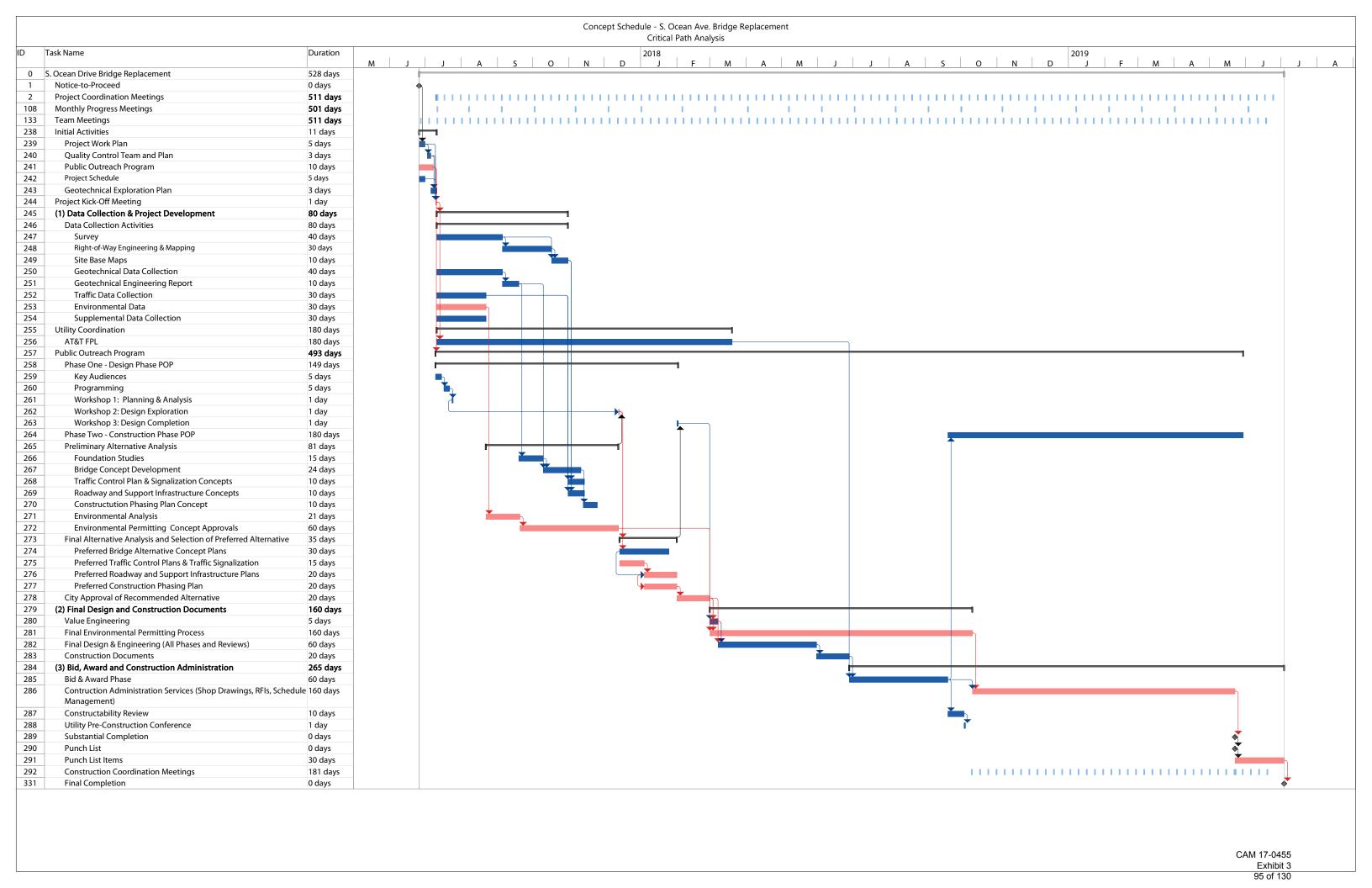
The latest generation of ICPR, released in 2014, includes fully integrated 2D surface water and groundwater flow with an emphasis on interactions between surficial aquifer systems and surface water bodies.

- Traditional 1D H&H
- Continuous Simulation
- 2D Overland Flow
- Georeferenced Graphic System
- 2D Groundwater Flow
- All Modules Fully Integrated
- Single Event Simulation

The combination of integrated surface water – groundwater flow and continuous simulation makes possible its use to for many water resources applications and analyses, such as: wetland hydro-

period assessments, wetland restoration, impacts of sea level rise on groundwater tables, consumptive water use, stormwater reuse, water sustainability, irrigation demands, and construction dewatering.

ASAD automatically computes pipe lengths and sizes, as well as inlet/manhole elevations and drainage areas. Storm sewer design is tied to the roadway geometry, so that recovery from roadway alignment changes (vertical and/or horizontal) takes seconds instead of hours if performed manually. Because ASAD lets the user change the storm sewer configuration quickly, the user can try numerous "what-if" scenarios to optimizer for cost, hydraulics, outfall locations, inlet spacing, or any combination of these. ASAD uses standard state DOT-defined drainage structures (inlets/manholes/ditch bottom inlets) for both hydraulic analysis and CAD drafting. The user also can create other non-standard structures as needed.



REFERENCES



References

Firm	Project	Client Name	Client Address	Client Contact	Description of Work	Year Completed	Cost of Construction
T.Y. Lin International	SR 97 Over Sandy Hollow Creek Bridge Replacement	Florida Department of Transportation, District 3	Highway 90 East Chipley, FL 32428	Sandra Lamb, PE (850) 227-1141	Rural 2-lane bridge replacement project. Design team implemented the use of the Geosynthetic Reinforced Soil—Integrated Bridge System for the substructure and a Florida Slab Beam system for the superstructure. These design innovations resulted in a savings for the District of \$562,000 over the use of a conventional flat slab bridge. Another innovation was the use of a temporary bridge to facilitate maintenance of traffic during construction.	2016	N/A
T.Y. Lin International	Venetian Causeway Bridge Rehabilitation Design-Build	GLF Construction	80 SW 8th Street Miami, FL 33130	Bill Junkin wjunkin@glfusa.com	\$12M design-build project that encompasses the complete demolition and replacement of the westernmost 731 feet of the existing Venetian Causeway bridge from Miami's mainland to the outer islands. The project includes the removal and disposal, in an artificial reef, of the bridge's westernmost superstructure and substructure, including the first abutment, existing bulkhead and the expansion joint at the end of the cantilevered beams and replacing these with a new complete bridge superstructure, substructure, approach roadway and lighting.	2016	\$12,000,000
T.Y. Lin International	Chokoloskee Bridge Replacement	Collier County Department of Transportation	2885 Horseshoe Drive South Naples, FL 34104	Marlene Messam (239) 252-5773	Replacement of the 57-year-old, 200-foot long Chokoloskee bridge on the causeway connecting Chokoloskee Island, the southernmost community on the west side of Florida, with Everglades City. Chokoloskee Bridge is the only means of surface transportation to residents and therefore it is their only hurricane evacuation route and the client required that 2-way traffic and pedestrian access be maintained at all times during construction. An ACROW 3000 Series temporary bridge with sidewalk was utilized to allow for the removal and replacement of the existing bridge in a similar horizontal alignment while maintaining safe pedestrian and vehicular flow.	2015	\$4,500,000
T.Y. Lin International	Smokehouse Bay Bridge	City of Marco Island		Timothy Pinter, PE (239) 389-5018	The City of Marco Island (jewel of the Florida Gulf Coast and located adjacent to the City of Naples) selected five companies to present designs for a replacement of the current Smokehouse Bay Bridge. The two bridge structure currently in place will be at the end of its useful life in 2013/2014. TYLI design removed the center support allowing better navigable space for boaters while increasing the mean high water elevation to 13.7 feet. The highest clearance submitted for this project. The additional clearance allowed for the creation of an inviting space under the bridge for pedestrians, bicyclists, and fisherman. Parks on both sides of the bay will be connected with a safe pedestrian path above and below.	2016	\$8,000,000
Arehna Engineering, Inc.	SR 84/ I-595 at NW 136th Avenue	Lakes Engineering, Inc.	4870 SW 72nd Ave Miami, FL 33155	Eugenio Ochoa, PE eochoa@lakeseng.com	The purpose of this geotechnical exploration consists primarily of obtaining sufficient geotechnical information about the site and subsurface conditions for use in evaluation the proposed foundation types and design of the planned structures.	In progress	TBD



Firm	Project	Client Name	Client Address	Client Contact	Description of Work	Year Completed	Cost of Construction
Arehna Engineering, Inc.	5th Street Bascule Bridge Replacement	Hardesty & Hanover, LLP	1000 Sawgrass Corp. Pkwy Suite 544 Sunrise, FL 33323	Mike Sileno, PE msileno@hardesty- hanover.com	Geotechnical explorations for the 150-foot bascule bridge (four-lane replacement) over the Miami River. In addition to replacing the existing bascule bridge with a new longer bascule bridge, bulkheads along the river and drainage improvements were required. The project also included improvements to the streets and intersections at each end of the bridge.	2010	\$189,730
Arehna Engineering, Inc.	SR 710 / Beeline Highway	HDR Engineering, Inc.	15450 New Barn Rd Suite 304 Miami Lakes, FL 33014	Rohan Hameed, PE Rohan.Hameed@ hdrinc.com	The geotechnical study for the project requires both the evaluation of existing geotechnical information and the collection of subsurface data and various geotechnical analysis and evaluation. The purpose of this geotechnical exploration consists primarily of obtaining sufficient geotechnical information about the site and subsurface conditions for use in evaluation the proposed foundation types and design of the planned structures. Laboratory analysis was performed on soil samples to obtain information for foundation analysis and pavement design.	In progress	\$480,000
Corradino	West 31Street and 32nd Street from West 12th Avenue to West 9th Avenue and West 11th And 9th Avenue from West 30th Street to West 33rd Street	City of Hialeah	501 Palm Avenue Hialeah, FL 33010	Mr. Jorge Hernandez jehernandez@ hialeahfl.gov	The design and preparation of contract documents detailing the full roadway and drainage reconstruction on West 31st and 32nd Streets from West 12th Avenue to West 9th Avenue and West 11th and West 9th Avenue from West 30th Street to West 33rd Street as part of the City of Hialeah's Roadway Improvement Program under our General Engineering Services Contract with the City of Hialeah.	2016	\$2,716,834
Corradino	West Glynn Archer Drive/ 14th Street Roadway Enhancements	City of Key West	3140 Flagler Avenue Key West, FL 33041	Janet Muccino jmuccino@keywestcity. com	The purpose of the project was to provide a continuous segment of sidewalk along both sides of the corridor to provide a safe route to school and to enhance pedestrian mobility and comply with ADA standards. The Corradino Group was retained to provide the roadway, drainage and signing and pavement markings design.	2012	\$1,895,000
Garth Solutions	Fort Lauderdale- Hollywood Int'l Airport New Runway and Terminal Expansion	AECOM	4101 Ravenwood Rd, Suite 401 Fort Lauderdale FL 33312	James.J. Pantina Jim.pantina@aecom. com	Project Administration, Public/Community outreach, Document Control.	2018 (est)	\$1,200,000,000
Garth Solutions	City Of Miami Gardens New Muncipal Complex	City of Miami Gardens	18605 NW 27th Ave Miami Gardens, FL 33056	Mayor Oliver Gilbert ogilbert@ miamigardens-gl.gov	Community outreach, Project Administration, Diverse Vendor Program, Workforce program	2015	55,000,000
Garth Solutions	New Meadowlands/ Metlife Stadium	DCK Worldwide	One PPG Place 27th Floor Pittsburgh, PA 15222	Frank W. Falciani ffalciani@dckw.com	Community outreach, Project Administration, Diverse Vendor Program, Workforce program	2010	\$1,400,000,000

Firm	Project	Client Name	Client Address	Client Contact	Description of Work	Year Completed	Cost of Construction
Intera	FDOT Coastal Engineering Services	Florida Department of Transportation	605 Suwannee St MS 32 Tallahassee, FL 32399-0450	Rick Renna, PE Rickey.Renna@ atkinsglobal.com	INTERA provides coastal engineering, bridge hydraulic modeling, hurricane generated storm surge and wave modeling, scour calculation, and wave load calculation services in support of bridge design and assessment statewide.	Ongoing	N/A
Janus Research, Inc.	Venetian Causeway	EAC Consulting	815 NW 57th Ave Suite 402 Miami, FL 33126	Enrique Crooks 305-265-5455	This project consisted of a historical documentation survey, as the MOA stipulated the documentation of two bascule spans and three stringer bridges. The project included large-format photography, the preparation of historic drawings using archival-quality supplies, the acquisition of historic photographs, and the production of a final report documenting the work.	Ongoing	\$213,832 (est)
Janus Research, Inc.	Ocean Avenue Bridge	E.C Driver & Associates (currently: URS Corporation)	105 E. Palmetto Park Rd Suite 340 Boca Raton, FL 33432	Luis Acosta 561-392-9578	The Ocean Avenue Bridge is a small gear driven, Chicago-style, double-leaf, trunnion bascule bridge. Constructed in 1950, this bridge spans the Intracoastal Waterway. In 2003, Janus Research conducted a cultural resources assessment survey of this bridge and adjacent historic resources. Following the identification and evaluation phases, it was determined this bridge was not eligible for inclusion in the National Register of Historic Places, due to alterations and commonality.	2003	\$15,001
Janus Research, Inc.	Flagler Memorial Bridge	Florida Department of Transportation District 4	3400 West Commercial Blvd Fort Lauderdale, FL 33309	Lynn Kelly 954-777-4334	JANUS RESEARCH conducted the cultural resources assessment survey for this significant bascule bridge connecting Palm Beach and West Palm Beach. This bridge was determined eligible for inclusion in the National Register of Historic Places, and was also considered a contributing resource to the surrounding commercial area. Following the survey work, an effects evaluation took place, numerous Cultural Resources Committee meetings were held, and a Memorandum of Agreement was prepared. To complete the project, Janus Research prepared a marketing plan for the bridge and assisted with the implementation of the mitigation measures. The above mentioned tasks were related to the Section 106 process, and Janus worked with the team to comply with Section 4(f) as well, which included preparing a Programmatic 4(f) document that was submitted to FHWA.	2015	\$31,196
Keith & Schnars	Churchill Drive	Seminole County	520 West Lake Mary Blvd Sanford, FL 32773	Calvin Landers, PE clanders02@ seminolecountyfl. gov	The scope of this project was new sidewalk construction, including A.D.A upgrade, underdrain installation inspection, roadway and curbs rebuild, material sampling, milling and resurfacing, verification paving report, and daily report in FDOT format.	Ongoing	\$54,014



Firm	Project	Client Name	Client Address	Client Contact	Description of Work	Year Completed	Cost of Construction
Keith & Schnars	Resurfacing & Bike Lanes Project NW 52 Street east of NW 107th Avenue to NW 97th Avenue and on NW 102nd Avenue from NW 41st Street north to NW 58th Street	City of Doral	8401 NW 53rd Ter Miami, FL 33166	Jorge Gómez, PE jorge.gomez@ cityofdoral.com	Excavation and installation of new drainage structures, existing tree relocations, new landscaping, replacement of concrete sidewalk, curb and gutter, milling and resurfacing of existing pavement including new bike paths, upgrading of existing signalization and roadway lighting relocations, updating of existing school crossing beacon system at John I Smith K-8 School area on NW 52nd Street and NW 104th Avenue area.	Ongoing	\$228,835
Keith & Schnars	Residential Development Phase 1 & 2	Seminole Tribe of Florida	3107 North State Rd 7 Hollywood, FL 33021	Fabian Lefler, PE FabianLefler@semtribe. com	CEI - Task based	Ongoing	\$238,611
Marlin Engineering	Traffic Calming Plan	City of South Miami	6130 Sunset Drive South Miami, FL 33143	Grizel Martinez gmartinez@ southmiamifl.gov	Prepared an area-wide traffic calming master plan. The study reflected traffic calming measures in an effort to reduce or eliminate cut-thru traffic and speeding within the neighborhood. Analyzed local traffic patterns based on Miami-Dade County Traffic Flow Modification guidelines and standard procedures. Existing traffic conditions at critical locations and roadway segments were addressed by proposing appropriate countermeasures. MARLIN also met with residents to provide them with an opportunity to identify the existing traffic issues within the study area and to provide direction for the study's focus. Tasks included: field review and inventory, traffic data collection, determination of critical locations, traffic calming analysis, preparation of a recommendations, County approval and permitting.	2016	N/A
Marlin Engineering	General Engineering Consultants	Town of Cutler Bay	10720 Caribbean Blvd Suite 105 Cutler Bay, FL 33189	Alfredo Quintero Jr. aquintero@cutlerbay- fl.gov	General engineering services including: roadway design; civil engineering; environmental engineering; traffic engineering; transportation planning, surveying, SUE and CEI	2014 - Current 2008 -2014	Various
Marlin Engineering	Krome Avenue Reconstruction	FDOT District 6	1000 NW 111 Ave Miami, FL 33172	Adriana Manzanares adriana.manzanares@ dot.state.fl.us	Major reconstruction project widening SR 994 from four to six lanes in Miami-Dade County. It includes major permitting activities due to its proximity to sensitive wetlands. MARLIN was responsible for the design plans including traffic control, drainage and structural plans, utility coordination and project management.	Current	N/A

MINORITY (MBE) PARTICIPATION



Minority (MBE) Participation

T.Y. Lin International (TYLI) is not an MBE firm; however, we routinely team with small and disadvantaged companies that are MBE Firms taking pride in our efforts in accordance with the MBE procurement goals under Florida Statutes 287.09451. The MBE firms included in the TYLI team are considered partners in this endeavor and will have meaningful participation that compliments their respective areas of technical expertise.

To assure MBE firms will have an equal and fair opportunity to share in the City of Fort Lauderdale's contract opportunities, we have to make sure we have the MBE "right" firms on our team. We make sure that they:

- » Express interest and commitment to the project
- » Complement our internal skill-set and have defined roles
- » Have staff that are available to focus on the job at hand

TYLI is mindful of affording opportunities MBEs, and as such continually strives to include them in our endeavors. These opportunities are qualified by the firm's technical proficiency and credible work history with various clients. This philosophy reinforces each of TYLI's proposed project team and in turn affords the firm perspective clients the technical excellence worthy of consideration.

TYLI was formerly a certified minority firm (H.J. Ross Associates) and has always actively retained working relationships with local minority firms. TYLI commits to incorporating certified MBE firms to its team that are complimentary to serving the City of Fort Lauderdale.

Team members Arehna Engineering, Inc., Garth Solutions, Inc., and Marlin Engineering, Inc., are certified MBEs, as recognized by the Florida Department of Management Services, Office of Supplier Diversity (DMS/OSD). Together, we commit to a minimum participation of 15%. TYLI has successfully teamed together with in the past on other projects for various municipalities in South Florida, including several miscellaneous infrastructure projects, as well as reviews and inspection services. They have the qualifications and experience necessary to support our team on this contract. We look forward to expanding our firm's relationships with MBE firms in Broward County and the region.

TYLI follows a methodical process to select project team members. Assembling the TYLI team that best fits the City of Fort Lauderdale's needs is critical to project success. To make sure that our MBE team partners have a meaningful role in the project and enjoy a fair share in the work we:

- » Analyzed the project task, break it into component practice areas, and identify the expertise necessary to complete the tasks.
- » Evaluated what particular requirements the project may have, such as the ability to work to tight schedules or a unique service specialty.
- » Drew from established relationships and knowledge of MBEs capabilities that we know well and trust.
- » Compared MBE firms that have the skills and performance credentials to support our team and identify which ones are the best fit.
- » Identified potential MBE firms that have the qualifications and expertise that complement our in-house capabilities and those of our team members.
- » Compiled our team and identified additional required expertise or resources, contacted team member firms to provide the additional staff -- thereby enhancing the firms' role and participation on the project.
- » Established a target percentage utilization of the work to be performed by the MBE firms.

For this solicitation we contacted several firms that were new to us and that are listed on the DMS/OSD database searching for those that had the qualifications and expertise required for the project.

We consulted with other team member firms, Keith & Schnars and Corradino, for their recommendation of firms with exemplary records of accomplishment that could support our team providing much needed support services for this project. These services included subsurface utility engineering, data collection, underwater inspections, public involvement, construction administration support, geotechnical engineering and soils and material testing. Ultimately, we have included MBE firms Arhena Engineering, Garth Solutions, and Marlin Engineering on our team.



SUB-CONSULTANTS

SOUTH OCEAN BRIDGE DRIVE



Sub-Consultants



AREHNA ENGINEERING, INC.

AREHNA Engineering, Inc. provides geotechnical engineering and materials testing services. They have an experienced staff of engineers, who work closely with clients and project design teams, carefully consider project information and provide the most cost-effective solutions to the challenges faced on each project. AREHNA's engineers' project experience includes many thousands of geotechnical engineering and materials testing projects, including roadway, bridges, airports and utility plant projects under system-wide/districtwide contracts for FDOT, SWFWMD, FDEP, Broward County, Hillsborough County, City of Sunny Isles, City of Tampa, City of Orlando, Port Tampa Bay, and many other local agencies.

AREHNA has in-house drilling and pavement coring capabilities as well as an AASHTO accredited, FDOT certified and USACE validated laboratory. AREHNA Engineering was organized in 2009 and is a certified DBE with the Florida Department of Transportation, as well as a woman-owned small business registered with several local agencies.

Number of Years of Experience: 8 years

Business Structure: Corporation **Minority Certifications:** DBE **Registration:** State of Florida

Address: 1440 Coral Ridge Drive

Suite 116

Coral Springs, FL 33071

Phone & Fax: (954) 417-8412 / (813) 944-4959

Email: aalba@arehna.com
Website: www.arhena.com

Contact Person: Angela Alba, PE

Size of Firm: 40 Employees



THE CORRADINO C=GROUP, INC.

Established in 1971, Corradino is a 153-person firm which has been providing municipal services to clients in South Florida and across the nation for over 45 years. As a multi-disciplinary firm, Corradino is adept at handling the myriad of issues faced by cities of all sizes and all stages of development. Having practiced these services in South Florida the firm understands the enormous pressures that municipalities are under. Corradino is an expert in the fields of civil engineering, roadway design, drainage design, traffic engineering, growth management, transportation planning, comprehensive planning and zoning, urban design, environmental planning, and construction engineering and inspection.

Number of Years of Experience: 46 years

Business Structure: Corporation **Registration:** State of Florida

Address: 4055 NW 97th Avenue

Suite 200

Doral, Florida 33178

Phone & Fax: (305) 594-0735 / (305) 594-0755

Email: CAlcantara@corradino.com

Website: www.corradino.com

Contact Person: Carlos Alcantara

Size of Firm: 153 Employees





GARTH SOLUTIONS, INC.

Garth Solutions, Inc. (GSI) is a management consulting firm that delivers targeted and strategic business solutions to a diverse portfolio of clients encompassing both the public and private sectors.

The GSI team is made up of proven and talented professionals who immerse themselves in our client's mission in order to deliver the most effective solutions tailored to securing the best possible outcomes.

We are natural collaborators who enjoy ongoing, working relationships with trusted partners, allowing us the freedom to leverage all resources at our disposal to best support our client's needs. It is this scalability that enables us to positively impact marquis projects such as the construction of the built \$1.4 billion New Meadowlands (currently MetLife) Stadium in East Rutherford, NJ to providing employee benefit and insurance support to the thousands of lives covered by Palm Beach County Schools in South Florida. One of our proudest accomplishments throughout our company's journey, however, is the over \$400 million of economic impact we have helped our clients to achieve in support of small businesses and diverse firms across the United States journey.

Number of Years of Experience: 14 years

Business Structure: Corporation

Minority Certifications: DBE/ACDBE, CBE/SBE, MWBE

Registration: State of Florida

Address: 7951 Riviera Boulevard

Suite 411

Miramar, FL 33023

Phone & Fax: (954) 727-3007 / (954) 727-3040

Email: yvonne@garhsolutions.com **Website:** www.garthsolutions.com

Contact Person: Yvonne Garth

Size of Firm: 20 Employees



INTERA INCORPORATED

Originally established in 1974, INTERA Incorporated is a multidisciplinary geosciences and engineering firm focused on providing clients with the information needed to effectively address risks associated with water resource, coastal, environmental, and waste isolation management issues. Their personnel have completed bridge hydraulics reports, bridge hydraulics analyses, and/or scour assessments for hundreds of individual riverine and tidal bridges across the United States including Florida, Louisiana, Mississippi, New York, North and South Carolina, Texas, Virginia, and Washington. These applications have included prediction of design conditions during both hurricane storm surge events and upland riverine flooding events. Examples of INTERA's work on several high profile bridges include the new Tacoma Narrows Bridge in Washington, the LA-10 John James Audubon Bridge over the Mississippi River in Louisiana, the Tappan Zee Bridge over the Hudson River in New York, and the Bonner Bridge over Oregon Inlet in North Carolina. Given our considerable experience with constructing, running, and reviewing hydrodynamic models, INTERA can tackle any coastal or riverine modeling needs whether they are in a hydraulic model development/scour analysis or a quality assurance review capacity. INTERA has completed several projects within and nearby the City working either directly for the City or for FDOT District 4. Recent examples of this work includes evaluating shorelines for the development of a seawall master plan for the City, evaluation of the flows through the Federal Highway over the Dania Cutoff Canal Bridge, and performing scour evaluations in support of FDOT District 4's Scour Evaluation of Unknown Foundations Bridges program. Notably, this included a scour evaluation of the South Ocean Drive Bridge.

Number of Years of Experience: 43 years

Business Structure: Corporation **Registration:** State of Florida

Address: 2114 NW 40th Terrace

Suite A-1

Gainesville, FL 32605

Phone & Fax: (352) 332-2323 / (352) 870-8613

Email: MGosselin@intera.com
Website: www.interra.com

Contact Person: Mark Gosselin Size of Firm: 138 Employees

SOUTH OCEAN BRIDGE DRIVE





JANUS RESEARCH

Janus Research consistently provides District 6 with highquality cultural resource management services. They offer tested experts with successful experience and a solid understanding of the challenges of cultural resource management in a highly urban and political environment with an active historic preservation community. As part of Janus Research's past work with the City of Fort Lauderdale, field visits took place at sites with historic resources, background research was conducted, and assessments were prepared. Janus Research has performed work for the City of Fort Lauderdale for the Bryan Building in the Downtown area, the Stranahan House, and the Peele Dixie Water Treatment Plant. Other recent notable projects in Fort Lauderdale includes the Las Olas/Bridges of the Isles Replacement Project and the CSX Railroad Bridge Project. Their approach focuses on identifying and solving potential issues during the early phases of a project to help streamline the PD&E process and ensure compliance with Section 106 of the National Historic Preservation Act, Chapter 267, F.S.; and Part 2, Chapter 12 (Archaeological and Historic Resources) of the FDOT PD&E Manual.

They have long-standing relationships with the staff of the Florida Division of Historical Resources' Compliance and Review Section, Federal Highway Administration, the State Archaeologist, the SHPO, the Miccosukee Section 106 Representative, and the Seminole Tribal Historic Preservation Officer. During their over 36 years in business, they have grown into the most trusted Florida-based, full service Cultural Resource Management consulting firm known for our leadership and professional innovation.

Number of Years of Experience: 36 years

Business Structure: Corporation **Registration:** State of Florida

Address: 1107 N. Ward Street

Tampa, FL 33607

Phone & Fax: (813) 636-8200 / (813) 636-8212 Email: Kenneth_Hardin@janus-research.com

Website: janus-research.com
Contact Person: Kenneth Hardin

Size of Firm: 16 Employees



KEITH AND SCHNARS

Keith and Schnars, P.A. (K&S) is one of the leading engineering consulting firms in the state of Florida. Officially incorporated in 1972, the firm has played a key role in the development of Florida's growing commercial, residential, recreational, and transportation infrastructure. As an employer of choice (120 professional and administrative staff throughout the state) for almost half a century, K&S offers multi-disciplinary expertise in the fields of engineering, land surveying, 3D laser scanning, landscape architecture, planning and environmental sciences.

Number of Years of Experience: 45 years

Business Structure: Corporation **Registration:** State of Florida

Address: 6500 North Andrews Avenue

Fort Lauderdale, FL 33309

Phone & Fax: (954) 776-1616 / (954) 771-7690

Email: jgomez@ksfla.com Website: www.ksfla.com

Contact Person: Joe Gomez, PE

Size of Firm: 120 Employees



MARLIN ENGINEERING

MARLIN was established in Miami in 1991 by Ramon Soria and Sergio Alfonso, Jr. Founded on a solid base of transparency, ethics and professionalism, MARLIN is a full service multidisciplinary planning and engineering firm that has taken on some of the largest and complex transportation projects in the State of Florida.

MARLIN combines the breadth of expertise and resources of larger firms with the specialized knowhow and customer service offered by smaller companies.

MARLIN is a certified MBE, DBE and SBE with offices located in Miami, Fort Lauderdale, Tallahassee and Puerto Rico. We serve the entire state of Florida as well as projects in adjoining states, assisting public and private clients in their efforts to improve, expand and modernize existing transportation facilities.

MARLIN continues to grow by adding highly qualified engineers and top level professionals to maintain its leadership, stay current with industry trends and address client demands. Our history demonstrates our adherence to excellence and innovation.

With thousands of bridge inspections performed nationally and internationally, MARLIN's team of professional engineers, certified bridge inspectors and commercial divers have become one of the go to companies for clients wanting the complete inspection package.

MARLIN's Structures Inspection Division uses state-of-the-art equipment and the latest technology. Continuous training and unwavering commitment to safety are the fundamental principles by which our team is guided.

From field surveys and data collection to utility locations, MARLIN recognizes the importance of quality, accuracy, and timeliness.

MARLIN is fully equipped with cutting-edge technology. Utilizing our in-house inventory items, such as VaXcavator System, RTKGPS Utility Survey Location System, and GIS Software, results in cost-effective solutions. Our team has collaborated with private contractors as well as local and state governments to complete even the most challenging projects.

Number of Years of Experience: 26 years

Business Structure: Corporation

Registration: State of Florida

Address: 15600 SW 288 Street

Suite 208

Homestead, FL 33033

Phone & Fax: (305) 477-7575

Email: rsoria@marlinengineering.com Website: www.marlinengineering.com

Contact Person: Ramon Soria **Size of Firm:** 76 Employees

State of Florida

Minority, Women & Florida Veteran **Business Certification**

AREHNA Engineering, Inc.

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

> 01/12/2016 01/12/2018









Chris Ortinoa

County Business Enterprise

Small Business Enterprise Anniversary Date: June 13th

Small Business Development Manager

The Office of Economic and Small Business Development must be notified within 30 days of any material changes in the business which may affect ownership and control. Failure to do so may result in the revocation of this certificate and/or imposition of other sanctions.

A service of the Broward County Board of County Commissioners www.broward.org/smallbusiness

CAM 17-0455 Exhibit 3 114 of 130



OFFICE OF ECONOMIC AND SMALL BUSINESS DEVELOPMENT Governmental Center Annex

115 S. Andrews Avenue, Room A680 • Fort Lauderdale, Florida 33301 954-357-6400 • FAX 954-357-5674 • TTY 954-357-5664

July 27, 2016

Ms. Yvonne Garth **GARTH SOLUTIONS, INC.** 7951 Riviera Blvd., Suite 411 Miramar, Florida 33023

Dear Ms. Garth:

The Broward County Office of Economic and Small Business Development is pleased to announce that your firm's County Business Enterprise and Small Business Enterprise certification has been renewed.

Your firm's certification is continuing from your anniversary date, but is contingent upon the firm verifying its eligibility annually through this office. You will be notified in advance of your obligation to continue eligibility in a timely fashion. However, the responsibility to assure continued certification is yours. Failure to document your firm's continued eligibility for the CBE and SBE program within **thirty (30) days** from your anniversary will result in the expiration of your firm's certification. Should you continue to be interested in certification after it has expired, you will need to submit a new application and all required supporting documentation for review.

To review current Broward County Government bid opportunities visit: www.broward.org/Purchasing and click on "Current Solicitations and Results." Also, from this website, you can log into your firm's profile in BidSync to ensure you have added all appropriate classification codes. Bid opportunities over \$3,500 will be advertised to vendors via <a href="mailto:e-mai

Your primary certification group is: **Contract Services.** This is also how your listing in our directory will read. You may access your firm's listing by visiting the Office of Economic and Small Business Development Directory, located on the internet at: www.broward.org/EconDev and click on "Certified Firm Directories."

Your firm may compete for, and perform work on Broward County projects in the following areas:

NAICS CODE: 541611, 541612, 541613, 541910

We look forward to working with you to achieve greater opportunities for your business through county

progurement/

Sincerely

Chris Atkinson, Assistant Director

Office of Economic and Small Business Development

Cert Agency: BC-CBE SBE

ANNIVERSARY DATE: JUNE 13th

Broward County Board of County Commissioners

Mark D. Bogen • Beam Furr • Dale V.C. Holness • Marty Kiar • Chip LaMarca • Tim Ryan • Barbara Sharief • Lois Wexler

www.broward.org



OFFICE OF ECONOMIC AND SMALL BUSINESS DEVELOPMENT Governmental Center Annex

115 S. Andrews Avenue, Room A680 • Fort Lauderdale, Florida 33301 954-357-6400 • FAX 954-357-5674 • TTY 954-357-5664

January 19, 2017

Ms. Yvonne Garth GARTH SOLUTIONS, INC. 7951 Riviera Blvd., Suite 411 Miramar, Florida 33023

ANNIVERSARY DATE - Annually, on January 8th

Dear Ms. Garth:

Broward County is pleased to announce that Garth Solutions, Inc. has renewed its certification as a Disadvantaged Business Enterprise [DBE]. Additionally, Garth Solutions, Inc. has been certified as an Airport Concessions Disadvantaged Business Enterprise (ACDBE) in Florida, under a Unified Certification Program [UCP] in accordance with 49 CFR, PARTS 26 and 23.

DBE/ACDBE certification continues from your anniversary date, but is contingent upon Garth Solutions, Inc. renewing its eligibility annually through this office, Office of Economic and Small Business Development (OESBD). OESBD will notify you in advance of your obligation to provide continuing eligibility documents; however, to assure continued certification is your responsibility. Failure to continue your eligibility will result in immediate action to remove Garth Solutions, Inc. as a DBE/ACDBE.

As long as Garth Solutions, Inc. is listed in the DBE Directory, it is considered DBE/ACDBE Certified by all Florida UCP Members.

DBE/ACDBE Certification is subject to actions by governmental agencies impacting the disadvantaged status of Garth Solutions, Inc.

Garth Solutions, Inc. will be listed in Florida's UCP DBE Directory which can be accessed via the internet, at

http://www3b.dot.state.fl.us/EqualOpportunityOfficeBusinessDirectory/

DBE/ACDBE certification is **NOT** a guarantee of work, but enables Garth Solutions, Inc. to compete for, and perform, contract work on all USDOT Federal Aid (FAA, FTA and FHWA) projects in Florida as a DBE/ACDBE contractor, sub-contractor, consultant, and sub-consultant or material supplier.

If, at any time, there is a material change in Garth Solutions, Inc., including, but not limited to, ownership, officers, directors, scope of work being performed, daily operations, affiliations with other businesses or individuals or physical location of Garth Solutions, Inc., you must notify OESBD, in writing, without delay. Notification should include supporting documentation. You will receive acknowledgement and confirmation of continued eligibility, if applicable after notification of changes.

Garth Solutions, Inc. may compete for, and perform, work on all USDOT Federal Aid projects throughout Florida, receiving DBE/ACDBE credit for work performed in the following area:

DBE/ACDBE

NAICS CODE: 541611 Administrative Management Consulting Services

NAICS CODE: 541613 Marketing Consulting Services NAICS CODE: 541820 Public Relations, Outreach NAICS CODE: 541430 Graphic Design Services

NAICS CODE: 541616 Other Management Consulting Services

NAICS CODE: 561110 Office Administrative Services

Please feel free to contact OESBD for any questions or concerns pertaining to your DBE/ACDBE certification. Our telephone number is (954) 357-6400; our fax number is (954) 357-5674.

Sincerely,

Sandy-Michael McDonald, Director

Office of Economic and Small Business Development

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA

SUPPLIER DIVERSITY & OUTREACH PROGRAM

A DIVISION OF PROCUREMENT & WAREHOUSING SERVICES

This Certifies

Garth Solutions, Inc.

has met the requirements for certification established by the Supplier Diversity &

Outreach Program of the School Board of Broward County as a

African-American

(M/WBE)

2/2/2015 Effective Date

2/1/2018 Expiration Date

7007-6399 09 Certification Number

rolleen M. Robbes

Colleen M. Robbs, Supplier Diversity & Outreach Coordinator



Internal Services Department Small Business Development

111 NW 1 Street, 19th Floor Miami, Florida 33128 T 305-375-3111 F 305-375-3160

March 29, 2016

CERT NO: 4579

Approval Date: 3/29/2016 - DBE

Mr. Ramon Soria MARLIN ENGINEERING, INC. 15600 SW 288 St Suite 208 Homestead. FL 33033-0000

Anniversary Date: Annually on March 29

Dear Mr. Soria:

Miami-Dade County Small Business Development (SBD), a division of the Internal Services Department (ISD), is pleased to notify you that your firm is certified under the Florida Unified Certification Program (UCP). Your firm meets the eligibility requirements for certification as a Disadvantaged Business Enterprise (DBE) in accordance with 49 CFR Part 26.

DBE certification is continuous with no expiration date; however, firms are required to attest that there are no changes via the No Change Declaration form annually on the firm's anniversary date to remain certified. You will be notified of your annual responsibilities in advance of the Anniversary Date listed above. You must submit the annual **No Change Declaration** form no later than the Anniversary Date to maintain your eligibility. Your firm will be listed in the UCP DBE Directory which can be accessed through the Florida Department of Transportation's website: http://www3b.dot.state.fl.us/EqualOpportunityOfficeBusinessDirectory/

DBE certification is NOT a guarantee of work, but it enables the firm to compete for and perform contract work on all USDOT Federal Aid (FAA, FTA and FHWA) projects in Florida as a DBE contractor, sub-contractor, consultant, sub-consultant or material supplier.

If at any time there is a material change in your firm, you must advise this office by sworn affidavit and supporting documentation within thirty (30) days. Changes include, but are not limited to ownership, officers, directors, management, key personnel, scope of work performed, daily operations, on-going business relationships with other firms, individuals or the physical location of your firm. After our review, you will receive instructions as to how you should proceed, if necessary. Failure to comply will result in action to remove your firm's DBE certification.

Questions or concerns should be directed to this office by mail or telephone. Our telephone number is (305) 375-3111 and fax number is (305) 375-3160.

Sincerely,

Claudious Thompson, Section Chief Small Business Development Division

NAICS & Industry Title: (Your firm is eligible to compete for and perform work on all USDOT Federal Aid projects throughout Florida and may earn DBE or ACDBE credit for work performed in the following areas.)

541330 - ENGINEERING SERVICES (DBE)

541370 - SURVEYING AND MAPPING (EXCEPT GEOPHYSICAL) SERVICES (DBE)



Internal Services Department **Small Business Development**

111 NW 1 Street, 19th Floor Miami, Florida 33128 T 305-375-3111 F 305-375-3160

March 23, 2016

CERT NO: 1578

Approval Date: 3/23/2016 - SBE/AE

Expiration Date: 3/31/2019

Mr. Ramon Soria MARLIN ENGINEERING, INC. 15600 SW 288 St Suite 208 Homestead, FL 33033-0000

Dear Mr. Soria:

Miami-Dade County Small Business Development (SBD), a division of the Internal Services Department (ISD) has completed the review of your application and attachments submitted for certification. Your firm is officially certified as a Miami-Dade County Small Business Enterprise Architectural & Engineering (SBE/AE) in accordance with section 2-10.4.01 of the code of Miami-Dade County.

This (SBE/AE) certification is valid for three years provided that you submit a "Continuing Eligibility Affidavit" on or before your anniversary date of (March 23) for the first and second year of the three year period. The affidavit must indicate any changes or no changes in your firm pertinent to your certification eligibility. The submittal of a "Continuing Eligibility Affidavit" annually with specific supporting documents on or before your Anniversary Date is required to maintain the three year certification. You will be notified of this responsibility in advance of the Anniversary Date. Failure to comply with the said responsibilities may result in immediate action to decertify the firm.

If at any time there is a material change in the firm including, but not limited to, ownership, officers, director, scope of work being performed, daily operations, affiliation(s) with other businesses or the physical location of the firm, you must notify this office in writing within (30) days. Notification should include supporting documentation. You will receive timely instructions from this office as to how you should proceed, if necessary. This letter will be the only approval notification issued for the duration of your firm's three years certification. If the firm attains graduation or becomes ineligible during the three year certification period, you will be properly notified following an administrative process that your firm's certification has been removed pursuant to the code.

Your company is certified in the categories as listed below affording you the opportunity to bid and participate on contracts with Small Business Enterprise measures.

Please note that the categories listed are very general and are used only to assist our customers in searching the directory for certified firms to meet contract goals. You can find the firm's up-to-date certification profile as well as all other certified firms on the Miami-Dade County Internal Services Department, Small Business Development Certified Firms' Directory at the website http://www.miamidade.gov/smallbusiness/certification-programs.asp.

Thank you for your interest in doing business with Miami-Dade County.

Sincerely,

claudious Thompson, SBD Section Chief Small Business Development Division

Mr. Ramon Soria MARLIN ENGINEERING, INC. Cert No: 1578 March 23, 2016 Page 2

CATEGORIES: (Your firm may bid or participate on contracts only under these categories)

- 0101 TRANSPORTATION PLANNING-URBAN AREA & REGIONAL PLAN (SBE/AE)
- 0102 TRANSPORTATION PLANNING-MASS & RAPID TRANSIT (SBE/AE)
- 0103 TRANSPORTATION PLANNING-AVIA/AIRPORT MASTER PLAN (SBE/AE)
- 0201 MASS TRANSIT PROGRAM (SYSTEMS) MANAGEMENT (SBE/AE)
- 0202 MASS TRANSIT FEASIBILITY & TECHNICAL STUDIES (SBE/AE)
- 0301 HIGHWAY SYSTEMS-SITE DEVELOP/PARKING LOT DESIGN (SBE/AE)
- 0302 HIGHWAY SYSTEMS-HIGHWAY DESIGN (SBE/AE)
- 0305 HIGHWAY SYSTEMS-TRAFFIC COUNTS (SBE/AE)
- 0306 HIGHWAY SYSTEMS-TRAFFIC CALMING (SBE/AE)
- 0307 HIGHWAY SYSTEMS-TRAFFIC SIGNAL TIMING (SBE/AE)
- 0308 HIGHWAY SYS-INTEL TRANS SYS ANAL, DESIGN, IMPLEMEN (SBE/AE)
- 0309 HIGHWAY SYSTEMS-SIGNING, PAVEMENT MARKING, CHANNEL (SBE/AE)
- 0310 HIGHWAY SYSTEMS-LIGHTING (SBE/AE)
- 0311 HIGHWAY SYSTEMS-SIGNALIZATION (SBE/AE)
- 0312 HIGHWAY SYSTEMS-UNDERWATER ENGINEERING INSPECTION (SBE/AE)
- 0601 W & S SEWER SYS-WATER DIST & SANITARY SEWAGE COLL (SBE/AE)
- 0602 W & S SEWER SYS-MAJOR WATER & SEWER PUMPING FACILI (SBE/AE)
- 1001 ENVIRONMENTAL ENG-STORMWATER DRAINAGE DESIGN SERV (SBE/AE)
- 1501 SURVEYING AND MAPPING-LAND SURVEYING (SBE/AE)
- 1503 UNDERGROUND UTILITY LOCATION (SBE/AE)
- 1600 GENERAL CIVIL ENGINEERING (SBE/AE)
- 1700 ENGINEERING CONSTRUCTION MANAGEMENT (SBE/AE)
- 541330 ENGINEERING SERVICES (SBE/AE)
- 541360 GEOPHYSICAL SURVEYING AND MAPPING SERVICES (SBE/AE)

State of Florida

Minority, Women & Florida Veteran Business Certification

Marlin Engineering, Inc.

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

04/03/2015 to 04/03/2017







REQUIRED FORMS

STATEMENT OF QUALIFICATION CERTIFICATION

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

If you are a foreign corporation, you may be required to obtain a certificate of authority from the department of

state, in accordance with Florida Statute §607.1501 (visit http://www.dos.state.fl.us/). Company: (Legal Registration) _ T.Y. Lin International Address: 500 W Cypress Creek Road, Suite 330 Zip: 33309 City: Fort Lauderdale _____ State: FL Telephone No. 954-491-5556 FAX No. Email: james.kanter@tylin.com Does your firm qualify for MBE or WBE status: No MBE WBE ADDENDUM ACKNOWLEDGEMENT - Proposer acknowledges that the following addenda have been received and are included in the proposal: Addendum No. Date Issued Addendum No. Date Issued 2/27/2017 VARIANCES: State any variations to specifications, terms and conditions in the space provided below or reference in the space provided below all variances contained on other pages of bid, attachments or bid pages. No variations or exceptions by the Proposer will be deemed to be part of the bid submitted unless such variation or exception is listed and contained within the bid documents and referenced in the space provided below. If no statement is contained in the below space, it is hereby implied that your bid/proposal complies with the full scope of this solicitation. If this section does not apply to your bid, simply mark N/A. If submitting your response electronically through BIDSYNC you must click the exception link if any variation or exception is taken to the specifications, terms and conditions. The below signatory hereby agrees to furnish the following article(s) or services at the price(s) and terms stated subject to all instructions, conditions, specifications addenda, legal advertisement, and conditions contained in the bid/proposal. I have read all attachments including the specifications and fully understand what is required. By submitting this signed proposal I will accept a contract if approved by the City and such acceptance covers all terms, conditions, and specifications of this bid/proposal. The below signatory also hereby agrees, by virtue of submitting or attempting to submit a response, hereby agrees that in no event shall the City's liability for respondent's indirect, incidental, consequential, special or exemplary damages, expenses, or lost profits arising out of this competitive solicitation process, including but not limited to public advertisement, bid conferences, site visits, evaluations, oral presentations, or award proceedings exceed the amount of five hundred dollars (\$500.00). This limitation shall not apply to claims arising under any provision of indemnification or the City's protest ordinance contained in this competitive solicitation. Submitted by: James Kanter, PE Name (printed) February 20, 2017

Date:

NON-COLLUSION STATEMENT

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

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

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

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

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

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

<u>NAME</u>	<u>RELATIONSHIPS</u>			
N/A				

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

LOCAL BUSINESS PREFERENCE CERTIFICATION STATEMENT

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

(1)	X Business Name	is a Class A Business as defined in City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. A copy of the City of Fort Lauderdale current year Business Tax Receipt <u>and</u> a complete list of full-time employees and their addresses shall be provided within 10 calendar days of a formal request by the City.
(2)	Business Name	is a Class B Business as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. A copy of the Business Tax Receipt <u>or</u> a complete list of full-time employees and their addresses shall be provided within 10 calendar days of a formal request by the City.
(3)	Business Name	is a Class C Business as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. A copy of the Broward County Business Tax Receipt shall be provided within 10 calendar days of a formal request by the City.
(4)	Business Name	requests a Conditional Class A classification as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. Written certification of intent shall be provided within 10 calendar days of a formal request by the City.
(5)	Business Name	requests a Conditional Class B classification as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. Written certification of intent shall be provided within 10 calendar days of a formal request by the City.
(6)	Business Name	is considered a Class D Business as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. and does not qualify for Local Preference consideration.
	S COMPANY: <u>T.Y. Lin I</u>	and a feet



CITY OF FORT LAUDERDALE BUSINESS TAX YEAR 2016-2017

BUSINESS TAX DIVISION 100 N. Andrews Avenue, 1st Floor, Fort Lauderdale, Florida 33301 (954) 828-5195

Business ID: 1502396 Business Name: KANTER, JAMES M

Business Address: 500 NW 62 ST # 330
Tax Category: ENGINEER

Tax Category:

Tax#:744883

Fee:

KANTER, JAMES M T.Y. LIN INTERNATIONAL 500 NW 62 ST # 330 FORT LAUDERDALE, FL 33309

DETACH AND POST THIS RECEIPT IN A CONSPICUOUS PLACE

Business ID:

Tax Number:

1502396 744883

Business Name:

KANTER, JAMES M

Business Address:

500 NW 62 ST # 330

Business Owner:

KANTER, JAMES M

- This Receipt is issued for the period commencing October 1st and ending September 30th of the years shown above.
- If you have moved out of the city, please provide a written statement.
- A transfer of business location within the city limits is subject to zoning approval. Please complete a Business Tax Transfer Application and bring it to our office to obtain the necessary approval.
- A Transfer fee applies of 10% of the annual business tax fee. The fee shall not be less than \$3.00, nor greater than \$25.00.
- If you have sold your business, please provide us with a copy of the Bill of Sale.

Please be advised that this issuance of a Business Tax Receipt establishes that the business you intend to conduct is a use permitted by the City Zoning Code for the location at which you intend to operate. The issuance of a Business Tax Receipt in no way certifies that the property located at this address is in compliance with other provisions of the City Code of Ordinances.

> **BUSINESS TAX DIVISION** 100 N. Andrews Avenue, 1st Floor, Fort Lauderdale, Florida 33301 TEL (954)828-5195 FAX (954)828-5881 WWW.FORTLAUDERDALE.GOV

CONTRACT PAYMENT METHOD BY P-CARD

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

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

Please indicate with which credit card you prefer to	be paid:
Master Card	
X Visa Card	
Company Name: T.Y. Lin International	
James Kanter, PE	MININA
Name (printed)	Signature
February 20, 2017	unit manager
Date:	Title

Client#: 722

TYLININTE1

ACORD...

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/01/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

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

PRODUCER	CONTACT Nancy Ferrick				
Dealey, Renton & Associates	PHONE (A/C, No, Ext): 510 465-3090 FAX (A/C, No): 51	0 452-2193			
P. O. Box 12675	E-MAIL ADDRESS: nferrick@dealeyrenton.com				
Oakland, CA 94604-2675	INSURER(S) AFFORDING COVERAGE	NAIC#			
510 465-3090	INSURER A: Hartford Fire Ins. Co.	19682			
INSURED	INSURER B: American Fire and Casualty Comp	24066			
T. Y. Lin International	INSURER C: Hartford Underwriters Ins. Co.	30104			
345 California Street, Ste. 2300	INSURER D : Aspen American Insurance Co.	43460			
San Francisco, CA 94104	INSURER E :				
	INSURER F :				

COVERAGES

CERTIFICATE 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 BE ISSUED OR MAY BE ISSUED OR MAY BE ISSUED. BY MAY BE ISSUED OR MAY BE ISSUED.

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.

	EXCESSIONS AND CONDITIONS OF SOCIET CEICLES. EMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CEANING,						
INSR LTR	TYPE OF INSURANCE	ADDL SUBR	POLICY NUMBER	(MM/DD/YYYY)	(MM/DD/YYYY)	LIMIT	S
Α	X COMMERCIAL GENERAL LIABILITY		57CESOF1487	03/01/2016	03/01/2017	EACH OCCURRENCE	\$1,000,000
	CLAIMS-MADE X OCCUR					DAMAGE TO RENTED PREMISES (Ea occurrence)	s1,000,000
						MED EXP (Any one person)	s10,000
						PERSONAL & ADV INJURY	s1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE	s2,000,000
	POLICY X PRO-					PRODUCTS - COMP/OP AGG	\$2,000,000
	OTHER:						\$
Α	AUTOMOBILE LIABILITY		57UENZC1594	03/01/2016	03/01/2017	COMBINED SINGLE LIMIT (Ea accident)	_{\$} 1,000,000
	X ANY AUTO					BODILY INJURY (Per person)	\$
	ALL OWNED SCHEDULED AUTOS					BODILY INJURY (Per accident)	\$
	X HIRED AUTOS X NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident)	\$
							\$
В	UMBRELLA LIAB X OCCUR		EUA1757169563	03/01/2016	03/01/2017	EACH OCCURRENCE	s1,000,000
	X EXCESS LIAB CLAIMS-MADE					AGGREGATE	s1,000,000
	DED RETENTION \$						\$
С	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY		57WEKO8793	03/01/2016	03/01/2017	X PER OTH-	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N N/A	N/A				E, L, EACH ACCIDENT	\$1,000,000
	(Mandatory in NH)	"'"				E.L. DISEASE - EA EMPLOYEE	s1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT	s1,000,000
D	Professional		LRA9P0116	03/01/2016	03/01/2017	\$1,000,000 per Clain	n
	Liability					\$1,000,000 Anni Agg	jr.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
General Liability Policy excludes claims arising out of the performance of professional services.

30 Days Notice of Cancellation (10 Days for Non-Payment of Premium).

PROOF OF INSURANCE FOR USE ON PROPOSALS. AN ACTUAL CERTIFICATE WILL BE ISSUED AT THE REQUEST OF THE NAMED INSURED.

CERTIFICATE HOLDER	CANCELLATION
SAMPLE CERTIFICATE	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE
	Anlie LA Jelson

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