



*DESIGN-BUILD TEAM QUALIFICATIONS FOR*  
I-75 / US 301 INTERCHANGE IMPROVEMENTS



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The Team of The Lane Construction Corporation (LANE) and GAI Consultants, Inc. (GAI) understands the unique features of this important project and the many commitments District 1 has already invested towards the I-75/US 301 Interchange. The project will address current operational concerns while building for the future – serving as an interim, stand-alone solution that ultimately serves the community for years to come. Environmental stewardship and preservation of this navigable waterway will be key tenets of the design and construction of this important project. The LANE Team brings unique qualifications that will allow us to achieve these goals, including:

- ▶ An integrated team that innovates design and construction solutions which simplify construction, maintenance of traffic, and lessens impacts to users
- ▶ A progressive interchange optimization that improves operations and adds value to FDOT and the community
- ▶ An enhanced community involvement plan that supplements the Department's outreach efforts with renderings and 3D models that can be shared with the public and local media
- ▶ A unified environmental team that protects natural resources through design and proven field techniques

The LANE Team stands ready to deliver this project for you with an unparalleled and trusted team of design and construction professionals who are committed to achieving quality and overall success for District 1.





One of America's premier heavy civil contractors, The Lane Construction Corporation (LANE) is the preferred partner to connect and improve the communities and world in which we live. Founded by railroad engineer John S. Lane in 1890, LANE constructs quality highways, bridges, locks, dams, and mass transit and airport systems in over 20 states. LANE has successfully participated in over 75 Design-Build (DB) projects ranging in scope from \$1.5 million to \$2.3 billion.

- ▶ LANE is the #2 Top Highway Contractor and the #36 Design-Build Contractor in the US ranked by ENR, and has over 150 projects delivered to FDOT totaling over \$2 Billion.
- ▶ FDOT 5 Year Average CPPR Score of 97, with CPPR Average Score of 102 on Design-Build Projects
- ▶ 10 Delivered Design-Build Projects in Florida totaling over \$300 M
- ▶ Our current industry Experience Modifier Rating (EMR) is 0.74, well below the industry average of 1.00.
- ▶ 2,200 employees in Southeast US

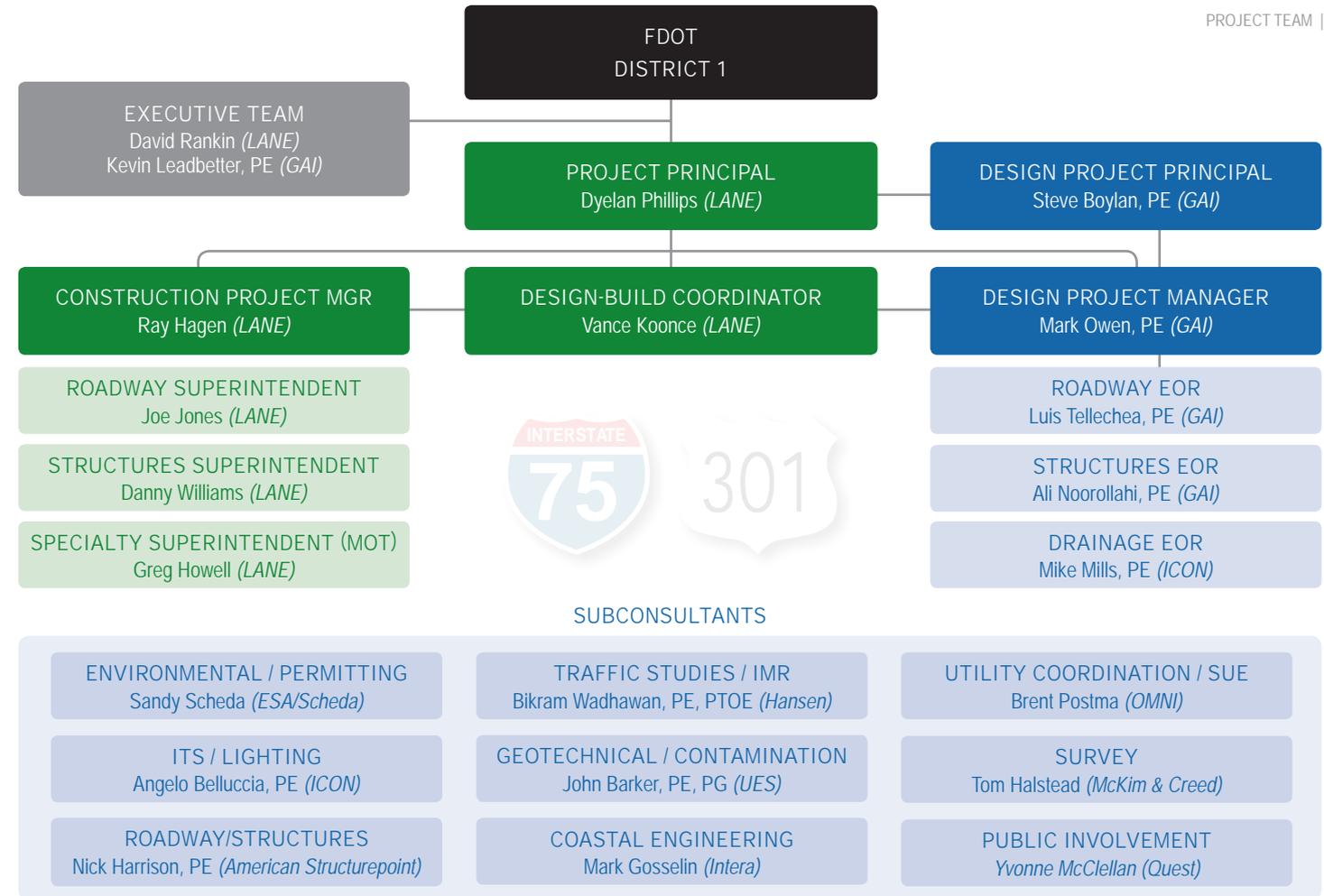


gai consultants

GAI Consultants, Inc. (GAI) is a 900-person, multi-discipline engineering and environmental consulting firm, with offices in more than 24 locations across the US. GAI applies practical engineering and field expertise to solve urban/rural highway and traffic challenges—and the skill brought to these projects is evident in GAI's long list of project successes. *GAI has served as prime engineer on more than 440 transportation design-build projects with a total value of more than \$850 million in the last 15 years in the State of Florida, 35 of which are for FDOT.*

GAI's is committed to providing comprehensive transportation services in all phases of project development, including developing plans, specs, and reports based on creative solutions that meet the specific needs of each project— solutions that save clients valuable time and money.

*GAI has earned American Society of Highway Engineers (ASHE) Awards for Outstanding Engineering throughout the U.S. and is consistently ranked by Engineering News-Record as a Top 500 Design Firm.*





## Max Brewer Bridge Replacement Design-Build, FDOT D5 (\$45M)

**LANE**

- ▶ Construction of a new, high-rise 3,207' bridge over the Intra Coastal Waterway
- ▶ Bridge superstructure is pre-tensioned 78" bulb-tee approach spans and a post-tensioned three-span continuous modified 78" bulb-tee main unit
- ▶ Work included reconstruction/realignment of the SR 406 roadway and removal of the existing, deficient movable and fixed bridge elements

Multiple Award Winning Project

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*"I would like to express my sincere gratitude and admiration to you and the entire Design/Build team for making this one of the best projects I have been a part of in my twenty six years of experience as an owner's representative. The project had many challenges, but the team work and high personal values exhibited by everyone truly made the project a success. I was especially impressed with everyone's willingness to accept responsibility and work together to find the best solutions to the project challenges. The communication between all parties helped build mutual trust and cooperation."*

Steven Wigle, PE | CEI for FDOT District 5  
A. Max Brewer Bridge Project



**I-95 from Malabar Rd to the Indian River County Line Design-Build, FDOT D5 (\$52M)**  
**LANE**

- ▶ Widened and reconstructed I-95 from four to six lanes for 12.4 miles
- ▶ Four bridge replacements, including two over the C-54 Canal and two at the Fellsmere Canal
- ▶ Widened two bridges
- ▶ Extensive coordination with adjacent state park lands and a local water control district
- ▶ A detailed maintenance of traffic plan was developed for the new bridges, widening areas, and also for the lengths of complete reconstruction of I-95



**I-4 from CR 557 to US 98 Design-Build, FDOT D1 (\$72M)**  
**LANE**

- ▶ Widened 16 miles of I-4 from four-lanes to six-lanes and a widening of six mainline bridges and replacement of four crossover bridges
- ▶ LANE self-performed the asphalt paving
- ▶ *Received the National Asphalt Pavement Association "Award for Quality" on this project.*



### Turnpike Widening from SR 528 to the Osceola Parkway Bid-Build, FTE (\$176M)

#### LANE

- ▶ Reconstruction and widening of Florida's Turnpike from 4 to 8 lanes, with 2 express lanes and 2 general purpose lanes in each direction, with the addition of non-accessible toll gantries
- ▶ Three new ramps at the SR 417 interchange: a 1,882-foot long third level steel box girder bridge, a 1,715-foot long third level steel box girder bridge and an at grade ramp
- ▶ Reconstruction and widening of the Osceola Parkway and Orlando South interchanges
- ▶ Replacement of the Turnpike bridges over the Central Florida Rail Corridor and over Central Florida Parkway/CSX Railroad Spur
- ▶ LANE initiated a MOT CSI to save money and time, and improve driver expectations



### I-95 from SR 406 to SR 44 Design-Build-Finance, FDOT D5 (\$127M)

#### LANE

- ▶ This 30-mile project widens I-95 from four to six lanes
- ▶ Interchange reconstruction
- ▶ Drainage system improvements
- ▶ Bridge widening and replacement
- ▶ Soundwall
- ▶ Lighting
- ▶ ITS
- ▶ Grassing
- ▶ LANE's proposal was the only one to deliver the full 30 mile project within the allowable budget



### I-85 Yadkin River Bridge Replacement Design-Build, NCDOT (\$140M)

#### LANE

- ▶ Widening of I-85 from four to eight lanes
- ▶ Realigned the roadway to eliminate sharp curves
- ▶ Replaced the deficient 2-lane bridges over the Yadkin River with dual 4-lane structures approximately 2,700 linear feet
- ▶ Replaced the bridge on US 29/70 over the Yadkin River.

▶ Received the 2014 DBIA National Award of Merit for Transportation



### Turnpike Widening from Beulah Rd to SR 50 Bid-Build, FTE (\$88M)

#### LANE

- ▶ Widened/reconstructed four miles of the Mainline Turnpike from four to eight lanes and reconstructed one mile of SR 50
- ▶ New bridges at Winter Garden- Vineland and Avalon Roads, the installation of noise walls and two toll plazas
- ▶ LANE looked for ways to expedite the project schedule while creating safer driving conditions for the motorist including expediting the reconstruction of the bridge over Avalon Road by constructing a temporary bridge

▶ 2012 FTBA Best in Construction Interstate Award



### I-35 Brazos River Bridges Bid-Build, TxDOT (\$212M) *LANE*

- ▶ 10 miles of complete roadway reconstruction
- ▶ 26 bridge replacements
- ▶ Multiple interchange operational improvements
- ▶ Concrete pavement
- ▶ 2 million CY of excavation
- ▶ Utility relocations
- ▶ Construction of twin, extradosed, steel bridges over the Brazos River. This was the first use of a steel extradosed bridge in the U.S. and was constructed from sectional barges on the Brazos River
- ▶ A vigorous schedule allowed the bridges to open to traffic 4.5 months sooner than expected



### South Jordan Bridge Design-Build P3, United Bridge Partners (\$76M) *LANE*

- ▶ New 5,375 foot precast segmental bridge is a two-lane, fixed-span, high-rise toll bridge over the Elizabeth River
- ▶ Modern, concrete bridge provides improved navigational clearances up to 145 feet high and 270 feet wide
- ▶ Features two 12 foot wide traffic lanes, two 8 foot wide shoulders, and an ADA-compliant sidewalk that is separated from traffic by a concrete barrier
- ▶ Bridge provides a much-needed route for emergency vehicles and an additional evacuation route for the area
- ▶ Fully electronic tolling system with E-Z Pass offers maximum convenience for users



I-10/I-95 Interchange Phase 1



I-10/I-95 Interchange Phase 2

**Phase 1: I-10/I-95 Interchange Reconstruction (\$157M)**  
**GAI (CEI), UES**

- ▶ The Big I required 17 bridges, 21 ramps, and 25 lane miles to be built through one of the busiest interchanges in Florida
- AASHTO 2011 America's Best Transportation Project
- AASHTO 2011 America's Transportation Awards: On Time, Medium Project
- FTBA 2011 Best in Construction: Interchange Award
- ACI First Coast Chapter Award: Significant Concrete Structure

**Phase 2: I-10/I-95 Interchange Modifications & Fuller Warren Bridge Widening Design-Build (\$117)**  
**GAI, UES**

- ▶ Targeted operational improvements in this heavily traveled systems interchange
- ▶ The AW/GAI Team developed ATC concepts that saved more than \$10M in construction costs
- ▶ Includes widening of the Fuller Warren Bridge over the St. Johns River to improve capacity and add a multi-use trail
- ▶ Construction of complex, curved steel structures to enhance interchange movements
- ▶ Requires intense community involvement efforts with key stakeholders such as the Riverside Arts Market
- ▶ Includes extensive concrete paving

“I commend the Team for the respect they displayed towards all the parties involved with the construction of this mega-project. I believe their professional relations were the cornerstone to building an excellent product, under budget and ahead of schedule. That spirit will no doubt continue to foster future successful partnerships.”

Ken Hill, PE | FDOT District 2  
 Former Jacksonville Construction Engineer  
 I-10/I-95 Interchange Reconstruction, Jacksonville, FL



I-95/I-4 Interchange



I-95/US 92 Interchange



I-95 Over Spruce Creek

**I-95 Widening & I-4/US 92 Systems Interchange Reconstruction (\$205M)**  
**GAI, UES**

- ▶ Systems interchange reconstruction
- ▶ Innovative concepts that saved \$30 Million in right-of-way
- ▶ Significant airport and local stakeholder involvement
- ▶ Bridge widening and replacement
- ▶ Asphalt pavement widening, milling and resurfacing
- ▶ Drainage system improvements
- ▶ Foundations for cantilever signs or overhead sign trusses
- ▶ Signing and pavement marking, signalization
- ▶ Intelligent Transportation System (ITS) modifications

*“Serving to deliver project objectives on-time, within budget, and overall successfully is the top priority for this Team’s leadership. The regularity in which they achieved these project objectives exceeded our expectations.”*

Bradley Bauknecht, PE  
 Former FDOT District 5 Project Manager for I-95 Widening and Systems Interchange Reconstruction



#### US 27 Widening from Barry Road to US 192 Design-Build, FDOT D1 (\$22M) *GAI*

- ▶ 4.45 miles of rural divided highway widening
- ▶ Bridge widening and interchange improvements at US-192
- ▶ 6,500 LF of sound walls
- ▶ Elimination of approximately 14,000 LF of retaining/gravity walls
- ▶ Significantly reduced utility impacts
- ▶ Reduced construction time by more than 500 days



#### Wekiva Parkway (SR 429) Segment 6 Design-Build, FDOT D5 (\$234M) *GAI*

- ▶ Environmentally sensitive area – requiring intense agency coordination, including Section 7(A) determination through the National Park Service
- ▶ 18 bridges, three of which cross the Wekiva River, and 5,700 feet of new wildlife bridge structures
- ▶ Four-lane divided highway; two-lane service road; interchange ramps; three parallel segmental bridge structures over the Wekiva River; 15 Florida I-Beam girder bridges spanning wildlife and roadway crossings; all-electronic tolling gantry



#### I-4/Turnpike Direct Connect Design-Build, FTE (\$84.9M) *GAI*

- ▶ Limited access system-to-system connection near Downtown Orlando
- ▶ 2000' Flyover Bridge Ramp Direct Connect of I-4 and Florida's Turnpike
- ▶ Complex MOT Plan in a highly congested area using detours and pacing methods
- ▶ Express Lanes are introduced on both Interstate facilities
- ▶ 6 miles of 8 lane resurfacing and roadside improvements
- ▶ Our two ATCs were approved on the project that reduced over 18,000 sf of bridge and 4200 sf of pavement reconstruction



#### I-295 Interchange/Collins Road Design-Build, FDOT D2 (\$63M) *GAI*

- ▶ 150,000 sy of concrete pavement
  - ▶ 6 miles of new concrete pavement (along both NB and SB I-295)
  - ▶ Four new bridges and one bridge widening
  - ▶ 12 miles of concrete barrier wall
  - ▶ New Intelligent Transportation System
  - ▶ Comprehensive MOT plan effectively routes over 125,000 vehicles per day through the work zone
- ▶ *DBIA Transportation Merit Award and the FTBA Best in Construction – Interstate*



**SR 589, Veterans Expressway Widening Design-Build, FTE (\$52M) *GAI***

- ▶ Roadway and bridge design
- ▶ Tolling/express lane design
- ▶ Complex Maintenance of Traffic
- ▶ Asphalt pavement widening, milling and resurfacing
- ▶ Drainage system improvements
- ▶ Signing and pavement marking
- ▶ Signalization / Lighting
- ▶ Utility Coordination
- ▶ Intelligent Transportation System (ITS)
- ▶ Foundation design for cantilever signs and overhead sign trusses



**I-10 Marietta Interchange at Hammond Blvd. Design-Build, FDOT D2 (\$27M) *GAI***

- ▶ New interchange constructed at Hammond Blvd with on and off ramps to and from I-10
- ▶ Overpass 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
- ▶ I-10 was widened and resurfaced through the interchange to accommodate added auxiliary lanes



**I-295 Widening (I-10 to Commonwealth Ave), FDOT D2 (\$11.1M) *GAI***

- ▶ Widening of I-295 from a four to six lane facility
- ▶ Widening of the bridges on I-295 over Commonwealth Ave
- ▶ Widening of the Bridges on I-295 over the CSX Railroad
- ▶ Widening and reconfiguration of the off/on ramps at I-295 and Commonwealth Ave



**I-95 Express Phase 3C, FDOT D6 (\$457M) *GAI (sub)***

- ▶ Critical component of South Florida's Express Lanes Network will complete the I-95 Express Lanes system in the area by adding two lanes in each direction on I-95
- ▶ Direct connections to/from I-95 Express and I-595
- ▶ GAI's design innovations will help streamline the construction process and increase overall safety—providing drivers with a safer, smoother ride on this high-speed, high-volume thoroughfare
- ▶ Structural improvements involve a total of 35 bridges ranging the full gamut from concrete beams to steel girders, from new construction to widening, strengthening, retrofit, and painting, as well as miscellaneous structures such as walls, signs, signals, platforms, and fenders



**US 1 / San Sebastian River Design-Build, FDOT D2 (\$13.5 M)**  
*GAI*

- ▶ New 760 foot long, 4-lane bridge structure with bike lanes and sidewalk over the San Sebastian River
- ▶ 2013 FTBA, *Best in Construction: Design-Build category*
- ▶ 2013 DBIA-Florida, *Honor Award: Transportation Category*
- ▶ FDOT District Two's *Small Project Winner (Under Budget Category)*



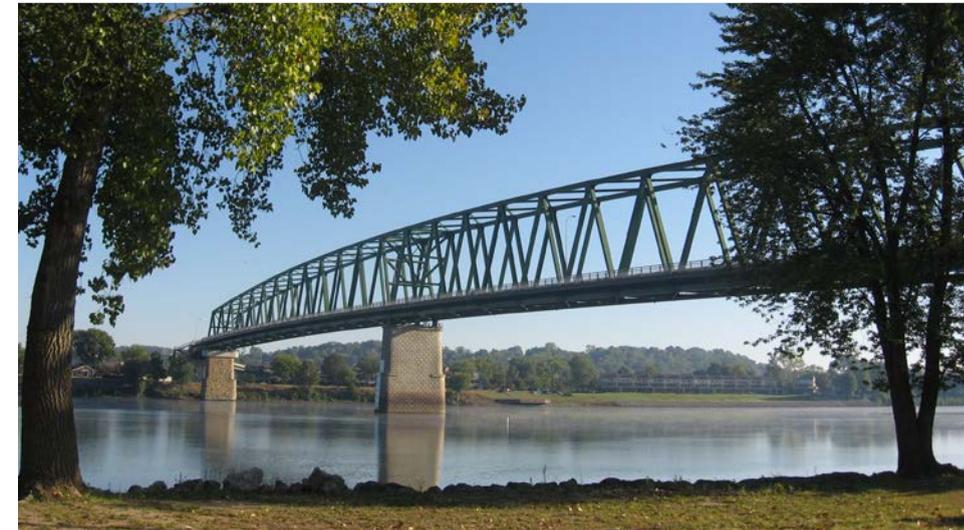
**Rubles Run Bridge, WVDOT (\$16M)** *GAI*

- ▶ Six-span, dual multi-girder bridge, carries the Mon-Fayette Expressway over Rubles Run and a deep, wide valley floor flanked by steep hillsides
- ▶ The northbound structure is 1,446 feet long, and the southbound structure is 1,374 feet long
- ▶ Each structure carries two 12-foot lanes of traffic with a 4-foot shoulder on each side of the traffic lanes for a total curb-to-curb width of 32 feet
- ▶ 4,600-foot radius curve for its entire length



**Romney Bridge Replacement, WVDOT (\$11M)** *GAI*

- ▶ Replacement of existing structure with a 930-foot six-span structure, including design of over 2,020 feet of approach
- ▶ Design study report/alternative analysis
- ▶ Span arrangement investigation
- ▶ Multi-girder superstructure design
- ▶ Geotechnical investigation
- ▶ Roadway design
- ▶ Utility relocations
- ▶ Right-of-way development
- ▶ Maintenance of Traffic (MOT)
- ▶ Drainage design
- ▶ Winner of *West Virginia Division of Highway's Engineering Excellence Award, Large Bridge Category, in 2008*



**Williamstown Marietta Bridge over the Ohio River, WVDOT (\$24M)** *GAI*

- ▶ 800-foot curved multi-girder approach span
- ▶ 440-foot tangent approach span for the 1,250-foot, two-span, continuous truss bridge
- ▶ New pier
- ▶ GAI's aesthetically pleasing, clean design, was accomplished in part by eliminating vertical truss members and by design of the free-standing pedestrian access stairwell on the Marietta side
- ▶ An 800-foot curved multi-girder approach span on the Williamstown side complements the geometric design of this economical structure
- ▶ Winner of the *ABCD New Major Structure Award*

