

RFP #2023000154

REPAIR OR REPLACE ROTONDA MSBU BRIDGE 014113

CHARLOTTE COUNTY, FLORIDA

FEBRUARY 8, 2023



KCI TECHNOLOGIES, INC.
4041 Crescent Park Drive
Tampa, Florida 33578

PRIMARY CONTACT
Ralph Verrastro, PE / Practice Leader — Bridges
239-216-1370 / ralph.verrastro@kci.com





ISO 9001:2015 CERTIFIED

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

4041 Crescent Park Drive • Tampa, FL 33578 • Phone 813-740-2300

February 6, 2023

Senior Division Manager – Purchasing
Charlotte County Administration Complex
18500 Murdock Circle, Suite 344
Port Charlotte, Florida 33948-1094

Subject: Proposal Response to RFP 2023000154 Repair or Replace Rotonda MSBU Bridge 014113

Dear Selection Committee Members:

Ralph Verrastro, PE, will serve as the Project Manager and the primary point of contact for Charlotte County related to this project. Mr. Verrastro can be contacted by phone at 239-216-1370, or via email at ralph.verrastro@kci.com. Rolando Corsa, PE, will serve as the Bridge Engineer of Record and secondary contact point of contact. Mr. Corsa can be contacted by phone at 813-767-0538, and via email at rolando.corsa@kci.com. Please consider selecting KCI Technologies, Inc. (KCI) in association with Weiler Engineering Corporation, INTERA, and Universal Engineering Sciences for this project for reasons that include:

1. Ralph Verrastro, PE, and Rolando Corsa, PE, have worked together on bridge and structural engineering projects in Florida for over 19 years.
2. KCI's staff prepared 60% repair plans for Bridge # 014113 which has provided a unique level of familiarity including the preparation of load rating calculations for the existing bridge.
3. KCI performed an emergency inspection of Bridge # 014113 after damage caused by Hurricane Ian.
4. KCI and our subconsultants have worked together on other bridge replacement projects in Southwest Florida and we are prequalified by FDOT in work categories that include bridges, roadway, survey, hydraulics, utilities, miscellaneous structures, bridge inspection, bridge load rating and CEI.
5. KCI recently completed or are working on bridge and roadway design services related to numerous similar bridges in Charlotte County and are substantially complete with the most of this work, so we are readily available to initiate work on this project.
6. KCI and our subconsultants value our working relationship with Charlotte County and will strive to function as a *seamless extension* of the County's public works staff.
7. We will provide expert technical advice with the attitude that we are part owners of this bridge.
8. KCI's staff has extensive experience providing bridge engineering services related to flood damaged bridges including negotiations with FEMA related to providing the required documentation for funding repairs and/or replacement of bridges.
9. KCI is approved by the Florida Board of Professional Engineers (FBPE) as a provider of continuing education courses.

Respectfully submitted,

KCI Technologies, Inc.

Ralph Verrastro, PE
Practice Leader – Bridges

Erick Fry, PE
Vice President

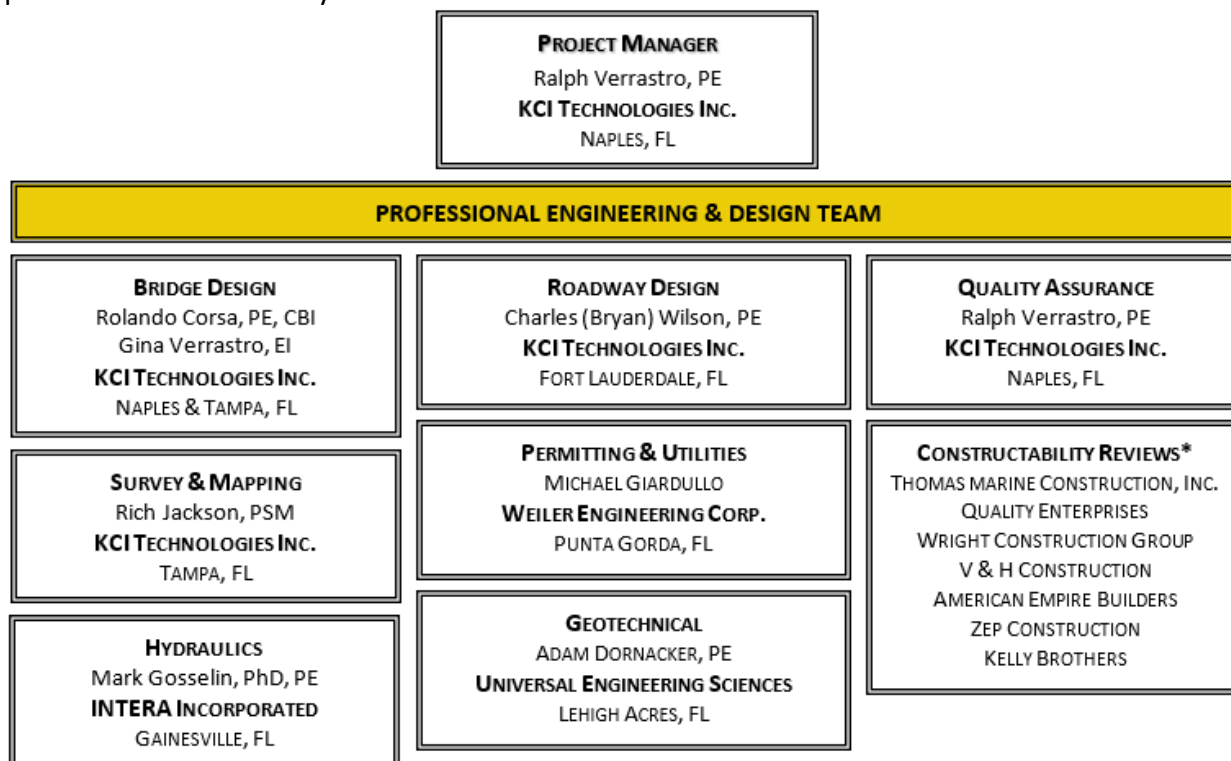
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SECTION I - TEAM PROPOSED FOR THIS PROJECT

The following Organizational Chart provides a graphical summary of the proposed staff and associated responsibilities for KCI Technologies staff and our sub-consultants. We promise that Ralph Verrastro, PE, and Rolando Corsa, PE, of KCI will not be substituted without the express permission of the County.



** We maintain working relationships with most of the bridge contractors in southwest Florida which allows access for discussions and feedback on constructability issues during the design phase.*

The following narrative provides background information about the key personnel proposed for this project. See their resumes for more detailed information about each person's experience in the Appendix of this EOI.



Ralph Verrastro, PE, will serve as the Project Manager for this project. He will be responsible for performing quality assurance of the project design documents. This includes performing a review of all project deliverables. He will also take the lead for the design team at any Public Information Meetings that may be required. Ralph will lead the design team and verify that all documents, plans, drawings, and specifications will meet or exceed the County's design requirements. As Project Manager, Mr. Verrastro will be responsible for the documentation of project communications between the County and the design team. He will also take the lead in preparing or reviewing all technical memorandums and reports submitted to the County for the design team. He graduated with a BS in Civil Engineering from Cornell University in 1976. His career includes bridge design experience throughout the United States, and he is a registered Professional Engineer in 37 states. Mr. Verrastro specializes in the design, inspection, evaluation, technical supervision, and quality assurance/quality control for bridge and miscellaneous structural projects.



Rolando Corsa, PE, will serve as the Bridge Engineer of Record for this project. He will be responsible for structural design and the supervision of the preparation of the structural drawings/details. He has been a bridge engineer and a Certified Bridge Inspector (CBI) since 2000 and is currently a Senior Bridge Engineer with KCI. After graduation from the University of South Florida, his experience in bridge engineering has involved: the design of new bridges; inspection and rehabilitation of existing bridges; and the inspection and load rating of bridges per FDOT requirements. Other structure types have included box culverts, traffic signal mast arms, storm water structures (weirs), utility pipe aerial crossings, boardwalks, fishing piers, docks, sea walls, retaining walls, high mast lighting poles, catwalks and underground utility structures.



Gina Verrastro, EI, will serve as the Bridge Designer for this project. She will assist with structural design and the preparation of the structural drawings/details. Ms. Verrastro has been providing bridge engineering services since 2017 and is currently a Bridge Designer with KCI. She is a graduate of Florida Gulf Coast University, and her experience in bridge engineering has involved: the design of new bridges and transportation signal/sign structures, the inspection and rehabilitation of existing bridges, and the inspection and load rating of bridges per FDOT requirements. She provides coordination, design, condition inspection, and construction inspection services for bridges, retaining walls, docks, and transportation structures.



Charles (Bryan) Wilson, PE, will serve as the Roadway Engineer of Record responsible for the design of the roadway approaches and traffic control plans. Mr. Wilson has over 35 years of experience in the design and management of highway transportation projects in Florida. His project experience encompasses all aspects of highway design from pavement rehabilitation to limited access interchanges and managed lanes facilities delivered in both bid-build and design-build formats.



Michael Giardullo, PE, will serve as the Utilities Project Engineer and handle the coordination for permitting with the environmental agencies. Mr. Giardullo, the Director of Civil Engineering at the Weiler Engineering Corporation, has repeatedly demonstrated his ability to manage projects using in-house professional staff. Mr. Giardullo has worked as the lead designer and project manager for a variety of projects throughout Charlotte County and for Charlotte County, including the South County Regional Park Improvements, Harbour Heights Park Boat Ramp & Dock Replacement, Kiwanis Park, Charlotte Harbor's Culvert projects, and the City of Punta Gorda's Harborwalk East & West project. Since 2011, he has served as the Engineer for DeSoto County.



Rich Jackson, PSM, will be the lead for the survey and mapping. Mr. Jackson is a project surveyor with over 35 years of experience throughout the state of Florida working with Clients such as FDOT and local municipalities. His experience includes transmission line route surveys, preparation of easements via sketch and legal description, ALTA/NSPS surveys, boundary surveys, construction layout, topographic surveys, hydrographic surveys, bathymetric surveys, as-built surveys, and 3D modeling.



Mark Gosselin, PE, will serve as the Hydraulics Engineer of Record. Mark has nearly three decades of experience in coastal processes, nearshore and open channel hydrodynamics, and sediment transport. Dr. Gosselin has served as project manager on hundreds of scour and hydraulics assessments of bridges and coastal structures throughout the country and has served as project manager on numerous coastal engineering studies that have involved wave, hurricane storm surge, riverine flooding, and dam break hydraulic modeling. His experience covers the southeastern U.S., Virginia, Washington, and Puerto Rico, and clients such as state departments of transportation, the Federal Highway Administration, US Army Corps of Engineers districts, the Federal Emergency Management Agency (FEMA), and NASA. He has applied SWAN+ADCIRC, RMA2, FESWMS, AdH, HEC-RAS, and other analytical techniques to support coastal structure design and assessments for design and numerous design-build projects. Dr. Gosselin has authored design guidelines at both the state and federal levels for clients, including NCHRP, FDOT, SCDOT, and NCDOT.



Adam Dornacker, PE, Mr. Dornacker is a registered Professional Engineer with nine years of experience in his field. His expertise includes foundation design analysis and recommendations, foundation installation monitoring, and field and laboratory soil and concrete testing. As Geotechnical Department Manager, Mr. Dornacker is responsible for managing and coordinating all work performed by the department. His responsibilities include preparing and reviewing geotechnical and materials engineering inspection reports, coordinating and supervising engineering staff and drilling personnel, conducting foundation observations, and foundation design reviews. He also is involved in geotechnical instrumentation monitoring and reviewing and signing materials testing reports.

SECTION II – PROPOSED MANAGEMENT PLAN

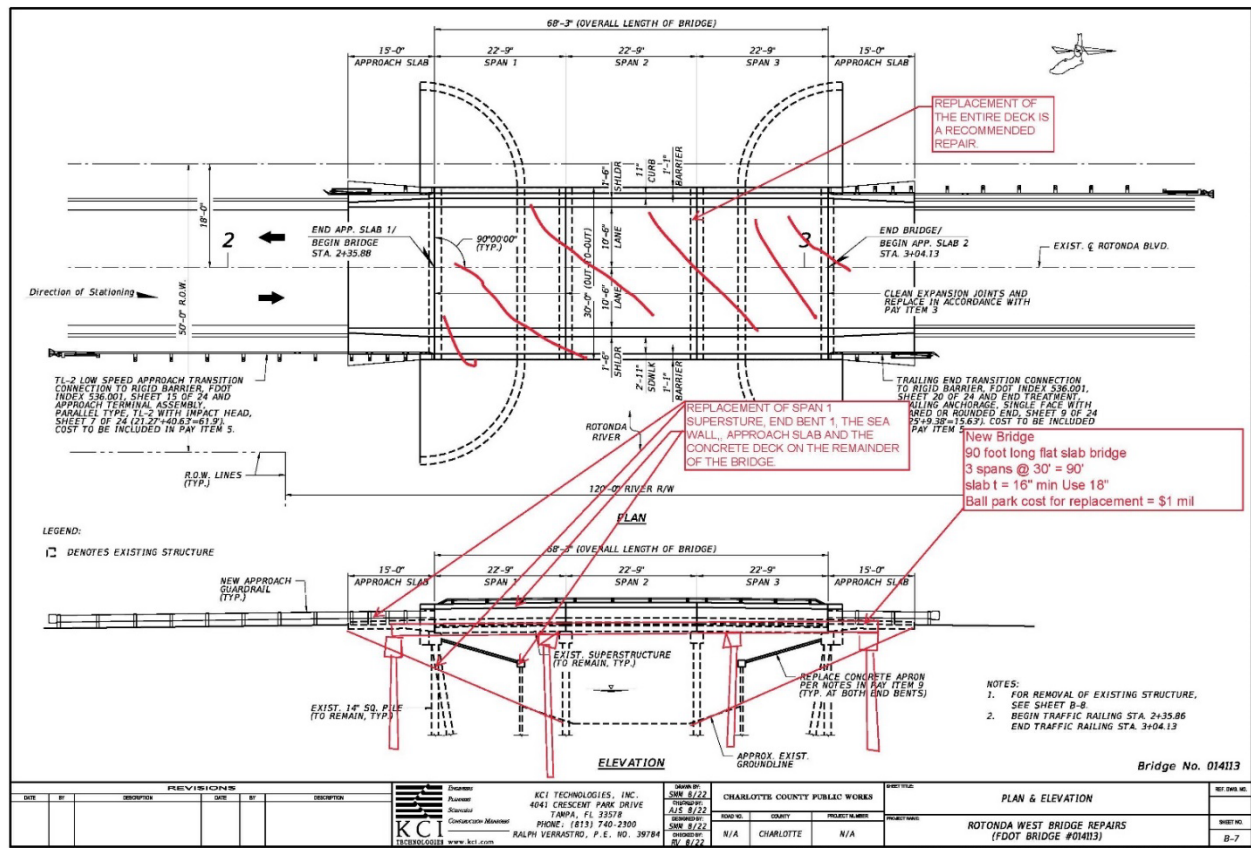
The following best practices explain our management approach for this and all our projects during the design and construction phases:

1. Clear communication between the design team and the County is a key ingredient in the recipe for a successful project. From the development of a comprehensive scope of services to the final punch list at the closeout of construction, our focus on the communication of information is crucial.
2. We personalize our approach to the communication of information depending on the requirements of the client. We are also accustomed to presenting technical issues, in our reports and oral presentations, in layman terms, for non-technical people.
3. Immediately following Notice-to-Proceed, we propose to conduct a meeting with the County Project Manager, County Bridge Engineer, and County Bridge Maintenance Supervisor to review the design criteria for these bridges. We also want to discuss the county's preferences related to bridge system components. The primary intent of this meeting is to document the county's objectives, preferences, and requirements.
4. We will work with county project managers to clearly define the scope of services in our up-front proposal and deliver those services on budget and on time, every time.
5. We propose to conduct bi-weekly progress meetings with the County staff during the design phase to keep all parties informed of our progress and to gain consensus on decisions to move forward.
6. We encourage client participation in important decisions - **NO SURPRISES!**
7. We will utilize high-quality visual aids at meetings and brainstorming techniques to assist in reaching a consensus.
8. KCI will prepare a meeting agenda prior to all design meetings and prepare detailed minutes after each meeting with a summary of the action items that need to be accomplished before the next meeting.
9. We maintain close working relationships with most of the bridge contractors in southwest Florida, which allows access to discussions and feedback on constructability issues during design.
10. If we need to make any assumptions during the design phase, particularly on bridge repair projects, because of unknown or latent details, we communicate these assumptions to the contractor in the plans. We also let the contractor know that if our assumptions turn out to be incorrect, we want to be alerted as early as possible so we can assist in developing any required revised repair details.
11. Our proximity allows us to function as a seamless extension of the county's staff.
12. We return phone calls and e-mails within 24 hours or less.

13. If we don't have an immediate response, we let you know we need some more time and provide a deadline to get back to you.
14. We confirm that everyone involved is included in e-mails as appropriate.
15. We schedule impromptu meetings when issues arise that require reaching a consensus among all project participants.
16. We prepare a diary to document all site visits during the construction of a project and share it with project managers and other stakeholders.
17. We prepare comprehensive requests for proposals that provide clear and concise summaries of the project for purchasing and the contractors.

SECTION III - PREVIOUS EXPERIENCE OF TEAM

Rotonda West Bridge Repairs (FDOT # 01411 and 014113), Charlotte County, FL – KCI has been working with Charlotte County's public works staff for the past year on repair plans for these bridges that includes the bridge that is the subject of this Expression of Interest. KCI had just submitted 60% bridge repair plans to the County for review for both bridges when Hurricane Ian hit southwest Florida. KCI's staff performed an emergency inspection after the hurricane and recommended bridge closure. KCI performed a cursory review of the alternatives to either repair or replace the damaged bridge. Repairing this bridge would include replacing the Span 1 superstructure (beams and deck), the concrete deck on the remainder of the bridge, the end bent piles and cap beam, the begin approach slab, and the sea wall. See the graphic below summarizing the required repairs and the proposed replacement bridge layout. The cost to replace the damaged elements plus the cost of the proposed repairs shown in our 60% plans (\$412K) will be close to the same as a full bridge replacement which was estimated to be in the \$1 mil range for just the bridge components. The potential service life for the proposed repairs would be in the 30-year range compared to a new bridge with a design life of 75 years.



South Gulf Cove Bridge Widening, Charlotte County, FL – KCI is substantially complete with bridge plans for repairs and the widening of four (4) bridges (FDOT #s 014053, 014054, 014055,



014056) in South Gulf Cove in Charlotte County. The superstructures for the 4 bridges have 5 – 24-foot spans and consist of adjacent, prestressed, concrete voided (Sonotube) slab beams with asphalt wearing surfaces and non-standard traffic railings. The superstructures are supported on pile bents that consist of cast in place concrete caps and prestressed concrete piles. The bridges span navigable waterways and were constructed circa 1976. These bridges are being widened to provide

sidewalks on the bridges and includes the replacement of the non-standard bridge railings and approach guard rails.

Ainger Creek (CR 775) Bridge Rehabilitation, Charlotte County, FL – KCI prepared comprehensive bridge rehabilitation design plans for this bridge. The superstructure for the Ainger Creek Bridge is a continuous, 4-span, cast-in-place concrete slab bridge with a total length of approximately 116 feet. The superstructure is supported on pile bents that consist of cast-in-place concrete caps and prestressed concrete piles. The bridge was constructed in 1981 and was widened in 2002. The repairs included: concrete spall repairs, rip rap repair/replacement, undermining repairs at end bents, sidewalk repair/replacement, guard rail replacement, pedestrian railing replacement, expansion joint replacement, and bridge deck repairs.



Emil Sweptson (CR 776) Bridge Rehabilitation, Charlotte County, FL – KCI prepared comprehensive bridge rehabilitation design plans for this bridge. The superstructure for the Emil Sweptson Bridge is a continuous, 12-span, cast-in-place concrete slab bridge with a total length of approximately 390 feet. The superstructure is supported on pile bents that consist of cast-in-place concrete caps and prestressed concrete piles. The bridge was constructed in 1980. The repairs included: concrete spall repairs, rip rap

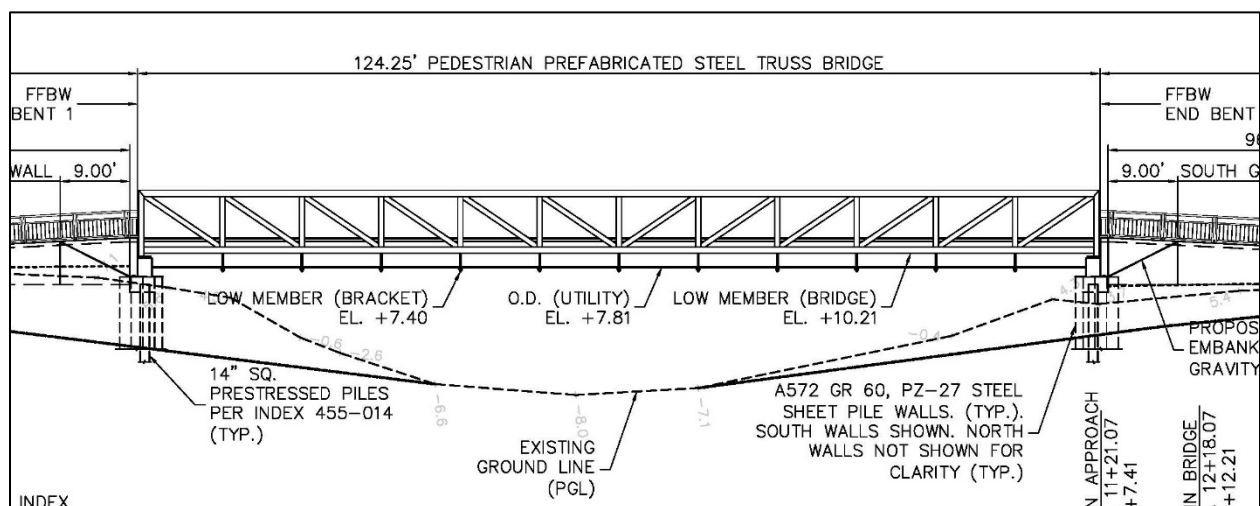
repair/replacement, undermining repairs at end bents, sidewalk repair/replacement, guard rail replacement, pedestrian railing replacement, expansion joint replacement, and bridge deck repairs.

Babcock Ranch Entrance Bridge, Charlotte County, FL – KCI prepared the final design plans and specifications in a design build format with Thomas Marine Construction for the entrance “faux” bridge to the new Town of Babcock Ranch off FL Route 31. The new entrance bridge incorporated 140 foot long by 16 feet high steel through trusses supported on shallow concrete spread footings. The roadway embankment was supported using a mechanically stabilized earth wall system using concrete blocks and geosynthetic geogrids. See the photo of this bridge below.



Elkcam Waterway Water Control Structure, Charlotte County, FL – KCI provided specialty structural design services for Thomas Marine Construction on this project. KCI designed and provided structural drawings for structures that included a precast concrete box culvert, cast-in-place concrete wingwalls and a cast-in-place concrete weir structure as the Specialty Structural Engineer.

Midway Boulevard Pedestrian Bridge over North Spring Lake, Charlotte County, FL – This project includes the design, permitting, and construction of the approach sidewalks and a new pedestrian bridge to carry the new sidewalk on the northwest side of Midway Boulevard over North Spring Lake. KCI was a subconsultant to JEI. The existing Midway Boulevard Bridge is a four-span, cast-in-place concrete slab bridge supported on prestressed pile bents. The total length is approximately 102 feet, and it provides four lanes of traffic and shoulders. The new pedestrian bridge is a 124-foot span prefabricated steel truss with stringers, and floor beams on pile-supported concrete abutments. The bridge was designed to numerous Charlotte County utilities.



Bridge Program Study Report – Phase 4, Collier County, FL

This project involved the inspection and evaluation of 66 bridges for Collier County, Florida. The bridge types included box culverts, prestressed concrete slab, prestressed AASHTO beam, and prestressed tee beam type bridges. They varied from simple single spans over 20 feet to complex multi span bridges over 500 feet long. We prepared a report that summarized the inspection findings and provided recommendations for repair and/or replacement of the bridges. The recommendations also included a proposed sequence and prioritization of the bridge repairs and replacements. Collier County is currently using the recommendations included in the report as a tool for planning their future bridge repair and replacement program.



Rustic Road Bridge Replacement, Sarasota County, FL – KCI provided bridge design and CEI services for the replacement of the Rustic Road Bridge over the Cowpen Slough in Sarasota County. The new structure is 53-foot span bridge consisting of prestressed concrete slab beams with a concrete deck supported on prestressed concrete pile bents. The bridge carries 2 lanes, shoulders, and a sidewalk on one side. It also provides support for utilities on both sides of the bridge.



SECTION IV – PROJECT CONTROL

What techniques are planned to assure that the schedule will be met?

1. We propose a duration of 12 months for the design phase of this project.
2. To hit the ground running, we have already prepared a draft scope of services which is included in the Section V of this EOI.
3. We will be prepared to meet with the County Project Manager to discuss the scope and start negotiations within days of being notified that we have been selected by the County.
4. We are very familiar with this bridge site and have started considering some design approaches which are included in this EOI.
5. We propose to eliminate the typical 60% plan review phase by providing very detailed 30% plans and then proceed directly to 90% review plans.
6. We will monitor the schedule on a weekly basis and take actions to accelerate the schedule if unforeseen issues cause delays.
7. To minimize the construction durations, we will consider Accelerated Bridge Construction techniques when appropriate.

Who will be responsible to assure that the schedule will be met?

Ralph Verrastro, PE, KCI's Project Manager, will be responsible for adherence to the agreed-upon schedule with support from the design team.

What (cost) control measures are planned?

1. We will develop a comprehensive scope of services that will allow agreeing on engineering fees on a lump sum basis.
2. The design project schedule and budget will be monitored on a bi-weekly basis using KCI's internal project management and accounting system.
3. Our Project Manager will prepare and submit monthly progress reports that summarize past achievements, upcoming work, budget statement, schedule statement, and information needed by the design team from the client.
4. To properly advise the County related to the probable cost of construction, KCI will get feedback from local bridge contractors related to labor-intensive work items during the design phase.

Who will be responsible for cost control?

Ralph Verrastro, PE, KCI's Project Manager, will be responsible for cost control with support from the design team.

Recent, current, and projected workload.

1. Charlotte County is currently one of KCI's Tampa bridge design group's largest and most important clients in SW Florida and therefore a very high priority.
2. KCI's Tampa bridge design group's total revenue derived from Charlotte County projects divided by our total revenue for the past 2 years is 15%. This statistic shows we have not been totally reliant on Charlotte County as a business sector and that we have capacity to do more work for the County.
3. We have not missed any project deadlines in the past and plan to continue this level of service for this contract.
4. If we commit to providing services for an agreed upon fee and schedule, we will deliver. We take these commitments very seriously. Prior to accepting any task assignment, we will perform a detailed review of our current project commitments at that time and provide a resource allocation summary in our proposal to the County.
5. We monitor our workload on a weekly basis using an internal two (2) week rolling schedule of project task commitments.
6. We have on-going work sharing relationships with other KCI offices if our workload is more than our local staff can handle.

SECTION V – PROPOSED DESIGN APPROACH

Describe proposed design philosophy.

1. Our team proposes to follow FDOT design guidelines as appropriate. However, since the project is funded with local funds, we will consider incorporating some special details/systems that may not be part of the FDOT standards but are commonly used by other county public works departments in Florida and in other parts of the country. The reason to consider these special details/systems is to provide a more cost-effective approach initially and reduce long-term maintenance costs. See the innovative approach discussion below for more specifics.
2. We understand that bridges must safely carry their loads for a long enough time to repay the investment made into them. This fact imposes a hierarchy on design decision-making:
 - a. Performance – structural capacity, safety, durability, and maintainability
 - b. Cost – including construction and long-term maintenance
 - c. Appearance
3. We always look for opportunities to introduce improved aesthetics into our bridge designs in ways that do not significantly increase the cost. To improve aesthetics and safety, the County could consider using the Texas standard barrier to replace the existing non-standard barriers on these bridges in this residential area. See the Texas standard barrier in the adjacent top photograph of the Melbourne Street Bridge in Charlotte County. We could also consider installing aesthetic lighting fixtures on the bridges. The bottom photograph shows an example of low-intensity LED bridge light fixtures that we specified on a bridge in Naples at the World Tennis Club, which was incorporated into the pilasters of the Texas standard barrier.



What problems do you anticipate in production and design, and how do you propose to solve them?

1. We will minimize potential problems by managing them by “prevention.” This management approach involves considering what can potentially go wrong and then preparing contingency plans that would mitigate the problem. Our extensive experience with bridge repair projects allows us to anticipate potential problems, aka “been there and done that.”
2. Environmental permitting has the potential to cause delays in design projects. To minimize this risk, we propose to perform due diligence with the environmental agencies

as part of our proposal preparation that will form the basis of the engineering agreement with the County.

3. We will even conduct upfront meetings, if necessary, with the agency representatives during the proposal phase. This approach is in the best interest of all parties involved.
4. Maintenance and protection of traffic on bridge projects using phased construction is another risk factor that creates problems for contractors. This bridge will remain closed until it is replaced. This approach dovetails very well when using Accelerated Bridge Construction techniques that minimize the time to perform the work after the detour has been set up.
5. The disposition of utilities is another risk factor that causes problems for owners, contractors, and engineers. Our approach to minimize this risk factor will be to conduct a special meeting (very early in the schedule) with all utility owners in the vicinity of bridge to make them aware of what we are proposing and to get their input and feedback. We will request the utility owners to provide the locations of their facilities.

Describe innovative approaches in production and design.

1. After conferring with County personnel related to their preferences related to the project approach, we will prepare a comprehensive proposal that defines the recommended scope of services and cost for the agreed-upon professional services.
2. We understand the County's desire for the selected consultant to provide a detailed comparison of the advantages, disadvantages, and costs of repairing or replacing the damaged bridge. We also understand that FEMA will need to approve the project approach and funding requirements. We will assist the County in the negotiations with FEMA related to obtaining adequate project funding.
3. KCI's staff has extensive experience evaluating existing bridge structures using the most modern methods with an emphasis on non-destructive methods.
4. KCI's staff is very familiar with testing that involves the removal of test specimens from concrete, steel, and timber bridges to allow for laboratory testing. We recently performed similar services for Collier County to investigate the need to install some crutch bents due to deteriorated piles.
5. Ralph Verrastro, PE, will serve as the Team Leader, and Rolando Corsa, PE, CBI, will serve as the Assistant Team Leader for the bridge inspections required on this project. The inspections will be in accordance with FDOT procedures and the Federal Highway Administration's "Bridge Inspection Guidelines." The inspections will be documented using detailed report forms and digital photographs. We propose to coordinate our work to have all fieldwork completed at the same time (i.e., any survey work required to document bridge geometry would be performed while our bridge inspectors are on-site).
6. The hydraulic analysis for this bridge will be a critical aspect of the bridge design, which will be documented in the Bridge Hydraulics Report (BHR). The analysis involves quantifying the design's high water elevation and estimating stream velocities and scour

depths to support the new bridge design. We will model the existing bridge figuration to determine if we could have predicted the scour that occurred. Based on the damage, we recommend eliminating the existing sea walls for all the bridge replacement alternatives. This would provide an improved waterway opening which should reduce stream velocities and the potential for scour. Our modeling will also aid in investigating what contribution the existing weir immediately upstream from the bridge had on the heavy amount of erosion and scour that occurred at the southern abutment and sea wall. The photograph below displays the weir a few days after Hurricane Ian.



Debris built up on the upstream side may have altered the direction of the flow. There may have been a time during the storm when the debris may have directed flow toward the south abutment that failed. The grate on top of the weir eventually failed, allowing flow to be restored through the bridge opening.

7. Upon completion of the prior tasks, we will prepare a Bridge Development Report (BDR) that summarizes the findings of our comparison of the bridge repair and bridge replacement alternatives. The BDR will provide recommendations related to non-structural project issues, including maintenance of traffic, utilities, and environmental permitting. We will consider the following bridge types for the proposed new bridge:
 - a. 90-foot-long, three 30-foot spans, cast-in-place concrete flat slab supported on pile-supported bents.
 - b. 90-foot-long, two 45-foot spans, prestressed concrete FDOT prestressed slabs with a concrete deck supported on pile-supported bents.
 - c. 90-foot-long, two 45-foot spans, fiber-reinforced polymer beams (Advanced Infrastructure Technologies GBeam™ product) with a concrete deck supported on pile-supported bents (See the project description for the Sun Island bridge in Section VI of this EOI below for KCI's experience with this innovative bridge system).

After review by the County, we will conduct a meeting to discuss the recommendations and plan the next phase of the project.

8. If any utility will be affected by the proposed project, we will conduct meetings with the utility owners to explain the proposed construction and request their input.
9. The next step in the completion of this project is the preparation of Preliminary Bridge Plans (30% bridge plans). After review by the County, we would conduct a meeting to discuss the recommendations and plan the next phase of the project.
10. After we have completed the Preliminary Bridge Rehabilitation Plans, we would conduct pre-application meetings with the appropriate environmental agencies to document their opinions related to the permit requirements. We recommend that the County Project Manager attend these meetings. For most of the bridge rehabilitation/replacement projects we have designed in the past, the Southwest Florida Water Management District (SWFWMD) is the primary agency that we need to work with related to permitting. In addition, we may also need to coordinate with the US Coast Guard, the US Army Corps of Engineers, the Florida Fish and Wildlife Conservation Commission, and the Florida Department of Environmental Protection.
11. The next step includes preparing the 90% plans, specifications, and bidding documents. The final design calculations and drawings will be prepared in accordance with the latest standards recommended by FDOT, with the exception that since the roadway improvements for this project will be minimal, we propose to include the roadway design/details in the bridge plans and not prepare separate component plans. Our final design details will consider future routine maintenance and methods to accelerate the construction process.
12. We will prepare the agenda for the Pre-Bid Conference for review and issuance by the County at the meeting. We will review all written questions submitted by the contractors during bidding and provide written answers. After the bids are received, we will assist the County in an evaluation of the schedule of values and provide a letter of recommendation for award or re-bidding.
13. KCI will provide intermittent inspections during construction to document that the contractor is performing the work in accordance with the contract plans and specifications. The inspections and testing will be performed in accordance with FDOT requirements. Record plans would be prepared to document all field changes.
14. We understand that Charlotte County has met with the Rotonda West MSBU related to their preferences for the other bridges in Rotonda West and will incorporate their preference with the use of 32-inch Vertical Shape Barriers with a 10-inch-high single bullet rail on top.
15. We will consider using jointless bridge designs that eliminate expansion joints which reduces cost initially and in the future by reducing long-term maintenance costs associated with these high-maintenance components.
16. We propose to utilize Accelerated Bridge Construction (ABC) techniques that utilize prefabricated bridge components where applicable.

SECTION VI – EXAMPLES OF RECENTLY ACCOMPLISHED SIMILAR PROJECTS

The following are relevant project examples showing the project experience for KCI. We have provided the names and contact information in some of the examples that serve as references for KCI's staff, including Ralph Verrastro and Rolando Corsa.

None of these projects included any change orders that were a result of errors or omissions on the part of KCI. In addition, all these projects were delivered on time and within budget. Any minor construction issues that came up were rectified in a timely fashion.

South Gulf Cove Bridge Widening, Charlotte County, FL – KCI is substantially complete with bridge plans for repairs and the widening of four (4) bridges (FDOT #s 014053, 014054, 014055, 014056) in South Gulf Cove in Charlotte County. The superstructures for the 4 bridges have 5 – 24-foot spans and consist of adjacent, prestressed, concrete voided (Sonotube) slab beams with asphalt-wearing surfaces and non-standard traffic railings. The superstructures are supported on pile bents that consist of cast-in-place concrete caps and prestressed concrete piles. The bridges span navigable waterways and were constructed circa 1976. These bridges are being widened to provide sidewalks on the bridges and include the replacement of the non-standard bridge railings and approach guard rails. The County's Project Manager was Kelly Slaughter, and here is her contact data, Kelly.Slaughter@charlottecountyfl.gov, (941) 575-3657.



Ainger Creek (CR 775) Bridge Rehabilitation, Charlotte County, FL – KCI prepared comprehensive bridge rehabilitation design plans for this bridge. The superstructure for the Ainger Creek Bridge is a continuous, 4-span, cast-in-place concrete slab bridge with a total length of approximately 116 feet. The superstructure is supported on pile bents that consist of cast-in-place concrete caps and prestressed concrete piles. The bridge was constructed in 1981 and was widened in 2002. The repairs included: concrete spall repairs, rip rap repair/replacement, undermining repairs at end bents, sidewalk repair/replacement, guard rail replacement, pedestrian railing replacement, expansion joint replacement, and bridge deck repairs. The County's Project Manager was Kelly Slaughter, and here is her contact data, Kelly.Slaughter@charlottecountyfl.gov, (941) 575-3657.



Emil Sweptson (CR 776) Bridge Rehabilitation, Charlotte County, FL – KCI prepared comprehensive bridge rehabilitation design plans for this bridge. The superstructure for the Emil Sweptson Bridge is a continuous, 12-span, cast-in-place concrete slab bridge with a total length of approximately 390 feet. The superstructure is supported on pile bents that consist of cast-in-

place concrete caps and prestressed concrete piles. The bridge was constructed in 1980. The repairs included: concrete spall repairs, rip rap repair/replacement, undermining repairs at end bents, sidewalk repair/replacement, guard rail replacement, pedestrian railing replacement, expansion joint replacement, and bridge deck repairs. The County's Project Manager was Kelly Slaughter, and here is her contact data, Kelly.Slaughter@charlottecountyfl.gov, (941) 575-3657.

Washington Loop Bridge over Prairie Creek, Charlotte County, FL

This project involved the replacement of the non-standard bridge railings and the installation of approach guard railing. The existing bridge railing was damaged because of a vehicle crash that prompted the County to hire Bridging Solutions to prepare design plans for the installation of a new Thrie beam bridge railing system. The County's Project Manager was Kelly Slaughter, and here is her contact data, Kelly.Slaughter@charlottecountyfl.gov, (941) 575-3657.



Sun Island Bridge Superstructure Replacement

The Sun Island Association hired KCI to prepare bridge rehabilitation plans that would include details for the replacement of spans 4 and 5 of their exit bridge. The other major work items included were concrete patching repairs to all the concrete cap beams and the installation of structural jackets on intermediate bents 2 through 8. The bridge repair plans specified similar prestressed slab beams reinforced with stainless steel prestress strands that would not be subject to the same corrosion problems that led to the premature deterioration of the original slab beams. In addition, the repair plans provided a bid alternate that included the innovative GBeam™ product supplied by Advanced Infrastructure Technologies or AIT Bridges (www.bridges.aitcomposites.com). Midcoast Construction Enterprises was the low bidder, and they offered both alternatives for the same cost in their bid proposal. The condo owners selected the GBeam™ alternate for reasons that included a 100-year design life and significantly lighter weight which would reduce the dead load on the intermediate bents. The GBeam™ superstructure included 4 – composite tub girders for each 47'-3" span with a 7.5" thick precast concrete deck which was supplied in 2 sections with a closure pour in the center of the bridge. See the photo above of the GBeams being shipped to Florida from AIT's plant in Maine and the photo to the left of the beams being erected from a barge.



Professional Services Library of Consultants (Library), City of Naples, FL

Bridging Solutions was selected by the City of Naples to provide “on-call” bridge/structural engineering services under a continuing professional services agreement in April of 2019. We have completed bridge rehabilitation plans for repairs for four (4) bridges on Harbour Drive, Park Shore



Harbour Drive Bridge, Naples, FL

Drive, Galleon Drive, and Mooring Line Drive. The repairs included concrete patching repairs, rip rap replacement, replacement of the asphalt-wearing surface, railing repairs, and installation of a waterproofing membrane on the concrete slab beams. Gregg Strakaluse, PE, City Project Manager, 239-213-5003, gstrakaluse@naplesgov.com.

Collier County Bridge Program Study Report, Collier County, FL

This program study was completed in phases and included the inspection and evaluation of 66 bridges. The final report provided recommendations for rehabilitation and/or replacement for each bridge with estimated costs. It also



provided recommendations that included a prioritization listing for the bridges for maintenance repairs and replacement. The report is being used as a tool to assist the County’s project managers in the programming of their 5- and 10-year bridge programs. The Collier County project manager was Gary Putaansuu, PE, Principal Project Manager, Gary.Putaansuu@colliercountyfl.gov, (239) 252-5876.

Miscellaneous Structural Engineering Services, Bonita Springs, Florida

KCI was selected by the City of Bonita Springs to provide “on-call” bridge/structural engineering services under a continuing professional services agreement in July 2018. The City’s lead project manager is Matt Feeney, Public Works Director, matt.feeney@cityofbonitasprings.org, 239-949-6246. We recently completed bridge repair plans for 7 bridges in the City of Bonita Springs, FL.

Melbourne Street Bridge Replacement, Charlotte County, Florida

Mr. Verrastro served as the Project Manager, and Rolando Corsa served as the Bridge Project Engineer for the replacement of this 54-foot span prestressed concrete beam bridge supported on concrete pile bents. Wright Construction Group was the prime contractor on this design-build project that included survey, mapping, permitting, environmental, roadway, and bridge design services. The improved roadway section provides two lanes, bicycle lanes, and sidewalks.



This project won a merit award from the Florida State Chapter of the American Public Works Association in April 2013. The County’s Project Manager was Kelly Slaughter, and here is her contact data, Kelly.Slaughter@charlottecountyfl.gov, (941) 575-3657.

SECTION VII – EXPERIENCE AND CAPABILITIES

Value Engineering

KCI's technical expertise saved Collier County hundreds of thousands of dollars on a 2018 assignment involving the Immokalee Road Bridge over a Drainage Canal (#030138) east of



Drill Resistance Device Testing Bridge Piles, Collier County, FL

Immokalee. The FDOT sent a letter advising the county of significant deficiencies related to the advanced deterioration of the timber piles. The consultant that had been monitoring the piles on this bridge (and all the other timber pile-supported bridges in the county for the past few years) was requested to re-inspect the piles based on the FDOT letter. The consultant re-inspected the piles and concluded that the county should perform repairs which included installing crutch bents at all the bents.

These crutch bents would have cost approximately \$300,000 for this bridge which was scheduled for replacement in 2 years. The county hired KCI to review the situation and provide a value engineering evaluation. We agreed that piles appeared to be a concern based on a visual inspection which was the level of inspection performed by the FDOT and the other consultant. We recommended performing in-depth testing of the piles using a drill resistance device that would provide quantitative test results related to the condition of the piles full depth. The results of the testing showed that the outer 2" of the 12-inch-diameter piles were compromised, but the interior 8-inch of the piles were solid material. We performed a structural analysis of the pile based on this information and concluded that no repairs were required given the short time frame planned for the full replacement of the bridge.

Life Cycle Cost Analysis

KCI has experience performing life cycle cost analysis on our projects. Although more prevalent on building projects and new bridges, this method of analysis could be applicable to this bridge repair project. Life cycle cost analyses estimates the total cost of owning the facility. It considers all the costs, including administrative, right-of-way, engineering, construction, and maintenance, plus salvage value at the end of a facility's life. LCCA is especially useful when project alternatives that fulfill the same performance requirements but differ with respect to initial costs and maintenance costs must be compared to select the one that maximizes net savings. We propose to perform the LCCA early in the design process while there is still a chance to refine the design to introduce a reduction in life cycle costs. The life cycle cost analyses for the bridges on this

project would be performed in accordance with the recommendations included in the National Cooperative Highway Research Program (NCHRP) Report 483 – Bridge Life-Cycle Cost Analysis.

Fast Track/Accelerated Bridge Construction (ABC)

We propose to consider ABC techniques that utilize prefabricated bridge components. See the attached photo from a presentation that Mr. Verrastro has provided at numerous industry conferences related to ABC. This approach will allow us to:

- Reduce construction duration
- Minimize traffic impacts
- Improve construction zone safety
- Lessen environmental impacts
- Increase quality control due to plant-controlled conditions



Environmental Assessment

The Florida Administrative Code (FAC) Section 62-330.051 Exempt Activities allows an exemption from permitting for bridge maintenance. Here is a specific excerpt from the FAC.

“(e) Repair, stabilization, paving, or repaving of existing roads, and the repair or replacement of vehicular bridges that are part of the road, where:

1. They were in existence on or before January 1, 2002, and have:

a. Been publicly-used and under county or municipal ownership and maintenance thereafter, including when they have been presumed to be dedicated in accordance with section 95.361, F.S.;

b. Subsequently become county or municipally-owned and maintained; or

c. Subsequently become perpetually maintained by the county or municipality through such means as being accepted by the county or municipality as part of a Municipal Service Taxing Unit or Municipal Service Benefit Unit;”

Specialized Experience

KCI's staff routinely offers technical seminars at industry conferences and publishes articles in technical magazines and journals to provide training for other engineers about structural engineering. Mr. Verrastro has served on the editorial board for *STRUCTURE* magazine and as an adjunct professor for engineering courses at Broome Community College in Binghamton, NY. KCI is an approved provider of continuing education courses by the Florida Board of Professional Engineers.

One of the courses that is very relevant to this project includes the course titled *Bridge Maintenance Management for Florida Municipalities*. This seminar provides practical management recommendations for the repair and replacement of the bridges owned and maintained by local municipalities in Florida. It also provides recommendations for alternative approaches to the design and construction of typical preventative maintenance repairs. KCI's staff presented this course at the statewide APWA Annual Conference in Daytona Beach in 2019.

Another relevant course that we have provided at industry conferences and for local municipalities is titled *Bridge Structure Flood Emergency Training*. This seminar provides training for public works personnel that will be assigned to perform emergency inspections during flood events for bridges and large culverts. The employees of municipal public works departments are typically the first responders in the event of a flood to determine the safety of the bridges that are owned and maintained by the municipality. They need to be trained to understand how to recognize a hazardous condition and be able to recommend/implement an immediate bridge closure, if conditions require it, to protect the safety of the traveling public. This seminar provides a recommended approach to preparing an emergency action plan for the municipality that includes identifying the risk associated with the various bridge types in the municipality's inventory and preparing a priority list for the performance of the inspections. It provides a basic understanding of the components of typical bridges and a working knowledge of the common failure modes caused by scour. This seminar also provides a sample inspection form to be used during an emergency flood inspection and a checklist of specific inspection activities that should be performed and documented.

Another relevant course that we have provided at industry conferences and for local municipalities is titled *Accelerated Bridge Construction Using Prefabricated Components*. This training course provides a practical overview of the proprietary and non-proprietary, prefabricated bridge components that are available for use on bridge replacement and rehabilitation projects. These components are manufactured using materials including concrete, steel, timber, and fiber-reinforced polymers. There is a growing trend in the transportation industry to reduce the disruption to the traveling public on highway projects by minimizing the duration of construction. These high-quality products provide cost-effective alternatives. Specialty structural engineers perform the final design of these products based on design criteria provided by the structural engineer of record. Typical design methods and limitations for each product are also discussed. In addition, case study projects are presented to illustrate some typical installations for the prefabricated components.

SECTION VIII – VOLUME OF WORK FROM COUNTY WITHIN 24 MONTHS

As documented on the County form enclosed with this EOI, KCI has received \$382,266 from the County over the past 24 months.

SECTION IX – LOCATION

This project will be managed out of our Riverview, Florida, office near the project location and the county staff offices. We are aware that the county project managers are juggling numerous assignments and need to satisfy their internal customers in other departments within the county. Our location and experience on past projects with all the county departments will facilitate the efficient production and delivery of project reports, plans, specifications, and construction inspection site visit reports.

Our primary goals related to this project are to be very responsive to the county's requests for assistance and to provide highly skilled and highly experienced advice with the attitude that we are part owners of these county bridges. We will work with county project managers to clearly define the scope of services in our up-front proposal and deliver those services on budget and on time, every time.

SECTION X – LITIGATION DISCLOSURE

KCI Technologies, Inc. has not been involved in any litigation in the State of Florida within the past five years.

SECTION XI – MINORITY BUSINESS

KCI Technologies, Inc. is not a certified minority business enterprise. However, we will make every effort to hire minority businesses as sub-consultants if the need arises.

APPENDIX - REQUIRED FORMS & RESUMES

PART IV - SUBMITTAL FORMS
PROPOSAL SUBMITTAL SIGNATURE FORM

1.	Project Team Name and Title	Years experience	City of office individual will work out of for this project	City individual's office is normally located	City of individual's residence
	Ralph Verrastro, Project Manager	47	Naples, FL	Naples, FL	Naples, FL
	Rolando Corsa, Bridge EOR	23	Tampa, FL	Tampa, FL	Tampa, FL
	Bryan Wilson, Roadway EOR	37	Ft. Lauderdale	Ft. Lauderdale	Parkland, FL
	Mark Gosselin, Hydraulics EOR	33	Gainesville, FL	Gainesville, FL	Gainesville, FL
	Michael J. Giardullo, Utilities & Permitting	25	Punta Gorda	Punta Gorda	Punta Gorda
	Adam Dornacker, PE, Geotechnical EOR	9	Lehigh Acres	Lehigh Acres	Lehigh Acres
	Rich Jackson, PSM, Surveyor & Mapper	39	Tampa, FL	Tampa, FL	Riverview, FL
	Gina Verrastro, EI, Design Engineer	6	Naples, FL	Naples, FL	Naples, FL
2.	Magnitude of Company Operations				
	A) Total professional services fees received within last 24 months:			\$ 440,607,000	
	B) Number of similar projects started within last 24 months:			40	
	C) Largest single project to date:			\$ 120,000,000	
3.	Magnitude of Charlotte County Projects				
	A) Number of current or scheduled County Projects			5	
	B) Payments received from the County over the past 24 months (based upon executed contracts with the County).			\$ 382,266	
4.	Sub-Consultant(s) (if applicable)	Location	% of Work to be Provided	Services to be Provided	
	Weiler Engineering	Punta Gorda, FL	15%	Utilities and permitting	
	Intera	Gainesville, FL	15%	Hydraulics	
	Universal	Lehigh Acres, FL	5%	Geotechnical	
5.	Disclosure of interest or involvement: List below all private sector clients with whom you have an active pending contract and who have an interest within the areas affected by this project. Also, include any properties or interests held by your firm, or officers of your firm, within the areas affected by this project.				
	Firm NA	Address			
	Phone #	Contact Name			
	Start Date	Ending Date			
	Project Name/Description				

NAME OF FIRM KCI Technologies Inc.
(This form must be completed and returned)

6. Minority Business:Yes _____ No X

The County will consider the firm's status as an MBE or a certified MBE, and also the status of any sub-contractors or sub-consultants proposed to be utilized by the firm, within the evaluation process.

Comments or Additional Information:

The undersigned attests to his/her authority to submit this proposal and to bind the firm herein named to perform as per contract, if the firm is awarded the Contract by the County. The undersigned further certifies that he/she has read the Request for Proposal, Terms and Conditions, Insurance Requirements and any other documentation relating to this request and this proposal is submitted with full knowledge and understanding of the requirements and time constraints noted herein.

By signing this form, the proposer hereby declares that this proposal is made without collusion with any other person or entity submitting a proposal pursuant to this RFP.

In accordance with section 287.135, Florida Statutes, the undersigned certifies that the company is not on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, and does not have business operations in Cuba or Syria (if applicable) or the Scrutinized Companies that Boycott Israel List, or is not participating in a boycott of Israel.

As Addenda are considered binding as if contained in the original specifications, it is critical that the Consultant acknowledge receipt of same. The submittal may be considered void if receipt of an addendum is not acknowledged.

Addendum No. _____ Dated _____ Addendum No. _____ Dated _____ Addendum No. _____ Dated _____

Addendum No. _____ Dated _____ Addendum No. _____ Dated _____ Addendum No. _____ Dated _____

Type of Organization (please check one):

INDIVIDUAL ☐
PARTNERSHIP ☐
CORPORATION ☒
JOINT VENTURE ☐KCI Technologies Inc.

Firm Name

813-740-2300

Telephone

N/A

Fax

Fictitious or d/b/a Name52-1604386

Federal Employer Identification Number (FEIN)

4041 Crescent Park Drive

Home Office Address

Tampa, FL 33578

City, State, Zip

67

Number of Years in Business

15863 Secoya Reserve Circle, Naples, FL 34110

Address: Office Servicing Charlotte County, other than above

Ralph Verrastro

Name/Title of your Charlotte County Rep.

239-216-1370

Telephone

NA

Fax

Erick Fry

Name/Title of Individual Binding Firm (Please Print)

Signature of Individual Binding Firm02/07/2023

Date

ralph.verrastro@kci.com

Email Address

(This form must be completed & returned)

DRUG FREE WORKPLACE FORM

The undersigned vendor in accordance with Florida Statute 287.087 hereby certifies that KCI Technologies Inc. does:
(name of business)

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.



Proposer's Signature

February 2, 2023

Date

END OF PART IV

(This form must be completed & returned)

BYRD ANTI-LOBBYING CERTIFICATION

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of an Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S.C. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

February 2, 2023
Date

Erick Fry
Type or Print Name


Signature

Vice President
Title

(This form must be completed & returned)

RALPH VERRASTRO, PE

PROJECT MANAGER

47 YEARS

TOTAL EXPERIENCE

9 YEARS

WITH KCI

CERTIFICATIONS & REGISTRATIONS

PE / FL / 39784 - Exp. 02/28/2023

EDUCATION

BS / Civil Engineering / Cornell University

AS / Engineering Science / Broome Community College

Mr. Verrastro, PE, specializes in the design, inspection, evaluation, technical supervision, and quality assurance/quality control for design and construction phase services for projects related to bridges and miscellaneous structures. His career includes bridge design experience throughout the United States, and he is a registered Professional Engineer in 37 states. Mr. Verrastro is a technical expert in the use of fast-track repair/replacement methods using prefabricated bridge components also known as Accelerated Bridge Construction. He has extensive experience in the evaluation and repair of bridges including historic metal truss bridges and concrete arch bridges. He served as the Specialty Structural Engineer for over 500 bridge structures throughout the USA working as a consultant to precast concrete manufacturers. He frequently provides technical presentations on engineering topics at industry conferences including the International Bridge Conference and the National Accelerated Bridge Construction Conference. Mr. Verrastro received the statewide Engineer of the Year Award from the Florida Engineering Society (FES) in 2018.

PROJECT EXPERIENCE

Charlotte County, Professional Services Library of Consultants - Charlotte County, FL. Principal-in-Charge. KCI was selected by the Charlotte County Public Works, FL to provide "on-call" engineering services under a continuing services agreement in 2018. Currently, we have been selected for four projects under this contract that involve bridge inspections, evaluations, and design of bridge repairs.

Charlotte County, Elkcarn Waterway Water Control Structure - Charlotte County, FL. Principal-in-Charge. KCI Technologies provided specialty structural design services for Thomas Marine Construction on this project where Johnson Engineering was the engineer of record. KCI designed and provided structural drawings for structures that included a precast concrete box culvert, cast-in-place concrete wing walls, and a cast-in-place concrete weir structure.

Charlotte County, Ainger Creek (CR 775) Bridge Rehabilitation - Charlotte County, FL. Principal-in-Charge. KCI Technologies prepared comprehensive bridge rehabilitation design plans for this bridge. The superstructure for the Ainger Creek Bridge is a continuous, four-span, cast-in-place concrete slab bridge with a total length of approximately 116 feet. The superstructure is supported on pile bents that consist of cast-in-place concrete caps and prestressed concrete piles. The bridge was constructed in 1981 and was widened in 2002. The repairs included: concrete spall repairs, rip rap repair/replacement, undermining repairs at end bents, sidewalk repair/replacement, guard rail replacement, pedestrian railing replacement, expansion joint replacement, and bridge deck repairs.

Charlotte County, Peace River Manasota Regional Water Supply Authority, Bridge Inspection Services - Charlotte County, FL. Principal-in-Charge. KCI Technologies provided bridge inspection services for four (4) privately owned bridge structures. The bridges are owned and maintained by The Manasota Regional Water Supply Authority. All the bridges are single-span structures spanning water management canals in Charlotte County, FL. The bridges consisted of prestressed concrete AASHTO beams with composite concrete decks supported on pile-supported end bents. The inspections were performed and documented in a format in accordance with FDOT and Federal inspection guidelines.

Charlotte County, Midway Boulevard Pedestrian Bridge over North Spring Lake - Charlotte County, FL. Principal-in-Charge. This project includes the design, permitting, and construction of the approach sidewalks and a new pedestrian bridge to carry the new sidewalk on the northwest side of Midway Boulevard over North Spring Lake. KCI was a subconsultant to JEL. The existing Midway Boulevard Bridge is a four span, cast in place concrete slab bridge supported on prestressed pile bents. The total length is approximately 102 feet, and it provides four lanes of traffic and shoulders. The new pedestrian bridge is a 124-foot span prefabricated steel truss with stringers and floor beams on pile supported concrete abutments. The bridge was designed to numerous Charlotte County utilities.

Charlotte County, Emil Sweptson (CR 776) Bridge Rehabilitation - Charlotte County, FL. Principal-in-Charge. KCI Technologies prepared comprehensive bridge rehabilitation design plans for this bridge. The superstructure for the Emil Sweptson Bridge is a continuous, 12 span, cast-in-place concrete slab bridge with a total length of approximately 390 feet. The superstructure is supported on pile bents that consist of cast-in-place concrete caps and prestressed concrete piles. The bridge was constructed in 1980. The repairs included: concrete spall repairs, rip rap repair/replacement, undermining repairs at end bents, sidewalk repair/replacement, guard rail replacement, pedestrian railing replacement, expansion joint replacement, and bridge deck repairs.



ROLANDO CORSA, PE, CIB

BRIDGE DESIGN LEAD

23 YEARS

TOTAL EXPERIENCE

9 YEARS

WITH KCI

CERTIFICATIONS & REGISTRATIONS

PE / FL 73191 - Exp. 02/28/2025

Certified Bridge Inspector

EDUCATION

BS Civil Engineering / University of South Florida

Mr. Corsa has worked on bridge engineering projects in Florida since 2004. He has been responsible for the design of new and replacement bridges and the inspection, evaluation, and rehabilitation design of existing bridges. His bridge experience includes the design of 3- and 4-sided concrete box culverts, precast concrete frame bridges, prestressed concrete slabs, prestressed concrete AASHTO and FL-I beams, cast-in-place concrete box post-tensioned bridges, composite steel rolled beam and welded girder bridges, and the inspection and load rating of movable bridges. Mr. Corsa's experience also includes designing miscellaneous transportation structures such as sign and mast arm structures, weirs, temporary bridge steel support towers, and sheet pile walls.

PROJECT EXPERIENCE

Charlotte County, Professional Services Library of Consultants - Charlotte County, FL. Structural Engineer. KCI was selected by the Charlotte County Public Works, FL to provide "on-call" engineering services under a continuing services agreement in 2018. Currently, we have been selected for four projects under this contract that involve bridge inspections, evaluations, and design of bridge repairs.

Charlotte County, Elkcam Waterway Water Control Structure - Charlotte County, FL. Project Manager. KCI Technologies provided specialty structural design services for Thomas Marine Construction on this project where Johnson Engineering was the engineer of record. KCI designed and provided structural drawings for structures that included a precast concrete box culvert, cast-in-place concrete wing walls, and a cast-in-place concrete weir structure.

Charlotte County, Ainger Creek (CR 775) Bridge Rehabilitation - Charlotte County, FL. Bridge Designer. KCI Technologies prepared comprehensive bridge rehabilitation design plans for this bridge. The superstructure for the Ainger Creek Bridge is a continuous, four-span, cast-in-place concrete slab bridge with a total length of approximately 116 feet. The superstructure is supported on pile bents that consist of cast-in-place concrete caps and prestressed concrete piles. The bridge was constructed in 1981 and was widened in 2002. The repairs included: concrete spall repairs, rip rap repair/replacement, undermining repairs at end bents, sidewalk repair/replacement, guard rail replacement, pedestrian railing replacement, expansion joint replacement, and bridge deck repairs.

Charlotte County, Midway Boulevard Pedestrian Bridge over North Spring Lake - Charlotte County, FL. Project Manager. This project includes the design, permitting, and construction of the approach sidewalks and a new pedestrian bridge to carry the new sidewalk on the northwest side of Midway Boulevard over North Spring Lake. KCI was a subconsultant to JEI. The existing Midway Boulevard Bridge is a four span, cast in place concrete slab bridge supported on prestressed pile bents. The total length is approximately 102 feet and it provides four lanes of traffic and shoulders. The new pedestrian bridge is a 124-foot span prefabricated steel truss with stringers and floor beams on pile supported concrete abutments. The bridge was designed to numerous Charlotte County utilities.

Charlotte County, Babcock Ranch Entrance Bridge - Charlotte County, FL. Project Manager. KCI was hired by Kitson & Partners to design the signature entrance bridge for this new town in Charlotte and Lee Counties that is planned to have 19,000 new homes. The bridge was designed with numerous aesthetic embellishments including steel trusses on the bridge fascia to provide the appearance of a historic bridge.

Peace River Manasota Regional Water Supply Authority, Bridge Inspection Services - Charlotte County, FL. Project Manager. KCI Technologies provided bridge inspection services for four (4) privately owned bridge structures. The bridges are owned and maintained by The Manasota Regional Water Supply Authority. All the bridges are single-span structures spanning water management canals in Charlotte County, FL. The bridges consisted of prestressed concrete AASHTO beams with composite concrete decks supported on pile-supported end bents. The inspections were performed and documented in a format in accordance with FDOT and Federal inspection guidelines.

Charlotte County, Emil Sweptson (CR 776) Bridge Rehabilitation - Charlotte County, FL. Project Manager. KCI Technologies prepared comprehensive bridge rehabilitation design plans for this bridge. The superstructure for the Emil Sweptson Bridge is a continuous, 12 span, cast-in-place concrete slab bridge with a total length of approximately 390 feet. The superstructure is supported on pile bents that consist of cast-in-place concrete caps and prestressed concrete piles. The bridge was constructed in 1980. The repairs included: concrete spall repairs, rip rap repair/replacement, undermining repairs at end bents, sidewalk repair/replacement, guard rail replacement, pedestrian railing replacement, expansion joint replacement, and bridge deck repairs.



GINA VERRASTRO, EI

BRIDGE DESIGNER

6 YEARS

TOTAL EXPERIENCE

1 YEARS

WITH KCI

CERTIFICATIONS & REGISTRATIONS

EI / FL / 1100022972

EDUCATION

BS / Civil Engineering / Florida Gulf Coast University

BA / Mathematics / SUNY University at Buffalo

MEMBERSHIPS

American Society of Civil Engineers - Member

Florida Engineering Society - Member

Ms. Verrastro has been providing bridge engineering services since 2017 and is currently a Bridge Designer with KCI. Her experience in bridge engineering has involved the design of new bridges and transportation signal/sign structures, the inspection and rehabilitation of existing bridges, and the inspection and load rating of bridges per FDOT requirements. She provides coordination, design, condition inspection, and construction inspection services for bridges, retaining walls, docks, and transportation structures. Her new bridge design experience has included simple and complex superstructure types, including 3- and 4-sided concrete box culverts, simple and continuous concrete slabs, simple and continuous composite steel rolled beams and welded plate girders, steel trusses, precast concrete arch elements, prestressed adjacent slab units with transverse post-tensioning for simple spans, prestressed concrete composite AASHTO and FL I-beam. Rehabilitation design experience has included the in-depth inspection, load ratings, and preparation of rehabilitation plans for bridge superstructure types that included steel rolled beams, welded plate girders, simple and continuous steel through and pony trusses, filled spandrel concrete arch bridges, concrete tee beams, concrete slabs, prestressed concrete slab beams, prestressed channel and tee beams, prestressed concrete AASHTO beams.

PROJECT EXPERIENCE

Charlotte County, Ainger Creek (CR 775) Bridge Rehabilitation - Charlotte County, FL. Bridge Designer. KCI prepared comprehensive bridge rehabilitation design plans for this bridge. Gina served as a Bridge Designer, performing tasks that included performing condition inspections, developing design details, preparing cost estimates, and performing inspections during construction. The superstructure for the Ainger Creek Bridge is a continuous, 4-span, cast-in-place concrete slab bridge with a total length of approximately 116 feet. The superstructure is supported on pile bents that consist of cast-in-place concrete caps and prestressed concrete piles. The bridge was constructed in 1981 and

was widened in 2002. The repairs included: concrete spall repairs, rip rap repair/replacement, undermining repairs at end bents, sidewalk repair/replacement, guard rail replacement, pedestrian railing replacement, expansion joint replacement, and bridge deck repairs.

Charlotte County, Emil Sweptson (CR 776) Bridge Rehabilitation - Charlotte County, FL. Bridge Designer. KCI prepared comprehensive bridge rehabilitation design plans for this bridge. Gina served as a Bridge Designer, performing tasks that included performing condition inspections, developing design details, preparing cost estimates, and performing inspections during construction. The superstructure for the Emil Sweptson Bridge is a continuous, 12-span, cast-in-place concrete slab bridge with a total length of approximately 390 feet. The superstructure is supported on pile bents that consist of cast-in-place concrete caps and prestressed concrete piles. The bridge was constructed in 1980. The repairs included: concrete spall repairs, rip rap repair/replacement, undermining repairs at end bents, sidewalk repair/replacement, guard rail replacement, pedestrian railing replacement, expansion joint replacement, and bridge deck repairs.

Charlotte County, Don Pedro & Knights Island Bridges - Charlotte County, FL. Bridge Designer. KCI prepared comprehensive bridge rehabilitation design plans for two bridges in Charlotte County. Gina served as the lead Bridge Designer performing tasks that included performing condition inspections, developing design details for repairs, preparing bridge repair plans and specifications, preparing cost estimates, and performing inspections during construction. Bridge number 014087 has three 50-foot spans with a total length of 150 feet and an out-to-out width of 36.5 feet. The bridge superstructure consists of multiple glue-laminated timber beams with a timber deck and timber wear deck. The bridge substructure consists of pile bents supported with prestressed concrete piles. Bridge #014090 is a single 60-foot span structure that is 16 feet out to out. The bridge superstructure consists of four 4-foot-wide 27" deep prestressed slab units with an asphalt-wearing surface. The bridge substructure consists of pile bents supported on prestressed concrete piles.

City of Bonita Springs, Bridge Maintenance Repairs - Bonita Springs, FL. Bridge Designer. KCI prepared comprehensive bridge rehabilitation design plans for eight bridges. Gina served as the lead Bridge Designer performing tasks that included performing condition inspections, developing design details for repairs, preparing bridge repair plans and specifications, preparing cost estimates, and performing inspections during construction. The typical repairs included: wearing surface replacement using waterproofing membranes, concrete spall repairs, rip rap repair/replacement, undermining repairs at end bents, sidewalk repair/replacement, guard rail replacement, pedestrian railing replacement, expansion joint replacement, and bridge deck repairs.



C. BRYAN WILSON, PE

ROADWAY DESIGN LEAD

37 YEARS

TOTAL EXPERIENCE

23 YEARS

WITH KCI

CERTIFICATIONS & REGISTRATIONS

PE / FL / 43447 - Exp. 02/28/2023

ATSSA / Traffic Control Technician
Advanced

EDUCATION

BS / Civil Engineering / Auburn
University

Mr. Wilson has extensive experience in the design and management of highway transportation projects in Florida and South Carolina. Mr. Wilson joined the consultant industry in 1994 after nine years with the FDOT. His project experience encompasses all aspects of highway design from pavement rehabilitation to limited access interchanges and managed-lane facilities delivered in both bid-build and design-build formats.

PROJECT EXPERIENCE

City of Port St. Lucie, Design and Permitting for Southbend Blvd Sidewalk Improvements - Port St. Lucie, FL. Project Manager. This project had included bridge sidewalk, drainage, and ADA ramp modifications. Within these modifications, CPSL had been provided with a set of contract documents that had consisted of plans, specifications, supporting engineering analysis, calculations, and all other technical documents in accordance with the applicable FDOT/CPSL policy, procedures, and requirements.

City of Boca Raton, El Rio Multi-Use Trail - Boca Raton, FL. Project Manager. KCI provided professional engineering, survey, environmental, and landscape architecture services to the City of Boca Raton for the design and construction of 2.25 miles of the El Rio Trail, a 12-foot wide, five-mile long shared-use pathway extending from Glades Road to Congress Avenue. The trail includes pedestrian bridges, seating areas, fishing piers, and native plantings.

The trail is designed for both pedestrians and bicycles and provides a connection from Florida Atlantic University to the Yamato Road Tri-Rail station to office and residential buildings located throughout its length. It meanders through natural preserve areas and residential communities and passes under I-95. Design elements included pathway design, paving and drainage, bridges and structures, site furnishings, planting, and irrigation.

Florida Department of Transportation District Two, SR 9A at SR 21 Interchange - Jacksonville, FL. Project Manager. KCI was responsible for the design and preparation of construction documents for the rigid pavement rehabilitation project for the southbound lanes of SR 9A/I-95 from NW 125th Street (MP 10.170) to the Biscayne Canal Bridge (MP 12.091). This was a Pavement Only Project (POP). The project also included traffic control plans and signing and pavement marking plans. The project length was 1.921 Miles. Mr. Wilson served as project manager responsible for the design and preparation of construction documents for the rigid pavement rehabilitation project for the southbound lanes.

Florida Department of Transportation District Four, SR 714 / SW Martin Highway PD&E Services - Martin County, FL. Project Manager. This project was developed as a State Environmental Impact Report (SEIR) and was conducted as the pilot project for FDOT District 4 utilizing the Statewide Acceleration Transformation (SWAT) process. The project involved widening a rural two-lane roadway to a four-lane divided urban roadway. Project tasks included signalization, signing and pavement marking, lighting, and utility coordination. Right-of-way acquisition was required on four parcels as well as permanent and construction easements. Coordination with Florida's Turnpike Enterprise was necessary related to the roadway bridge crossing over Florida's Turnpike and the presence of a Park-and-Ride lot located at the Turnpike toll plaza at the eastern project limit. Close coordination with State and Martin County staff was necessary to successfully adapt the PD&E process and documentation to changes evolving out of the design process. Mr. Wilson served as project manager for the roadway design elements of the PD&E study and final design.

City of Miami Beach, New West Avenue Bridge over Collins Canal - Miami Beach, FL. Project Manager. KCI was the lead design consultant for the West Avenue Design-Build project in the City of Miami Beach, Florida. The project scope was the design of a new bridge, crossing the Collins Canal from 17th Street and connecting to Dade Boulevard. The project included the complete reconstructions Dade Boulevard, a new closed drainage system for the road and offsite drainage as well, to pick up flow near the local businesses. The work also includes new signals, signing and pavement markings, lighting, ADA upgrades, and a pedestrian walkway that crosses the canal at Bay Road. The multidisciplinary nature of the work required us to coordinate with geotechnical engineers as well as other roadway engineers and contractors to tie into the work currently in progress. Utility coordination was also performed to limit the impact to the existing utilities in the corridor. KCI assisted in the preparation of permit documents, as well as coordinating reviews with the local governing bodies; the City of Miami Beach and Miami-Dade County.



RICH JACKSON, PSM

SURVEY & MAPPING LEAD

39 YEARS

TOTAL EXPERIENCE

5 YEARS

WITH KCI

CERTIFICATIONS & REGISTRATIONS

PSM / FL / LS6719 - Exp. 02/28/2025

EDUCATION

Coursework / Civil Engineering / The Ohio State University

Coursework / Business Administration / Franklin University

MEMBERSHIPS

Florida Surveying & Mapping Society - Member

Mr. Jackson's professional experience spans from public sector clients such as city/county municipalities and Florida Department of Transportation, to institutional clients such as hospitals, public schools and universities, as well as private sector clients. His specialized skills include boundary surveying (including ALTA/NSPS land title surveys), residential and commercial boundary surveys, topographic surveying (including civil engineering design surveys), construction surveying including public and private projects, roadway layout, highway layout, utility layout, as-built surveys, legal descriptions and sketch of descriptions including public, private and utility easements, as well as expert witness, business development and marketing, training and development of field and office technicians, executive leadership and administrative management, development and execution of business plans and marketing plans for professional services.

PROJECT EXPERIENCE

Superior ROW Services, LLC, Charlotte Peachland Site Preparation - Punta Gorda, FL. Surveyor. Charlotte-Peachland Transmission Line Improvements Road and Drainage project for Florida Power and Light is a 9.5-mile rebuild project. KCI provided construction surveying services for site preparation and construction of service road and haul road improvements to facilitate the rebuild operation.

Florida Department of Transportation District Seven, I-75 at Fowler Interchange - Hillsborough County, FL. Project Surveyor. This was a stand-alone landscape project on the southeast quadrant of the interchange that includes land sculpting to provide visual interest at the large flat clearing. The landscape theme shows the different ecosystems of Florida taking

advantage of the modified terrain, which also includes some decorative gabion walls and rip rap design features. Mr. Jackson reported directly to the project manager, provided coordination and direction for field and office staff to recover and verify the existing alignment and horizontal control, established site benchmarks and prepared topographic surveys of roadway, fore-slopes, median crossings, wetlands and four bridge clearance surveys within portions of the 12-mile project area located on I-75 from the Manatee County/Hillsborough County line to north of CR 572.

Hillsborough County, CEI for Citrus Park Drive Extension from Countryway Blvd to Sheldon Rd - Tampa, FL. Survey Manager. The project consisted of extending Citrus Park Drive to connect Countryway Boulevard to Sheldon Road by adding a 2.73-mile section of four-lane, divided urban road. The corridor has two 11-foot lanes, a six-foot "buffered" bicycle lane, and sidewalks in both directions. New traffic signals were installed at the new Fawn Ridge Boulevard intersection and at the entrance of Deer Park Elementary. Included in the project are landscaped medians, drainage improvements, pedestrian safety features, water and wastewater infrastructure, and an upgraded ITS system. The project also consists of 58 acres of wetland mitigation creation. Connecting the two existing segments of Citrus Park Drive accommodates traffic demands in the northwest area of Hillsborough County, including the neighborhoods within and around Westchase and Citrus Park. This project provides pedestrian and bicycling connectivity to other neighborhoods, as well as the Upper Tampa Bay Trail and Deer Park Elementary School, and will alleviate traffic volumes on Linebaugh Avenue and South Mobley Road.

City of Tampa Water Department, SUE Special Project 12, W Hillsborough Ave - Tampa, FL. Survey Manager. KCI performed SUE & survey services on an approximately 1300-foot-long and 100-foot-wide area in the rear of a strip shopping center located on West Hillsborough Avenue between Town & Country Boulevard and Ambassador Drive in Tampa, Florida as requested by City of Tampa, Water Department. Additionally, all work was performed adhering to the State of Florida Minimum Technical Standards, as set forth by the Board of Professional Surveyors and Mappers, Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes, and Underground Facility Damage Prevention and Safety Act, Chapter 556, Florida Statutes. Subsurface Utility Engineering (SUE) work conformed to ASCE C-1 38-02 utilizing quality levels "A", "B", "C" and "D."

Tampa Electric Company, Ybor City New Poles & Archways - Tampa, FL. Surveyor. Upgrade to lighting and lighted archways along historic 7th Avenue, between Nuccio Parkway and 26th Street. KCI provided SUE QLA and QLB services for the installation of new light poles (33), Archway Poles (42), Decorative Lighted Archways (21), LED Light Heads (40), and the removal and replacement of associated secondary lighting conductors, and specifically identified building services. KCI's scope of work for this project was to provide Subsurface Utility Engineering, Survey, design, coordination, permitting, construction, and as-built documentation of the assets placed in the field. Construction oversight was done by Tampa Electric Company, which interacted with KCI's project management team as each task was completed.



Years of Experience: 33

Education:

- PhD, 1997, Coastal and Oceanographic Engineering, University of Florida
- MS, 1992, Naval Architecture and Offshore Structures, University of California at Berkeley

Professional Registrations/Affiliations:

- Professional Engineer (Civil), FL, 1999, No. 54594
- Professional Engineer (Civil), LA, 2006, No. 32466
- Member, Florida Engineering Society
- Member, Florida Institute of Consulting Engineers Transportation Committee
- Member, Florida Coastal Hydraulics Council
- Member, American Shore and Beach Preservation Association

Professional History:

2013 – Present Vice President of Coastal Engineering
– INTERA Incorporated, Gainesville, FL

2002 – 2013 Vice President – Ocean Engineering
Associates, Inc., Gainesville, FL

1997 – 2002 Chief Engineer – Taylor Engineering,
Jacksonville, FL

Mark Gosselin has nearly three decades of experience in coastal processes, nearshore and open channel hydrodynamics, and sediment transport. Dr. Gosselin has served as project manager on hundreds of scour and hydraulics assessments of bridges and coastal structures throughout the country and has served as project manager on numerous coastal engineering studies that have involved wave, hurricane storm surge, riverine flooding, and dam break hydraulic modeling. His experience covers the southeastern U.S., Virginia, Washington, and Puerto Rico, and clients such as state departments of transportations, the Federal Highway Administration, U.S. Army Corps of Engineers districts, the Federal Emergency Management Agency (FEMA), and NASA. He has applied SWAN+ADCIRC, RMA2, FESWMS, AdH, HEC-RAS and other analytical techniques to support coastal structure design and assessments for design and numerous design-build projects. Dr Gosselin has authored design guidelines at both the state and federal level for clients including NCHRP, FDOT, SCDOT, and NCDOT.

Project Experience

Stan Gober Bridge over Marco Channel, Collier County, FL. 2021. *QC Reviewer.* The project involved development of the scour countermeasures design for several of the interior bents, armor stone size calculation based on HEC-23 methodologies and documentation.

Bridge Hydraulics Report for Gulf of Mexico Drive (SR-789) over Longboat Pass Project Development and Environment

Study, Florida Department of Transportation - District 1, Manatee County, FL. 2020. *Project Manager.* As part of the team tasked with evaluating the hydraulic design of a replacement of the Gulf of Mexico Drive (SR 789) Bridge over Longboat Pass for the Project Development and Environment (PD&E) study, INTERA was assigned with developing the Bridge Hydraulics Report for the new bridge. Analysis required accounting for the bridges Location on the open coast directly facing the Gulf of Mexico. As such, development of the hydraulics and waves employed a tightly couple wave and hydraulics model (SWAN+ADCIRC). Provided technical guidance for the modeling effort.

Bridge Hydraulics Analysis Report for the Little Ringling Bridge Replacement Project, Florida Department of Transportation District 1, Sarasota County, FL. 2020-2021. *Quality Control Reviewer.* Provided quality control review for the bridge hydraulics report supporting the bridge replacement design. Project involved ADCIRC+SWAN modeling of storm surge and wave climate. Results of the modeling provided the hydrodynamic inputs to calculate scour at the bridge foundation, set low chord elevations, and design abutment protection.

Boulevard of the Arts Living Shoreline and Shoreline Protection Design, City of Sarasota, FL. 2018. *Project Manager.* The city requested a conceptual design of the revetment shoreline protection at 1000 Boulevard of the Arts and adjacent riprap breakwater at 1001. The intent of the breakwater is to protect mangrove plantings along the 1001 property creating a living shoreline. Work for the project involved development of design wave and surge criteria, sizing the armor stone protection for both the shoreline protection and the breakwater, and determining both the horizontal and vertical extents of the coastal structures. All design calculations and recommendations were documented in a Coastal Engineering Design Report.

No-Rise Study for the I-75 at US 301 Interchange Project, Florida Department of Transportation (FDOT) - District 1, Manatee County, FL. 2017. *Project Manager.* The I-75 at US 301 Interchange Project includes construction of two new bridges over the Manatee River parallel to the existing I-75 northbound and southbound bridges. Since the northbound bridge intersects the downstream edge of the FEMA regulated floodway, a no-rise study was required. Work involved obtaining and modifying the existing FEMA HEC-RAS model to reflect existing and proposed conditions, simulating the design flows, comparing the results to ensure no rise in water surface elevation upstream of the project, and preparing the no-rise certification.

MICHAEL GIARDULLO, P.E.: DIRECTOR OF CIVIL ENGINEERING

ROLE: SENIOR PROJECT MANAGER

EDUCATION: BACHELOR OF SCIENCE, CIVIL ENGINEERING, LOYOLA MARYMOUNT UNIVERSITY;
MASTER OF SCIENCE, CIVIL ENGINEERING, COLORADO STATE UNIVERSITY;
MASTER OF BUSINESS ADMINISTRATION, UNIVERSITY OF MASSACHUSETTS

Mr. Giardullo has been with Weiler Engineering for 16 years and currently serves as the Director of Civil Engineering. Mike has performed design, permitting, and project management services for many municipalities including countless land development and stormwater projects in South and Southwest Florida. He has worked closely with FDOT, FDEP, SWFWMD, ACOE, and other regulatory agencies to complete project for both local government and state agencies. He is an expert in LAP funded projects and completing requirements to receive funding, design, construct, and meet stated requirements of the funding source.

COUNTY ENGINEER/CONTINUING SERVICES-DE SOTO COUNTY, FL

Mr. Giardullo currently serves in the role of County Engineer for DeSoto County. In this role, Mr. Giardullo provides recommendations and direction to the Board for County projects, development review, and supervises the Engineering Dept. staff. Since August of 2011, WEC has provided a range of engineering services to DeSoto County, which include construction management and inspection services, project management, development of an annual CIP and road repaving program, coordination with various state and federal agencies on County projects, administration of grant funds, assistance with utility project design and master planning, and providing technical guidance to the Administrator and County Commissioners. The projects range from under \$5,000 to over several hundreds of thousands of dollars. Mr. Giardullo assisted DeSoto County on multiple utility projects and stepped in as the Interim Utility Department Director for DeSoto County from January 2021 through November of 2022. Mr. Giardullo has also been responsible for design engineering and project management of 9 bridge repair and replacement projects.

CITY OF MARATHON MARINA WASTEWATER UPGRADE PROJECT-MARATHON, FL

Mr. Giardullo was involved with all of aspects of these projects and performed the lead design role as well as project management. Mr. Giardullo also assisted the City by dividing the project into different phases and coordinating the effort of a number of different contractors who were all working on different portions of the project to ensure that the final system functioned as intended in the design. The project included vacuum sewer and force main and included numerous bridge crossings. The project also included road paving. In addition to design and permitting, Mr. Giardullo oversaw WEC inspection team for multiple phases of construction.

REYNOLDS BRIDGE REPLACEMENT – ARCADIA, FL

Mr. Giardullo served as the senior project manager for this bridge replacement project. He was responsible for the analysis of the existing bridge structure and cost benefit analysis of replacement alternatives. Ultimately a simple flat span bridge was the most cost effective for this 98 foot span. Mr. Giardullo was the engineer of record for the road design and hydraulics. WEC partnered with Ralph Verrastro's team at Bridging Solutions (currently KCI). Mr. Giardullo also provided grant management services for this project.



Education

BS, Civil Engineering,
Florida Gulf Coast
University

Years of Experience

9

Licenses

- Professional Engineer -
FL#85319

Certifications

- ACI Concrete Field Testing
Technician - Grade I
- ACI Concrete
Construction Special
Inspector - #01291809
- OSHA 10-Hour

Adam Dornacker, PE

Geotechnical Department Manager

Mr. Dornacker, PE, has nine years of experience in his field. His expertise includes foundation design analysis and recommendations, foundation installation monitoring, and field and laboratory testing of soil and concrete. Mr. Dornacker is responsible for managing and coordinating all work performed by the Geotechnical Department. His responsibilities include preparing and reviewing geotechnical and materials engineering inspection reports, coordinating and supervising engineering staff and drilling personnel, and conducting foundation observations, foundation design reviews, and geotechnical instrumentation monitoring, and reviewing and signing materials testing reports.

PROJECT EXPERIENCE

Caloosahatchee Connect

Fort Myers/Cape Coral, FL

This project will serve to connect a reclaimed water transmission pipeline from the City of Fort Myers to the City of Cape Coral just south of the Midpoint Bridge. The transmission pipeline will be installed underneath the Caloosahatchee River using large-scale directional drilling operations. The 7,600-foot reclaimed water transmission main will be the largest and longest subaqueous horizontal directional drill project using fusible polyvinyl chloride pipe (FPVC) in the United States. Mr. Dornacker was the lead Geotechnical engineer for the project and was responsible for the coordination of drilling operations, review of soil samples, review of laboratory testing (including direct shear and consolidation testing), and generation of geotechnical report and recommendations. Geotechnical borings were completed in the Caloosahatchee River using a truck-mounted drilling rig atop a push barge with specially designed platforms, borings were performed to depths exceeding 120 feet below the water line.

Golden Gate Bridge Over Santa Barbara Canal

Naples, FL

This project consists of the phased demolition of the existing bridge along Golden Gate Parkway and the new construction of a four-lane, two-way bridge over the Santa Barbara Canal. Mr. Dornacker coordinated completion of the geotechnical borings to depths of 100 feet below ground surface, as well as the GPR survey and MOT operations. Mr. Dornacker also reviewed the geotechnical findings and generated report recommendations to include foundation piling recommendations in accordance with FDOT standards.

Yellow Bird Street Roadway Widening

Marco Island, FL

This project consisted of roadway improvements to widen Yellowbird Street from Bald Eagle Drive to N. Collier Boulevard, a distance of approximately 3,800 feet. The improvements are to widen the pavement to 11-foot travel lanes and add a new four-foot wide paved shoulder along both sides of roadway. Mr. Dornacker performed hand auger soil borings, classified soils, and coordinated the completion of the geotechnical report for the project.



Ralph Verrastro, PE / Practice Leader — Bridges
4041 Crescent Park Drive / Tampa, Florida 33578
239-216-1370 / ralph.verrastro@kci.com

