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Superior Construction Company Southeast, LLC (SUPERIOR), in association with GAI Consultants, Inc. (GAI), the SUPERIOR Team, is dedicated to meeting all project goals for Florida's Turnpike Enterprise (FTE) and delivering these improvements efficiently – both through schedule and cost effectiveness. Our successful history on similar Design-Build (DB) projects represents our Team's cohesiveness and resolve to meet this project's commitments of improving mobility and minimizing disruptions to the traveling public. We will implement All Electronic Tolling (AET) and complete the Direct Connect Flyover Ramp and Express Lanes on the Turnpike Mainline (SR 91) no later than December 30, 2020, while partnering with FTE, FDOT-D5, I-4 Mobility Partners, OPCO (I-4MP), and other local stakeholders. The SUPERIOR Team recognizes the challenges facing this project and has developed a plan to match key issues with solutions, providing value to FTE and your customers.

The SUPERIOR Team knows this project. GAI was the last design firm to "touch" the I-4 interchange, and as such has unparalleled awareness of the key issues driving its success. In addition to our recent experience in the interchange, John Saunders, PE, our Design Project Manager was EOR for the widening of the Turnpike throughout the project limits 10 years ago. Because of this involvement, the SUPERIOR Team has first-hand knowledge of traffic and site conditions will help our Team anticipate issues and plan for (rather than react to) them. Our background at this interchange has allowed us to develop a list of challenges and a means of addressing them, shown in **Figure 1** and **Table 1** below.

Figure 1 – Key Challenges & SUPERIOR Team Approach

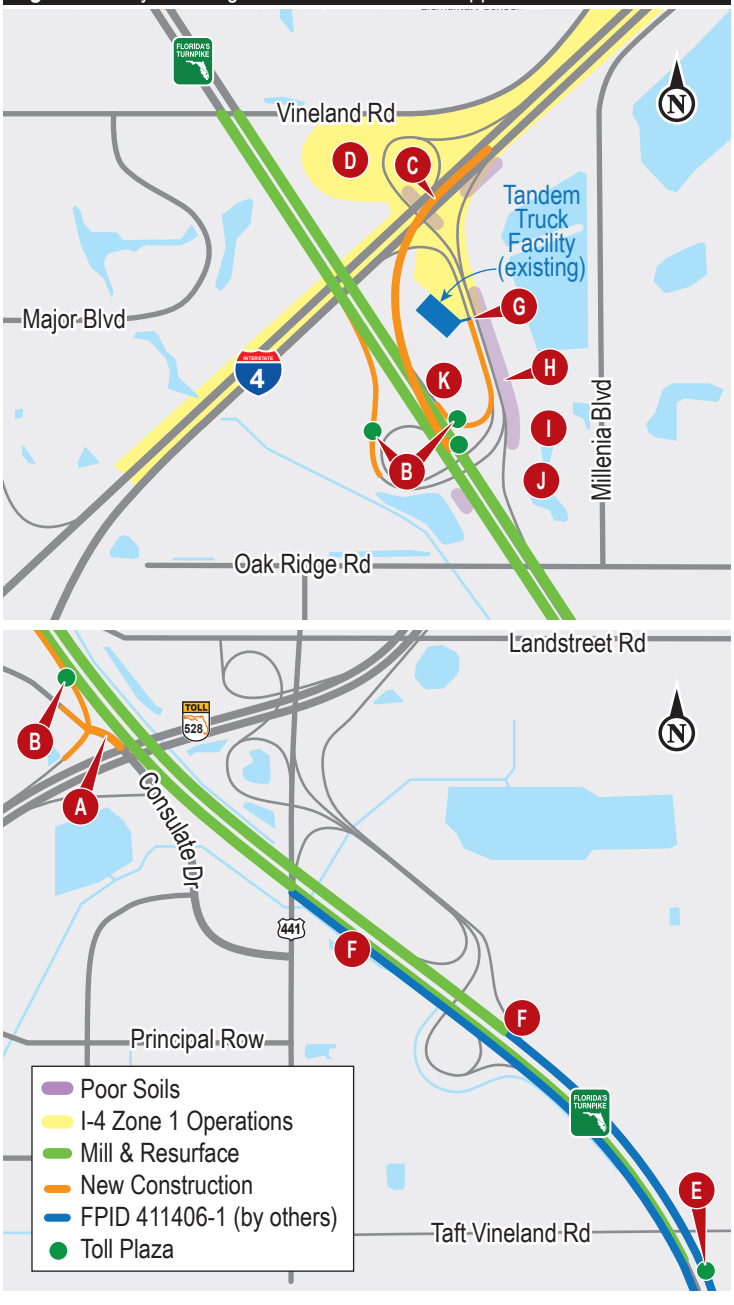


Table 1 – Key Challenges & SUPERIOR Team Approach

Challenge	SUPERIOR Team Approach
Meeting Schedule Milestones	Developing a comprehensive schedule to meet the following key milestones: A Consulate Dr. Improvements – 12 months from NTP B AET for Consulate Dr. and I-4 Ramps – July 2019 C I-4 Flyover - Completed within final 13 months ▪ Project Completion - December 2020
Efficient solution to the flyover ramp	Submitting ATCs that will enhance the concept by: ▪ Reducing embankment ▪ Lowering profiles ▪ Improving horizontal geometry ▪ Optimizing pier placements for constructability ▪ Providing stormwater treatment opportunities that do not impact FGT
Coordination with Adjacent Projects	I-4 Ultimate: D Zone 1 Operations Schedule ▪ Complex Maintenance of Traffic Turnpike Widening from Osceola Pkwy to Orlando South Interchange: E Toll site construction, testing, and implementation F Integrate Express Lanes
Overlapping ITS and Tolling Systems	ITS and Tolling systems overlapping between projects that serve: ▪ FTE ▪ FDOT-D5 ▪ FTE Tolls ▪ I-4MP
Managing FGT Coordination and Avoidance	Full Awareness of the FGT requirements and the Global Agreement: ▪ Horizontal and Vertical Clearances ▪ Construction Specifications ▪ Mandatory review times ▪ Innovative accommodation strategies
Maintaining Access to the Tandem Truck Facility	Keeping the tandem truck facility in operation by: G Implementing a concise traffic control plan ▪ Utilizing staging area built at Turkey Lake Service Plaza
Poor Soil Conditions and Drainage Challenges	The SUPERIOR Team is intimately aware geotechnical conditions on the site and will address: H Poor soils particularly along the SE border of the interchange I History of improper discharge from the recently completed Millennia Palms Apartments J High water table/ditch staging in SE quadrant of the interchange ▪ Poor discharge flow to Shingle Creek due to sedimentation and plant growth
Other Important Scope Elements	▪ Miscellaneous Roadside Improvements from Existing Roadside Conditions Assessment Report (ERCAR) K Accommodation of the Future 10-Lane Expansion

Section 1 – Design-Build Firm Name and Qualifications

The contracting entity for this project will be Superior Construction Company Southeast, LLC. Our Team's prequalifications are presented in the accompanying organization chart.

Section 2 - Past Performance Evaluations, Design-Build Project Experience, Organization, Staffing

2.1 Contractor Grades

Our staff and crew members take great pride in their work as evidenced by our exceptional past performance ratings. SUPERIOR's workforce is committed to maintaining safe work zones, providing quality workmanship in a timely manner, and minimizing adverse impacts to the traveling public. Our average Contractor Past Performance Rating (CPPR) for all FDOT projects completed in the last five years is 100. Individual CPPR scores for our similar projects can be found in **Tables 2, 3, and 4**.

2.2 Professional Consultant Grades

GAI has gained significant experience with FDOT as EOR on many DB projects, and have worked closely with FDOT and CEI staff throughout design and construction achieving excellent CPPR grades on every project. This is further demonstrated by GAI's average consultant performance grade of 3.3 on conventional projects.

2.3 Performance History with Other States or Agencies if None with Department N/A

2.4 Design-Build Project Experience of the Contractor and Professional Consultant

The SUPERIOR Team has a strong history, both individually and together, of delivering successful DB projects in Florida. Together, we have successfully completed the $66M I-295/Collins Rd Interchange DB, the $33M I-295 East Beltway Project and the $27M I-10/Hammond Blvd. Interchange DB for District 2. Our numerous DB projects, listed in **Table 2**, illustrate the unparalleled DB project experience our Team brings to FTE.

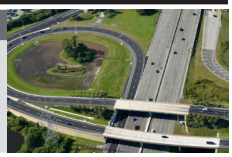
In addition to delivering successful DB projects, we have a history and reputation of providing innovative and cost savings solutions, including:

- SR 9B Phase 2 DB (SUPERIOR) - Reconfiguration of the SR 9B/I-95 Interchange - ***$10M in Savings***
- SR 9B Phase 1 DB (GAI) - modification to the 9B roadway profile – a reduction of over 1 million CY of embankment - ***$7M in Savings***
- SR 115/MLK Interchange DB (GAI) - modification to the SR 115/Phoenix Ave./ Port Entry Interchange - ***$10M in Savings***
- Modification of the I-4/I-95/US-92 Interchange DB (GAI) eliminating major R/W acquisition and thousands of significant earthwork, MSE Walls and Bridge Length - ***$40M in Savings***
- Heckscher Dr CSI (SUPERIOR/GAI) - Reconfiguration of the NB off-ramp - ***$1M in Savings***

= Systems Interchange = Major Bridge = FGT = Express Lanes

Table 2 – Design-Build Project Experience

GAI (EOR) | **SR 91 (Florida Turnpike) / I-4 Interchange Improvements**, FTE, $12M, Completed 2014



GAI was design EOR for this project which improved the Owner's concept by spreading out two interchange movements and improving weave distance – providing better, safer operations between key movements to and from the Turnpike Mainline. The project also required intense utility coordination with Florida Gas Transmission and the Orlando Utilities Commission to address facilities within the right-of-way. *Ref: Pamela Nagot, PE (407) 264-3043. Key Staff: Steve Boylan, John Murphy, Lloyd Gurr, Bobby Jamieson, Randy Miner, DJ Silverberg*

SUPERIOR, GAI (EOR) | **I-295 East Beltway at UNF Drive,** FDOT D2, $33M, Completed 2006, CPPR 96

Design of Single-Point Urban Interchange (SPUI) roadway for Segment 6, a four-lane divided interstate highway from north of the JTB interchange to south of Beach Blvd. Scope included stormwater design and permitting, two 2,000' bridges (AASHTO girder), and JEA utility design (water & wastewater facilities). ACI Significant Concrete Structure Award. *Ref: Carrie Stanbridge, PE (386) 961-7730. Key Staff: Pete Kelley, Curtis Long, Sylvester Asiamah, Kevin Leadbetter*

SUPERIOR, GAI (CSI) | **I-295/Heckscher Drive Interchange,** FDOT D2, $21M, Completed 2016, CPPR 102

New Ramp and bridge construction connecting New Berlin Rd, Heckscher Drive and the TraPac Cargo Terminal to I-295. SUPERIOR and GAI combined to implement a CSI resulting in a $1 Million savings to the project. Project scope included 47,500 SY of concrete paving and IMR modification. *Ref: Will Lyons, PE (904) 360-5574. Key Staff: Pete Kelley, Brian McGarity, Rick Hamilton, Jeremy Andrews, Sylvester Asiamah, Kevin Leadbetter, Hazem Ibrahim, Randy Miner, Bobby Jamieson*

SUPERIOR, GAI (CEI) | **I-295 Interchange/Collins Rd,** FDOT D2, $66M, Completed 2014, CPPR 104

Construction of a collector/distributor system to alleviate traffic congestion and improve safety; 150,000 SY of concrete pavement, 6 miles of new concrete pavement on I-295, four new bridges, one bridge widening, 12 miles of concrete barrier wall, and a new ITS system. MOT plan effectively routes over 125K vehicles per day. DBIA Transportation Merit Award. *Ref: Ken Hill, PE (904) 360-5563. Key Staff: Pete Kelley, Curtis Long, Kevin Leadbetter*

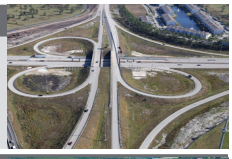
SUPERIOR, GAI (CEI) | **I-10 Marietta Interchange at Hammond Blvd,** FDOT D2, $27M, Complete 2016, CPPR 104

The new interchange was constructed at Hammond Blvd with on and off ramps to and from I-10. An overpass was constructed across I-10, connecting Hammond Blvd on the south side of I-10 to Devoe St on the north side. Hammond Blvd was widened from two to four lanes with turn lanes to accommodate the increased traffic volume of the new interchange.GAI served worked with SUPEROR as the CEI on this important contract. *Ref: Jessica Tippett, PE (904) 360-5504. Key Staff: Pete Kelley, Curtis Long, Kevin Leadbetter*

SUPERIOR | **SR 9B, US 1 to I-95,** FDOT D2, $95M, Completed 2016, CPPR 96

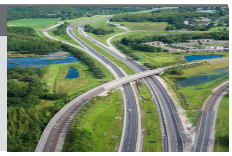
Two mile extension of SR 9B and the construction of interchanges at I-95 and US 1, eight new bridges, two million CY of embankment, and 200,000 SY of concrete pavement. Successfully utilized the FDOT's ATC process to reconfigure the I-95/SR 9B interchange, saving over $10 million in construction costs, and allowing single-phase construction. *Ref: Jeff Daugharty, PE (904) 360-5575 Key Staff: Jeremy Andrews, Pete Kelley, Curtis Long*

GAI (EOR), UES (GEO) | **I-95 / I-4 / US 92 Systems Interchange,** FDOT D5, $205M, Complete 2018



Project includes reconfiguration of the systems interchange of I-95 with I-4 and with US-92, along with widening of I-95 from 4 to 6 lanes from SR 44 to US 92. GAI's innovative redesign of the interchange resulted in saving over $20M of ROW acquisition. Additional scope items include drainage improvements, bridge widening/replacement, and ITS modifications. *Ref: Brad Bauknecht, PE (386) 740-3519. Key Staff: Steve Boylan, Bobby Jamieson, Randy Miner, Ali Noorollahi, Judson Fohr, Hazem Ibrahim, Randy Miner, Kevin Leadbetter, John Murphy*

GAI (EOR), UES (GEO) | **Veterans Expressway Widening,** FTE, $51M, Complete 2018



This major highway project increases capacity on the Veterans Expressway toll road between the Sugarwood Toll Plaza and Van Dyke Road. This project will introduce express lanes into the middle of a highly urbanized section of a 20-mile system. One general use lane and one express lane will be added in each direction. *Ref: Tom Neyer, PE (407) 532-3999. Key Staff: Steve Boylan, Sylvester Asiamah, Judson Fohr, Lloyd Gurr, Bobby Jamieson, Randy Miner, John Murphy, Kevin Leadbetter, Ali Noorollahi, Jim Schlottman, John Murphy*

2.5 Similar Types of Work Experience

Additional relevant work experience directly applicable to this project is offered in **Tables 3 and 4**.

Table 3 – Similar Project Experience

Project	Value	Design-Build	New Construction	Widening/Reconst.	New Interchange	Major Interchange	Major Bridge	Drainage Const.	Permitting/Env.	Complex MOT	Utility Coord.	Adj. Proj. Coord.	ITS
I-295 Widening (I-10 to Commonwealth Ave), FDOT D2, Completed 2014 SUPERIOR, GAI (EOR) Key Staff: Sylvester Asiamah, Randy Miner, Curtis Long	**$11M**			✓				✓	✓	✓	✓	✓	✓
I-95 Widening, Flagler County, FDOT D2, Completed 2007 SUPERIOR Key Staff: Pete Kelley, Curtis Long	**$81M**		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
SR 9B/US 1 to I-295, FDOT D2, Competed 2013 GAI (EOR) Key Staff: Kevin Leadbetter, Bobby Jamieson, Sylvester Asiamah, Randy Miner, Hazem Ibraham, John Murphy	**$94M**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SR 115 / 21st Street Interchange, FDOT D2, Completed 2014 GAI (EOR), UES (Geo.) Key Staff: Kevin Leadbetter, Bobby Jamieson, Sylvester Asimah, Randy Miner, Hazem Ibraham, John Murpy	**$31M**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CR 210 at US 1, FDOT D2, Completed 2014 GAI (EOR), UES (Geo.) Key Staff: Bobby Jamieson, Randy Miner, Sylvester Asiamah, Hazem Ibrahem, Kevin Leadbetter, John Murphy	**$10M**	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	
Beach Blvd / Kernan Blvd Interchange, JTA, Completed 2009 SUPERIOR Key Staff: Pete Kelley, Curtis Long	**$32M**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Nocatee Parkway over US-1, PARC Group, Completed 2011 SUPERIOR Key Staff: Pete Kelley, Curtis Long	**$27M**		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓

= Systems Interchange = Major Bridge = FGT = Express Lanes

Table 4 – Additional Similar Project Experience

SUPERIOR | I-295 / JTB Interchange, FDOT D2, $92M, Completed 2009, CPPR 98

Construction of multi-level interchange including 6 new steel tub girder flyover structures, 95,000 SY of concrete pavement, and 1.4 million CY of embankment for new ramp construction. The existing bridges and median on SR 202 were also widened to accommodate four travel lanes in the westbound direction and three travel lanes in the eastbound direction. SR 9A was also widened to accommodate three travel lanes. Superior won an FTBA Major Interchange Award for this project. Self-performed earthwork, drainage, roadway base, pile driving Substructure & superstructure for all bridges. *Ref: Carrie Stanbridge, PE (386) 961-7730. Key Staff: Pete Kelley, Curtis Long*

SUPERIOR | I-95 / I-295 / SR 9A North Interchange, FDOT D2, $50M, Completed 2010, CPPR 104

Project included a 2,256 LF variable depth post tensioned segmental flyover, allowing for high speed transition from I-95 SB to I-295 EB. The new flyover consists of 234 segments over 10 spans with a total width of 49' and more than 10,000 CY of concrete, 2 million pounds of reinforcing steel and over 1 million LF of post tensioning strand. The substructure consists of nine intermediate bents and two end bents. Each bent is supported with a series of 30" precast concrete piling. Temporary cofferdams allowed installation of supporting footers below grade upon which fared support caps were built. *Ref: Carrie Stanbridge, PE (386) 961-7730. Key Staff: Brian McGarity, Rick Hamilton*

***GAI (EOR)* | Turnpike Widening (Atlantic Ave to Boynton Beach Blvd)**, FTE, $51M, Complete 2021

The Turnpike will be widened from six to eight lanes including two tolled express lanes that will use variable tolling to manage congestion and assure quality level of service. This project has extensive involvement with both Florida Gas Transmission (FGT) and the Lake Worth Drainage District who have major facilities bordering the corridor. The project includes rework of the Boynton Beach Blvd. interchange and conversion of existing tolling to all-electronic Collection. *Ref: Marco Barbarosa, PE (407) 532-3999. Key Staff: John Saunders, Sylvester Asiamah, Steve Boylan, Judson Fohr, Kevin Leadbetter, Randy Miner, Ali Noorollahi, Jim Schlottman, DJ Silverberg, Anna Zhang*

***GAI (EOR)* | Wekiva Pkwy Section 6,** FDOT D5, $215M, Completed 2015 (Design / Design-Build RFP)

The Wekiva Parkway (SR 429) project involves the construction of the Wekiva River Crossing, a nationally designated wild and scenic river. GAI's design effort includes 21 new bridge structures, one of which is a new bridge over the Wekiva River, and 5,700 feet of new wildlife bridge structures so animals can safely pass between the Seminole State Forest and Rock Springs Run State Reserve. *Ref: Kevin Moss, PE (386) 943-5255. Key Staff: Bobby Jamieson, Sylvester Asiamah, Bobby Jamieson, Randy Miner, Jim Schlottman, Abner Serrano, DJ Silverberg, John Murphy, Jim Murray*

***GAI (EOR)* | I-95 at I-10 Operations Improvements,** FDOT D2, $117M, Compete 2020

GAI is serving as EOR to provide design and construction services for operational improvements to the existing interchange at I-95 and I-10 in Duval County, Florida. The $117 Million design-build project includes the widening of the Fuller Warren Bridge over the St Johns River for an additional lane and a pedestrian path. Our innovative design includes two straddle bents to support the 3rd level flyover ramp connecting I-95 NB to I-10 WB. *Ref: Craig Teal, PE (386) 961-7800. Key Staff: Bobby Jamieson, Jim Murray, Ali Noorollahi, Randy Miner, Sylvester Asiamah, Judson Fohr, Lloyd Gurr, Kevin Leadbetter, John Murphy*

2.6 Environmental Record

SUPERIOR has zero environmental violations from WMD, FDEP, or EPA during the last 5 years. The Category 7 component of our CPPR rating over this same time is 11/12. Our Team's Environmental Services Manager Pranav Agrawal and Health, Safety, and Environmental Manager Frank Ortega will develop a project specific environmental plan ensuring the project remains consistent with the PD&E commitments and permit requirements. Our environmental records on some of FDOT's most challenging interchange projects include:

- I-295/Heckscher Dr. Interchange – Category 7 Score 12/12
- I-95 / I-295 / SR 9A North Interchange – Category 7 Score 12/12
- I-295 Interchange/Collins Rd – Category 7 Score 12/12
- I-10 / Hammond Blvd. Interchange – Category 7 Score 12/12

2.7 Contractor Experience Modification Rating

2016 0.50 EMR

Our history of providing a safe and healthy workplace for employees and the traveling public assures you we will deliver this project safely. SUPERIOR enjoys a superb current year Experience Modifier Rating (EMR) of 0.50 validating our safety commitment. This rating demonstrates we have 50% fewer workplace accidents than our competitors. We achieve this through a pledge to safety that starts at the top and is instilled through all levels. Field managers conduct weekly tool box talks, daily safety job briefings, and new hire orientations.

Our employees are involved in our safety program by dedicating themselves to understanding that safety is a behavior and is ultimately their responsibility. This is reinforced through focused training and education on the recognition of hazards and methods of abatement. Our SUPERIOR commitment to safety has been recognized with the ***2013 and 2015 American Road & Transportation Builders Association Excellence in Safety Award, and 6 consecutive FTBA safety awards.***

2.8 Design-Build Firm Organization

SUPERIOR will execute the prime contract for DB services with FTE, provide and lead project management, and perform all bridge, concrete, and roadway construction activities. SUPERIOR is a Licensed Florida General Contractor founded in Gary, Indiana, in 1938 and has been a committed partner to FDOT for over 30 years. We are an ENR Top 400 Contractor and consistently rank among the leading bridge contractors in the nation, specializing in constructing complex bridge projects. ***We have successfully completed 24 DB projects totaling more than $600 million and in the last five years have completed over $1.3 billion in heavy civil construction projects.***

GAI is the lead designer and will provide roadway, structures, environmental and utility coordination services. ***GAI has completed, or is actively working on 35 DB projects for FDOT, and 39 DB projects in Florida in the past ten years, with a total value of over $780 Million.*** GAI and our subconsultant partners are prequalified in all the required design categories and offer FTE unparalleled experience working together on DB Projects.

2.9 Design-Build Firm Staffing Plan

The SUPERIOR Team includes not only the same firms, but many of the same key design and construction staff members from the successful similar projects noted in **Tables 3 and 4**, including the recently completed I-4/Turnpike Interchange Improvements project. These individuals have significant DB and limited access/ interchange experience, including projects on the Turnpike system with tolling and express lanes. They have demonstrated an excellent ability to work together to solve construction and design issues quickly. Our key personnel on this project are identified in **Table 5** with detailed resumes accompanying this LOI.

We are committed to exceeding the Department's goal of 10% DBE and 3% non-DBE Small Business utilization. We understand FTE's commitment to DBE firms and your desire to exceed the statewide goals, especially on large, high profile projects.

Table 5 – Design-Build Team Staffing *(continued on following page)* **Key Staff - Resume Included*

The Executive Committee | Pete Kelley, Curtis Long, Kevin Leadbetter, PE | These senior staff members of SUPERIOR and GAI, respectively, will provide general direction and oversight, as well as be integrally involved in solving any significant project challenges. The Executive Committee will fully support the project management team to guarantee a successful completion and provide proven leadership in establishing project policies, critiquing schedules, ensuring sufficient resources, and demanding safety, quality, and environmental stewardship woven into every project discipline. They will assist with addressing contractual issues if necessary, conduct quarterly progress meetings with FDOT management, participate in periodic project meetings, and resolve any major project issues. Quality, safety, and environmental managers will report directly to the Executive Committee, allowing these three important aspects of the project to act independently from the project management team.
Construction Project Manager* | Brian McGarity | Mr. McGarity will be responsible for all construction activities, including work performed by subcontractors. He will lead field superintendents, project engineers, and subcontract managers, and will support Mr. Johnson with responsibilities for safety, quality, schedule, and budget management, and subcontractor quality control. Mr. Andrews will work closely with Mr. McGarity to ensure the design, design review, permits, and construction documents are delivered as needed to support the construction schedule. Mr. McGarity has significant diverse construction experience predominately focusing on DB interchange projects. He served as the Assistant Project Manager on the I-95/I-295 North Interchange project which included a 2,256 LF variable depth post-tensioned segmental flyover bridge.
Construction DB Coordinator* | Jeremy Andrews, PE | Mr. Andrews provides a vital link between construction operations and the multi-discipline Design Team responsible for completing the FDOT's approved and Released-For-Construction (RFC) documents on schedule for active field operations. Mr. Andrews will act as a liaison between design and construction, ensuring constructability and quality assurance, and tracking the design and permitting progress. Mr. Andrews has extensive design management and pre-construction experience, having served as task team lead managing stakeholder risk assessment, constructability review, and schedule development for more than 16 years.
Construction Roadway Superintendent* | Oscar Matson | Mr. Matson brings over 30 years of utility, grading, and drainage experience. He will be responsible for all roadway construction activities, including work performed by roadway subcontractors. Mr. Matson will develop task hazard analyses, schedules, and work plans for roadway activities and be held responsible for their successful implementation. He will lead foremen and crews to safely deliver a quality and environmentally compliant project.
Construction Structures Superintendent* | Rick Hamilton | Mr. Hamilton brings over 30 years of bridge building experience with expertise in structural steel, concrete and major interchanges. He is a heavy lift expert. Mr. Hamilton will be responsible for all bridge construction activities, including work performed by bridge subcontractors. Mr. Hamilton will develop task hazard analyses, schedules, and work plans for structures activities and be held responsible for their successful implementation. He will lead foremen and crews to deliver safely deliver a quality and environmentally compliant project.
Construction MOT (Specialty) Superintendent* | Mike Trail | Mr. Trail brings over 25 years of earthmoving, road building, site development, and maintenance of traffic experience. He is an ATSSA Florida Advanced Worksite Traffic Supervisor. Mr. Trail provides onsite direction of all temporary traffic control on the project. He is responsible for initiating, installing, and maintaining all temporary traffic control devices. He offers critical insight to, and constructability review of, the temporary traffic control plan. Mr. Trail conducts daytime and nighttime inspections ensuring performing excellence in maintenance of traffic.
Design Project Manager* | John Saunders, PE | Mr. Saunders brings 29 years of highway design and project management experience on large multi-disciplined projects including systems interchanges, AET conversions and express lanes. He has been actively managing projects with FTE for over 20 years. Mr. Saunders will manage GAI's design production staff and work with Superior to provide FTE with a quality project. With his experience, Mr. Saunders will assure efficient plans production, plan reviews, permitting, and adjacent project coordination from the onset of the project through construction. Mr. Saunders has comprehensive knowledge of this area having been the project manager for the project finished in 2008 for the 8 lane widening of these same project limits.
Design Roadway EOR* | Robert Jamieson, PE, PTOE | Mr. Jamieson brings 16 years of experience specializing in highway and traffic engineering and final design of major highways. Mr. Jamieson will lead the roadway and overall design of the project to assure that FTE/FDOT criteria and standards are met throughout the project. He will use his experience from other DB projects to execute a detailed and efficient maintenance of traffic plan for the project duration. Mr. Jamieson will work directly with our Construction PM Mr. McGarity and Superintendents Mr. Matson, Mr. Hamilton and Mr. Trail during design development and its successful implementation during construction.

Table 5 – Design-Build Team Staffing *(continued)* **Key Staff - Resume Included*

Design Structures EOR* | Ali Noorollahi, PE | Mr. Noorollahi specializes in structural analysis and preparation of plans for bridges (structural steel, reinforced concrete, and pre-stressed concrete) and analysis and rating of existing bridges. He brings 29 years of experience in the design and analysis, including cast-in-place retaining walls, anchored sheet pile walls, under cut walls, box culverts, and sign structures. Mr. Noorollahi will lead these structural design efforts and work closely with our Construction Superintendent Rick Hamilton to assure a safe constructible design.

Design ITS/Tolls (Specialty) EOR* | Amazia Kiboko, PE, PTOE | Mr. Kiboko brings 33 years of experience in the areas of transportation engineering, ITS, lighting and signalization design, and utility coordination. This includes ITS design on numerous DB projects and improvements to the I-4 ITS system. Mr. Kiboko will work as our liaison with FTE tolls, ITS, and utility coordinators to design and implement an efficient and effective ITS system to FTE/FDOT criteria using familiar equipment for ease of maintenance. He will be intimately involved with the I-4MP and the southern project coordination to effectively implement the AET tolling and express lanes.

2.10 Design-Build Firm Coordination Plan

SUPERIOR Team Internal Coordination

Our knowledge and past history working within this interchange has allowed us to conduct numerous internal workshops studying preliminary design concepts that enhance safety, mobility, and overall project operations during and following construction – all while reducing construction time and associated impacts to customers. Weekly progress meetings with GAI design and SUPERIOR construction staff will continue through the proposal phase into final design and throughout construction. File sharing through our innovative "Newforma" system allows for daily mirroring of files on GAI's servers for access by all team members and the FTE's PM – providing a sole source of the latest information and CADD files in a simple, user-friendly portal.

Design and construction submittals will be prioritized based on our comprehensive design and construction schedule. Brian McGarity (Construction PM) and Jeremy Andrews, PE (DB Coordinator) will work together through procurement and into the start-up of the project ensuring an efficient and constructible design. The high level of coordination on all of SUPERIOR's and GAI's previous DB projects and the resultant performance grades provides the strongest evidence of our effective internal coordination.

External Coordination

Coordination with FTE. Our Team has demonstrated we can work cooperatively with FTE to resolve any project issues arising during design or construction, as evidenced on the Turnpike/I-4 Interchange Improvements Project, where partnership was the key in overcoming challenges such as FGT accommodation and improvements to FDOT D5's section of I-4.

Pre-submittal meetings, direct contact with FTE plan reviewers and open communication between key members of our staff and the FTE Design and Construction Project Managers/CEI, has resulted in rapid resolution of even the most complex issues on our DB projects. Construction PM Brian McGarity will develop a partnership with the CEI and FTE Construction Staff, facilitating an effective flow of information and issue resolution.

Coordination with Permitting Agencies. The SUPERIOR Team will promptly and thoroughly engage all environmental agencies, including South Florida Water Management District (SFWMD) and the US Army Corps of Engineers (USACE). We will leverage our strong relationships with these agencies to work alongside FTE's environmental permitting staff to efficiently coordinate throughout all phases of design and construction.

Coordination with Other Adjacent Department and Local Projects. Our Team will coordinate with the following projects that are identified as having potential overlapping activity either through or adjacent to the Project:

- I-4 Ultimate Project from Kirkman Rd to SR 434 (FDOT D5)
- Turnpike Widening from Osceola County Line to Orlando South, with Express Lanes (FTE)
- Orlando South Interchange (FTE)
- Sand Lake Rd / Turnpike Interchange (FTE)
- Beachline (SR 528) widening from Turnpike to McCoy Rd (FTE)
- Beachline (SR 528) widening from I-4 to Turnpike (FTE)
- Turnpike Mainline Safety Improvements – Orange County (FTE)
- Highway Asset Maintenance Contract (FTE)
- Adaptive Signal Control Project on Consulate Dr (FTE)

The physical overlap between this project and the I-4 Ultimate project will create the greatest challenge due to the restrictions identified within the RFP governing access to portions of the site. These constraints allow only 13 months from full availability to construct the flyover into the I-4 median. This requires a well thought-out construction phasing plan to accomplish. The SUPERIOR Team has already analyzed the critical path for this work and developed a plan of action as detailed in **Table 6**.

Coordination with Utility Agency Owners (UAO's). GAI has experience working with all twenty of the UAOs listed in the RFP. Our recent experience in the I-4 interchange involved intensive coordination with FGT, AT&T, OUC, and the City of Orlando (CONSERV-II). This project will directly impact the AT&T duct system running underneath the NB inside shoulder of the Turnpike, and our design approach will be to minimize the impact to the extent feasible. While FGT Pipelines will be avoided at all costs, the nature of the pipeline crossing will require coordination in accordance with the Global Agreement, which will need to be managed early and throughout the life of the project.

Section 3 - Design-Build Project Requirements, Identification of Critical Issues and Outline to Address Critical Issues

The SUPERIOR Team has a full understanding of the issues and drivers behind this project as well as the commitments made to stakeholders and the need to serve your customers.

Roadway

This project is effectively comprised of three segments working together to provide a functional express lane system, specifically:

I-4 Interchange. This interchange is the heart of the project, providing a direct connection between the express lanes under construction by the I-4 Ultimate project and the burgeoning express lane system along the northern end of the

Table 6 – Preliminary Schedule

Milestone	2018	2019	2020
Anticipated NTP - Construction Duration - 1045 Days	←NTP	Float	← Consulate Dr Deadline
Consulate Dr Operational Improvements (RFP - First 12 Mos. of Constr.)		Float	
AET Conversion (RFP Consulate Dr & I-4 Ramps by 7/31/2019)			
Resurfacing/Roadside Improvements/Express Lane Implementation			Float
Turnpike Mainline Interchange at I-4 - Ramps and Mainline			Float
Partial Flyover Construction within Availability Limits			
Finish Flyover Construction (I-4 Access - 12/1/2019)		AET Conversion Deadline →	
Project Complete (12/30/2020)		I-4 Access Available →	Completion Deadline →

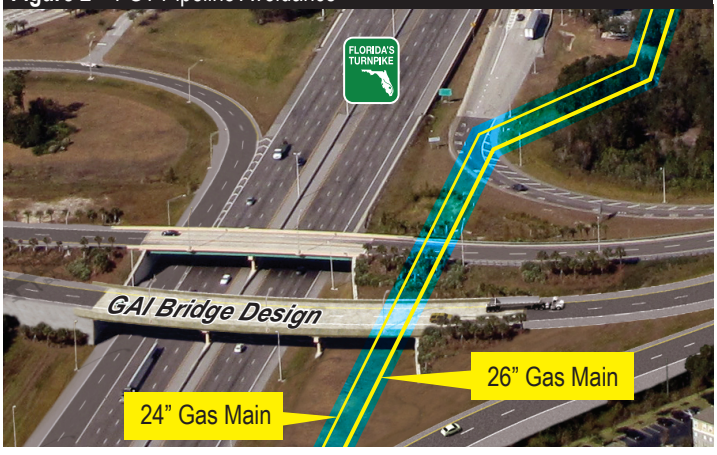
Turnpike Mainline. It is this section of the project where innovation reigns, and the SUPERIOR Team has vetted several concepts to achieve the project goals while expediting construction, adding value, and saving valuable construction dollars.

A number of goals have been established for the construction of this interchange:

- **Avoiding impacts to the intermodal (tandem truck) parking area.** This facility is vital to the transportation of goods within Florida. While large tandem-trailer trucks are forbidden on Interstates and local roads, FTE makes allowances for these vehicles to transport goods along the Turnpike mainline. This staging area exists for trucks to separate these trailers allowing for their travel on conventional facilities.

  As part of the prior improvements to the interchange (designed by GAI), an additional staging area was added at the Turkey Lake Service Plaza to provide an alternative means for these vehicles to park and make u-turns during peak periods. One of the drivers of this enhancement was the management of the short weave between NB exiting traffic from the Turnpike mainline and access to the staging area. Our strategy for managing access to this truck staging area will take full advantage of this facility, using it whenever detours are necessary through the interchange. The SUPERIOR Team recognizes the fact that use of this facility can create tolling inequities to users, as trucks using the southbound exit to I-4 must pay a toll. We will work with FTE to develop solutions that manage this impact without inflicting unfair treatment during detours.
- **Reducing the amount of work in areas controlled by the I-4 Concessionaire.** The operations zone availability schedule provided within the RFP forces work within the I-4 Ultimate corridor to be performed at the end of the project, leaving only 13 months available to the Team for work in this complex area. The SUPERIOR Team will construct as much as possible outside of these constrained time limits by optimizing alignments and geometry to simplify construction and reduce time needed to build improvements within the I-4 operations zone.
- **Minimizing impacts to the FGT pipelines.** The SUPERIOR Team is fully aware of the need to avoid FGT facilities and comply with all terms of the Global Agreement. Not doing so can add significant costs, time, and risks to the project. The hallmark of GAI's approach to the previous improvements was recognition of the potential risks FGT involvement could bring to the DB project's schedule. GAI developed an avoidance strategy based upon full understanding of FGT's requirements. A separate bridge was constructed (in lieu of widening) with an additional span over FGT's "specified width" as shown in **Figure 2**. When the Global Agreement was executed during construction of the interchange improvements, the project already complied, resulting in only minor modifications to design elements to appease FGT. Among those enhancements were innovative approaches to solve concerns, such as installing temporary barrier in a permanent condition – allowing the barrier to be "removable" and hence not a hindrance to FGT.

Figure 2 – FGT Pipeline Avoidance



- **Aesthetics.** The RFP dictates requirements for aesthetics to match the I-4 Ultimate scheme within the boundaries of the I-4 Right-of-Way. The SUPERIOR Team has developed a strategy for the proposed straddle piers (illustrated later in this document) that enhances aesthetics to match those guidelines.
- **Accommodating stopping sight distance in both directions on the bridge.** The steep, curved flyover may require widened shoulders to provide adequate sight distance within this systems interchange. GAI will carefully design the alignment and profile to meet FDOT, FTE, and AASHTO requirements.
- **Optimize the interchange configuration.** During the development of this LOI, our Team evaluated several different alternatives including ramp "flips" and realignment of the direct connect ramp to run alongside the existing ramps. Through this preliminary investigation, we came to believe that the sacrifices needed to make those concepts function strayed from the project goals and presented significant challenges of their own. While we will continue to evaluate innovative alternatives, our primary focus will be to optimize the RFP concept, lowering profiles and setting alignments to improve constructability. The SUPERIOR Team will work to propose geometry that reduces complex substructures and accelerates construction. The placement of piers and columns will be evaluated against clear zone and stopping sight distance needs for the NB Turnpike, EB I-4 and surface ramps. These alternatives will be vetted through the ATC process and modified as needed to match FTE's expectations.

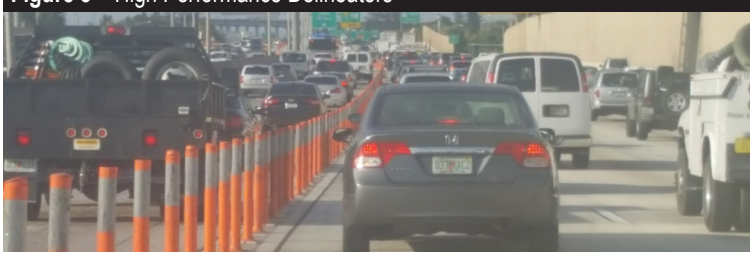
As a value added enhancement, the SUPERIOR Team will propose a concept that modifies the ramp geometry to increase the design speed to 50 mph. *We understand the implications of such a change to stopping sight distance requirements and minimum K values. However, free flow speeds on this ramp will likely significantly exceed the concept plan's 45 mph design speed. A 50 mph design speed will significantly improve safety and enhance operations. This is the standard for non-loop ramps in systems interchanges.*

Operational Improvements at Consulate Dr. There is ongoing construction in the vicinity of Consulate Dr. which will continue alongside this project's proposed operational improvements. Capacity improvements are proposed for the Off-Ramp and intersection at Consulate Dr., including additional turn lanes and signals. The existing toll site will be relocated and replaced with the new AET site and equipment.

Improvements at this interchange are subject to an early completion deadline, specifically 12 months within NTP. The SUPERIOR Team has front-loaded work within the project schedule to begin this construction early. Component submittals for this portion of the project will be among the first submitted to FTE, with 90% roadway plans presented to FTE within weeks or days of the Notice-to-Proceed.

Resurfacing/Express Lanes. The southern project limits are adjacent to a current express lane implementation construction project, which will come online at approximately the same time as this project. A major scope component of this project is to mill and resurface the Turnpike mainline allocating space for express lanes, and reducing lane widths to accommodate a 3'-4' wide buffer. This buffer will be populated with tightly spaced "high performance" delineators shown in **Figure 3** which are capable of surviving a multitude of vehicular impacts without requiring replacement.

Figure 3 – High Performance Delineators



Design Exceptions will be needed for shoulder width on the outside shoulder (reduced to 10') and inside shoulder width around existing bridge piers. These are the same design exceptions our design PM, John Saunders, implemented with the previous 8-Lane Widening project (FPID 406091-1). Our Team has also reviewed the Design Variations & Design Memorandum and plan to incorporate the approved criteria into our final design, and will submit any changes to these Exceptions/Variations (as a result of approved ATCs) within the procurement period as defined in the RFP.

Roadside improvements are also required within the limits of the resurfacing as outlined in the RFP and provided ERCAR. The deficiencies include out of date criteria adjustments (guardrail), repairing damaged items (endwalls, spalled concrete), missing object markers, and older signs replacement.

Pavement Design

Our Team will develop pavement designs utilizing the information provided from FTE, including the Minimum Pavement Design Requirements in Attachment No. 19. We will collect additional information such as pavement cores to provide input for optimum and efficient pavement designs throughout the corridor. Reduced resilient modulus values will be used in areas where soils are not ideal as was done in the earlier iteration of improvements at this interchange.

Adjustment of the lane widths to provide the required buffer will affect the existing crown location relative to the lanes. The SUPERIOR Team will carefully evaluate existing cross slopes and provide a milling and resurfacing correction strategy taking full advantage of existing pavement and limiting the amount of costly overbuild. We will also submit a Cross Slope Analysis Report with recommended areas of cross slope correction using existing data, supplemented by additional surveys as appropriate.

GAI is aware of high groundwater elevations along Ramp B located north of Oak Ridge Road and also along the northern end of Ramp B at the end of the ramp near the merge onto I-4 EB. Black base will be used for any areas that do not have 3' of base clearance for ramps and 2' of base clearance for the shoulders.

Drainage

GAI fully understands the drainage challenges at this interchange and the extent to which existing ponds are "maxed out" to meet current permit demands. Implementing the proposed pond improvements along the east side of the mainline may present challenges with FGT due to the reduction of clearance over their line as a result of the expansion. GAI permitted the previous ponds and worked closely with FGT to negotiate a mutually-agreeable solution; the SUPERIOR Team will take a similar approach through the 90% FGT Submittal process that will supplement the efforts currently underway between FTE and the utility.

GAI has completed drainage spread calculations using both the concept plans and our preliminary concepts and have confirmed bridge inlets and scuppers will not be needed on the new flyover bridge. This not only simplifies design and construction, but also reduces maintenance and avoids aesthetics challenges associated with "hiding" drainage pipes.

GAI is well experienced in the design of maintenance repairs for existing facilities such as the double-cell 10' x 7' Bridge Concrete Box Culvert, Bridge Culvert No. 750601/750488 currently co-maintained by FTE and FDOT D5 as noted in the ERCAR report. Desilting, temporary diversion of stormwater, and treating exposed rebar with corrosion inhibiting material when replacing the interior box culvert concrete surface will be specified. Alternative repair methods and materials will also be considered and coordinated with FTE during design.

Environmental/Permitting

The milling and resurfacing, routine maintenance of drainage structures, and general safety improvements listed in the ERCAR report are expected to be exempt from SFWMD permitting under Rule 62-330.015(4)(b)-(d) Exempt Activities. The SUPERIOR Team will work closely with FTE and SFWMD to separate the intent of individual parts of the project, seeking to isolate these minor improvements from the more significant enhancements at the I-4 Interchange and Consulate Dr. Separating these components in the eyes of the permitting agencies will help to streamline design and begin construction sooner, ultimately reducing impacts to customers.

The new Direct Connect ramps and bridges will increase impervious area and, therefore, require permitting with SFWMD and USACE. There is a potential for wetland impacts associated with the proposed SB toll plaza at STA. 5510 and with the modifications to Ramp D of the interchange. The new toll plaza along the north side of Shingle Creek at STA. 5510 may also be within the FEMA 100-year floodplain. This may require "cup-for-cup" compensation. This mitigation can be accommodated within the existing floodplain compensation area adjacent to STA. 5470 along the west limited access right-of-way. Additional impervious area may be subject to discharge limitations to Shingle Creek.

GAI is familiar with the stormwater treatment and FEMA 100-year floodplain compensation areas associated with the previously issued SFWMD Permit No. 48-01443-P. We recognize the importance and complexity of changing any of the existing roadside stormwater treatment swales and connecting facilities in these sensitive areas to accommodate the proposed improvements.

Verification under the U.S. Army Corps of Engineers' (USACE) Nationwide Permit program may be required for potential impacts to wetlands or surface waters associated with the proposed SB toll plaza at STA. 5510 and with the modifications to Ramp D of the interchange. Wetland mitigation may be required depending upon the amount of impact proposed.

A survey was completed for the listed species with potential to occur within the project limits as shown in the ERCAR report dated February 13, 2017. No federally or state-listed species were observed within the project area, and suitable habitat was not present within the project limits for most of the listed species with potential to occur within the project limits. Foraging habitat for wood storks may be affected by the proposed shoulder modifications to Ramp D, but impacts should not be more than 0.5 acre, yielding a "No Effect" determination for wood storks.

Maintenance of Traffic

The Superior Team will develop a traffic control plan that protects the travelling public, provides a safe work area for construction personnel, and allows for efficient construction. The plan will also provide for safe work zone ingress and egress and include full width shoulders for disabled vehicles and traffic enforcement activities.

The construction of the Direct Connect ramp will be completed in two phases. Phase 1 will consist of realigning the Turnpike's NB lanes and entrance ramp from I-4. This work will be basic roadway widening, completed behind a temporary barrier wall and will also include construction of the new toll site. Phase 2 constructs the Direct Connect ramp itself, including work in the median of both I-4 and the Turnpike. It also includes significant overhead work for straddle bents, beam picks, etc.

GAI is intimately aware of the traffic characteristics in the area and the available detour routes that can be used during the project's construction. Our prior experience revealed the available capacity along the Turnpike mainline through the interchange allows for longer-term lane closures to install piers and accommodate utility relocations (AT&T). The SUPERIOR Team will coordinate these activities closely with FTE to evaluate traffic conditions and provide clear messaging through the work zones.

The ramp shoulder and turnlane widening at Consulate Dr. will be constructed using minor shifts and temporary barrier wall for safety. The existing signal timings and detectors will be maintained throughout construction in order to avoid increasing traveler delay. Finally, the Turnpike mainline will be milled and resurfaced for restriping and express lane marker installation under night time lane closures relying primarily on Design Standard details, while paying careful attention to drop-offs and maintaining positive drainage at all times.

Structures

Structural work on the project includes design and construction of:

- Direct connection flyover ramp from the Turnpike Mainline to I-4 east of the interchange
- Median barrier demolition and reconstruction with associated approach slab and bridge deck work at Bridge No. 750603 (NB Turnpike over I-4)
- Pier protection barriers at Bridge Nos. 754097 and 754098 (John Young Parkway over Turnpike)
- New overhead sign structures
- MSE and other retaining walls
- New mast arm signal structures and other miscellaneous structures and roadside structural improvements as required by the RFP

Based on our initial review of the site and RFP documents, we believe the constructability, MOT, aesthetics, and economics point to curved weathering steel box girders or post tensioned concrete box girders as the most appropriate structural systems for the flyover bridge. Structural steel offers the benefits of lighter erection loads and faster erection, less shoring, and less overall impact to the travelling public. Ali Noorollahi and the SUPERIOR Team has extensive experience in the design of similar curved steel structures, including a complex third level curved plate girder flyover widening on the I-10 at I-95 Operational Improvements DB Project in Jacksonville utilizing Descus, MDX, and MIDAS software packages.

A single straddle pier is likely to be necessary to support the flyover. Straddle piers are also included on the I-10 at I-95 project, supporting 3rd level flyovers. The SUPERIOR Team recognizes the importance of meeting I-4 Ultimate aesthetic requirements. We have developed a preliminary concept that supports the bridge with a concrete straddle using decorative uprights consistent with the I-4 Ultimate aesthetic guidelines as shown in **Figure 4**.

The SUPERIOR Team also includes BCC with the experience and prequalification to handle post tensioned or segmental concrete bridge superstructure design if needed, giving the Team the full complement of tools needed to evaluate all options and provide the best, most effective solution for FTE. Category 2 Structure peer review services will be provided by either BCC or McNary Bergeron, depending on the final structure type proposed.

We are very familiar with the Turnpike Plans Preparation and Practices Handbook (TPPPH) and Structures Design Guidelines (SDG) criteria for re-use of existing sign structures as well as design of new sign structures using the AASHTO LRFDLTS-1 Guide Specifications. We also have recent experience designing combination span-cantilever sign structures on I-95 in Miami-Dade County that are very similar to the structure at STA 5529+00 on this project.

Toll gantries will be standard, non-accessible structures designed and constructed in accordance with standard FTE details and GTR requirements. Gantries will be designed to support both types of tolling systems currently in use by FTE to provide flexibility.

Signing and Marking Signing & Pavement Markings

Nearly all of the pavement markings through the project limits will be modified due to the implementation of the express lanes and AET conversion as shown in the signing concept plans. The project to the south will be implementing express lanes and installing signs relevant to this project. The expected completion date of that job, in early 2021, and full opening of the express lanes will likely take place at the same time for both projects. The SUPERIOR Team will coordinate during design and construction to schedule installation of those signs and eliminate, if possible, the need for overlay panels.

Similarly, signs will be placed within the I-4 Ultimate project limits by the concessionaire. As this project's opening will align with the completion of the I-4 Ultimate project, all signs will come online at the same time, and no special treatments will be needed to manage interim conditions.

The SUPERIOR Team will develop a master signing plan at the onset of the project illustrating proposed signs as well as those to be installed by others. This holistic approach delivers a consistent message to roadway users clearly assigning and directing traffic. This effort will be closely coordinated with the ITS and tolling efforts, maintaining appropriate spacing and efficiently combining structures where appropriate. All express lane signing will be enacted using TPPPH requirements to match statewide standards.

Signals

Traffic signals will be upgraded at the Consulate Dr. interchange to match with the proposed geometric improvements. Signals will be supported by mast arms and new controllers will be compatible with Orange County traffic management systems.

Lighting

The existing lighting system through the I-4 interchange is a patchwork of systems modified over the past 50 years. Existing circuits, load centers, and conduit routings were "forensically" evaluated during design of the last improvements at the interchange to ultimately develop a functional system. Lighting will be upgraded to LED as part of this project, and all electrical systems replaced to bring the facility to current standards. Our prior knowledge of the system will help in phasing replacements and in the utilization of existing lighting during construction to meet temporary illumination requirements.

Figure 4 – Straddle Pier Aesthetics

ITS

ITS elements on this DB project will include:

- Installation of approximately 5 miles of 144-strand single mode fiber optic cable backbone, spliced on both ends of the project limits within existing splice vaults to the existing backbone
- All ITS devices, new and to remain, as well as the new mainline and ramp toll gantries will be connected to the new backbone via a single mode fiber optic cable drop
- New CCTV cameras on new poles with lowering devices will be installed for complete coverage of the corridor
- A new 3-line Dynamic Message Sign (DMS) on the southbound direction just prior to the exit to I-4
- Microwave Vehicle Detection Sensors (MVDS) placed every 1/3 mile on both sides of the roadway along the express lanes and every 1/2 mile for general use tolled lanes
- Travel Time System (TTS) based on Bluetooth technology, a Highway Advisory Radio Transmitter (HART) with a HART Advisory Sign, and a Variable Speed Limit (VSL) sign system will be installed
- New Toll Amount DMS signs and Toll Status DMS signs will be installed including any required CCTV verification cameras
- A robust power subsystem, provided by upgrading existing power service locations and providing power redundancy utilizing generators and Uninterruptible Power Supply (UPS) units

Our ITS design will account for efficiencies and maintainability by collocating ITS devices on the same structures (CCTV, MVDS, TTS) and by locating ITS cabinets in areas with safe and easy access for maintenance personnel.

Paramount to the success of the project is the early and constant coordination with adjacent projects and stakeholders such as the I-4 Ultimate Project, the Sand Lake Interchange Project, as well as the FDOT D5 ITS Department for any required interconnections between the FTE and FDOT systems. As illustrated in **Figure 5**, many of the ITS and tolling systems overlap, carrying messages relevant to each agency, such as variable tolling rates and dynamic messaging. We understand that, through an agreement between FTE and FDOT, construction, maintenance, and operations of each portion of the system will remain underneath the charge of the agency that controls the physical section of roadway. Tolls and messaging will be managed through software at the SunGuide Transportation Management Center, seamlessly assigning control to the respective agencies.

We also understand the importance of the current ITS system in the operations of the Turnpike. We are committed to maintain continuous operation of the current ITS system until the new ITS system is completed and in operation.

Tolling/Express Lanes. AET elements will be designed with non-accessible gantries in strict accordance with the Turnpike Enterprise's General Tolling Requirements (GTR). The schedule will be met to convert the I-4 Interchange (Sites 3 & 4) and Consulate Dr. (Site 6) Ramp Plazas to AET by July 31, 2019.

The proposed I-4 Ramp Plazas have been located in proximity of the existing plazas to maximize temporary traffic conditions during construction; however, this places the proposed plaza within an undesirable superelevated section. Our goal is to move the proposed plazas back along tangent to meet the GTR guidance while providing safe maintenance of traffic conditions. The existing toll plazas will continue to take tolls until the conversion date, at which time demolition will start.

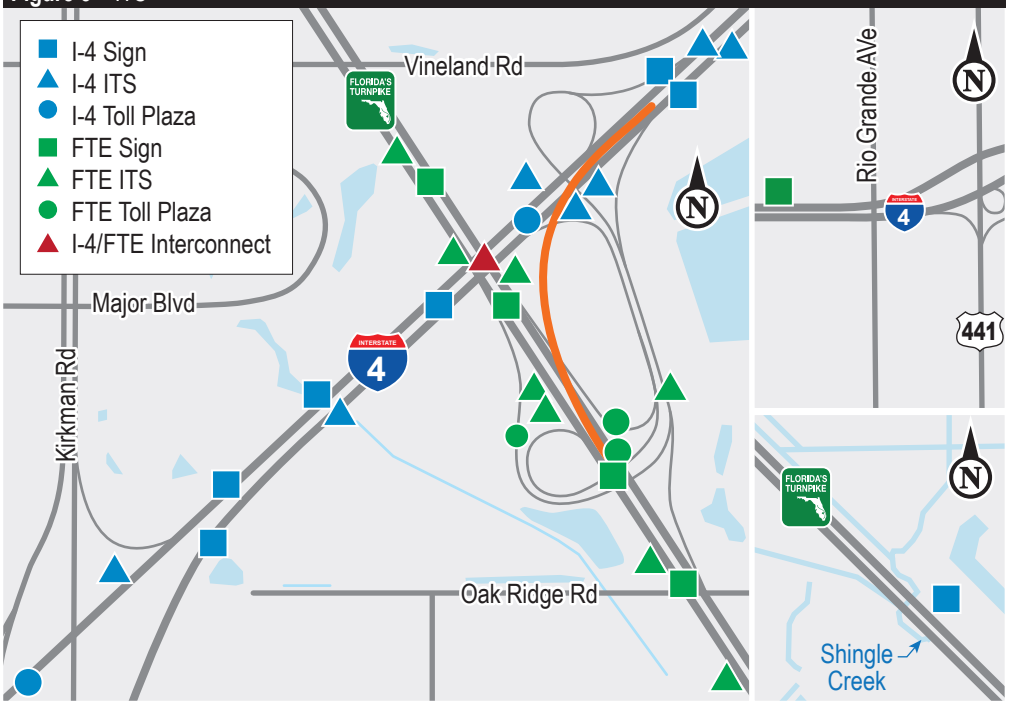
Our Design PM John Saunders has extensive experience in working with FTE on tolled and express lane facilities, and will lead the toll coordination with the FTE. Adequate tolling equipment installation and testing time will be clearly identified in the critical path method schedule.

Utility Coordination

The utility coordination effort on this project will benefit from GAI's knowledge of the twenty UAO facilities located within its limits. Our review of the proposed work and reference information suggests that only two will have direct involvement with the project; AT&T Corporation (two 2" HDPE conduits with manholes) and Florida Gas Transmission Company's 24" and 26" High Pressure Steel Gas Mains. Each has easements within the Turnpike's right-of-way.

The primary direct impacts will be to the AT&T existing conduits and three manholes positioned along the east side of the existing median barrier between Oak Ridge Road and I-4. The proposed flyover ramp and associated walls and signs will most likely expose the existing HDPE ducts, located approximately four feet below existing pavement. Prudent excavation and exposure of these ducts will allow our Team to preserve the integrity of the duct with temporary support and then replace them upon completion of any subsurface work. As is common practice when working with AT&T in the median of the Turnpike, the SUPERIOR Team will install the new ducts and manholes and AT&T will run cables and perform switchover. We will develop construction phasing to allow AT&T to perform only one switchover and complete their work all at once, lessening impacts and saving costs.

Figure 5 – ITS



GAI has extensive experience with FGT, having worked directly with them on four major projects statewide. In each case, we were able to avoid relocation of their facilities through careful coordination and design, using innovative techniques to satisfy their requirements. We are very familiar with the language and requirements in the FGT Global Agreement that was negotiated in 2013, will follow the mandatory 90% review process, and incorporate FGT construction specifications into our design and construction plans.

Survey

Our Survey Team is local and has the proven experience utilizing the latest and greatest in modern surveying and mapping technology. We have the capabilities and equipment to provide photogrammetry and Mobile LiDAR data collection procedures for rapid static and real time GPS surveys. We intend to utilize Mobile LiDAR for the resurfacing section of the project to safely and quickly recover cross slope data. This information, coupled with a well thought-out pavement

design, can help to minimize costly overbuild and avoid construction challenges such as drop-offs and temporary drainage.

For the I-4 Interchange survey collection, we will use verification surveys and update changed areas to provide a reliable basis for design. Utilities will be re-designated and additional SUE performed at the onset of the project to verify locations and aid in the coordination and avoidance process.

Geotechnical

Our Design Team has thoroughly reviewed the RFP and geotechnical data to preliminarily assess the subsurface conditions within the proposed project area. We will develop a comprehensive geotechnical investigation plan based on this review and our Team's geotechnical experience in the area. This will assure that all design work is performed in accordance with FDOT and FHWA requirements as well as all requirements in the RFP. This approach will allow our Team to take full responsibility for the geotechnical design.

Geotechnical Investigation Plan. Bridge borings will be performed to ensure that at least one boring is located at each structure foundation unit and to a minimum depth of at least 20 feet below the tips of the piles. Roadway borings will be performed on 100-foot intervals with a minimum of 3 borings per 100-foot interval for interstate highways. Any organic or unsuitable soils will be fully delineated and shown for removal in accordance with FDOT Standard Index 500. Laboratory testing shall be performed such that there is at least 1 test per 25 feet of boring. Prior to starting our geotechnical exploration we will meet with the FTE Geotechnical Engineer to verify our investigation is in compliance with FDOT and RFP requirements.

Geotechnical Load Tests. A comprehensive load test program will be developed which will include PDA testing at each bent/pier location in accordance with FDOT requirements. The PDA data will be utilized to develop accurate pile lengths and driving criteria. Installation of the production piles will be supervised and certified by the geotechnical foundation engineer of record. All foundation members will be monitored by a certified CTQP inspector.

Design Management

As discussed throughout this document, our entire project approach is singularly focused on proactively addressing issues. We have centered our research around identifying risks and developed plans to mitigate them.

The SUPERIOR Team will aggressively pursue design approvals, using logical component sets to kick off work and resolve key issues. Early coordination with FGT is a must, as any revision to the concept plans will likely "reboot" the 90-day review process mandated by the Global Agreement. In addition, regulatory agencies will be engaged early on to gain clearances and allow for any required permit modifications needed as a result of changes made during the ATC process.

Work will be prioritized to meet early schedule commitments, such as work at Consulate Dr. and completion of the AET conversions. Milling and resurfacing and ERCAR-mandated upgrades will also be expedited, bringing these improvements to the public early and off of the critical path.

Transportation Management Plan (TMP)

The SUPERIOR Team will develop a TMP considering the immediate project limits and regional influences. Construction activities will be coordinated with other ongoing projects and various other agencies including City of Orlando, Orange County, FDOT D5, I-4MP, emergency services, the media and local law enforcement. Our TMP consists of three components:

Temporary Traffic Control Plan (TTCP). The TTCP will focus on safely moving traffic through active work zones and providing positive guidance to road users. We will minimize the number of TTCP phases and their duration while providing effective coordination with adjacent projects. The TTCP will utilize temporary barrier wall as necessary to enhance worker and public safety within the work zone.

Motorist Awareness Systems will be deployed during all Turnpike and I-4 lane closures to serve as a speeding deterrent. Specific signage will also be provided to adequately inform motorists experiencing vehicle trouble where refuge areas are located. Every effort will be made to minimize traffic interruptions along the Turnpike and I-4 and any lane closures will be properly timed and scheduled.

The following design/construction techniques will further minimize traffic impacts to the travelling public:

- Use of high capacity precast concrete piles minimizing footing sizes in the vicinity of the Turnpike and I-4
- Rotating the pile footings parallel to the interstate minimizing roadway impacts
- Optimizing span arrangement of the flyover structure to better suit bridge erection and minimize temporary falsework

Transportation Operations. The SUPERIOR Team will provide a detailed Incident Management Plan (IMP) to detect, respond and manage incidents occurring within the limits of the project. Pre-determined detours will be coordinated with FTE to be ready for incidents that may occur. SUPERIOR will maintain an on-site stockpile of signs and devices necessary to enact detours quickly should an incident require.

The Team will assist stranded motorists at no charge to the motorist or Department as an innovative approach of the IMP to ensure disabled vehicles are removed from the travel lanes as quickly as possible. SUPERIOR will provide a direct line of communication between our Team and FTE's/FDOT's Traffic Management Centers.

Public Involvement. We understand the construction of this project will impact a wide variety of users that include local commuters and out-of-town travelers. We will maintain focused and consistent coordination among team members, other contractors, and stakeholders including police and emergency services. The SUPERIOR Team will work alongside FTE Public Involvement Office staff to communicate upcoming work periods so that information can be posted on FTE's website and make staff aware of pending activities.

Construction

Foundation Installation Plan. The SUPERIOR Team will develop and submit a Pile Installation Plan which will address process control standards and quality assurance for the installation of bridge foundation pile. The Pile Installation Plan will include the operation and maintenance of the pile driving system, criteria for replacement of hammer/pile cushions, and aspects of a dynamic monitoring program. FTE will be immediately notified of any deviations from the approved Foundation Installation Plan.

Test Pile Program. Universal Engineering Sciences (UES) will perform Dynamic Load Testing, provide recommended production pile casting lengths, and develop driving criteria in coordination with the Geotechnical Foundation Design Engineer of Record. Coordination will be seamless, and turn-around time optimized for document submittals since the PDA services and geotechnical engineering will both be performed by UES. 100% Dynamic Testing will be used to expedite construction, minimize impacts to the motoring public and make certain the direct connect flyover bridge construction schedule is achieved.

Vibration and Settlement Monitoring. The Settlement and Vibration Monitoring Plan (SVMP) will be prepared as part of the 90% plans submittal. The SVMP will be maintained and updated throughout the work and will ensure all RFP criteria is met with respect to vibration and settlement monitoring during the installation of all foundations (piling and misc. drilled shaft casings) as well as any sheet piling required for support of excavation. Design and construction techniques minimizing vibrations will be deployed at vibration sensitive project sites including the three existing ramp toll sites at the Consulate Dr. SB off-ramp, the I-4 NB on-ramp and the I-4 off-ramp prior to commissioning of these three AET sites on each of the ramps.

THE SUPERIOR TEAM

Our Team stands ready to deliver this important project to FTE and your customers. We have a complete understanding of all project challenges and have a plan to match each of them. We have unparalleled experience in the area and within the I-4 interchange itself. The SUPERIOR Team looks forward to partnering with FTE to successfully deliver this project!