

### TASK ORDER APPROVAL FORM

CONTRACT #: C19-2747-PW

TASK ORDER #: 18

TASK ORDER AMOUNT: \$ 498,734.00

**CONTRACT: C19-2747-PW  
MOTT MACDONALD FLORIDA, LLC  
GENERAL ENG SERVICES FOR PW  
EXPIRES: 09/30/2023**

OFFERED BY CONSULTANT:

Mott MacDonald Florida, LLC  
FIRM'S NAME

David D. Skipper, PE  
REPRESENTATIVE'S PRINTED NAME

Digitally signed by:  
David Skipper  
SIGNATURE

Senior Vice President 5/23/2023  
TITLE DATE

**RECOMMENDED FOR APPROVAL  
(Department Director)**

Jason T. Autrey, Digitally signed by Jason T. Autrey, P.E., C.P.M.  
Date: 2023.05.24 08:20:57 -05'00'  
P.E., C.P.M.

\_\_\_\_\_  
SIGNATURE

Public Works Director

\_\_\_\_\_  
TITLE

05.24.2023

\_\_\_\_\_  
DATE

John Hofstad Digitally signed by John Hofstad  
Date: 2023.06.01 15:30:29 -05'00'

\_\_\_\_\_  
COUNTY ADMINISTRATOR (if applicable)

06.01.2023

\_\_\_\_\_  
DATE

Revised January 21, 2020

**APPROVED BY OKALOOSA COUNTY  
(Per Purchasing Manual) Table 1**

DeRita Mason Digitally signed by DeRita Mason  
Date: 2023.05.24 09:18:43 -05'00'

\_\_\_\_\_  
PURCHASING MANAGER

05.24.2023

\_\_\_\_\_  
DATE

Faye Douglas Digitally signed by Faye Douglas  
Date: 2023.06.01 13:46:08 -05'00'

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OMB DIRECTOR/DATE

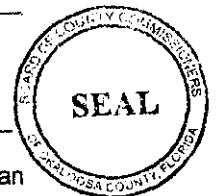
06.01.2023

\_\_\_\_\_  
DATE

  
CHAIRMAN (if applicable)  
Robert A. "Trey" Goodwin, III, Chairman

JUN 06 2023

\_\_\_\_\_  
DATE



**Okaloosa County**  
**Contract # C19-2747-PW**

**CONSTRUCTION ENGINEERING & INSPECTION (CEI)**

**SCOPE OF SERVICES**

This Scope of Services is for Mott MacDonald Florida, LLC to provide construction engineer and inspection (CEI) services to Okaloosa County for Live Oak Church Road Intersection Improvement and Precast Bridge Widening project. These services are limited to the roadway portion of the project and will take place prior to, during and after construction. The CEI for the bridge widening portion of the project will be provided by others under contract with Okaloosa County. The Scope of Services contemplated by this Task Order are further described in the attached Exhibit A.

The fee for these services will be based on the approved billing rates, having a limiting, not-to-exceed fee of \$486,234.00. The fee for material testing and/or survey will be billed at-cost with no mark-up with a limiting amount of \$12,500.00. The total limiting amount of this Task Order is \$498,734.00.

**EXHIBIT "A"**

**CONSTRUCTION ENGINEERING AND INSPECTION**

**SCOPE OF SERVICES**

**FOR**

**Project Description:**

**Live Oak Church Road Widening Project from SR 85 to Shoal River Drive in Okaloosa County.**

**FPN: 449308-1-54-01**

**Federal Project No.: N/A**

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Financial Project ID (s): 449308-1-54-01

**SCOPE OF SERVICES**  
**CONSTRUCTION ENGINEERING AND INSPECTION**

**1.0 PURPOSE:**

This scope of services describes and defines the Construction Engineering and Inspection (CEI) services which are required for contract administration, inspection, and materials sampling and testing for the construction projects listed below.

**2.0 SCOPE:**

Provide services as defined in this Scope of Services, the referenced County manuals, and procedures. The project for which the services are required is as follows:

Financial Project IDs: CEI - C19-2747-PW  
Descriptions: Live Oak Church Road Widening project  
County: Okaloosa

Exercise independent professional judgment in performing obligations and responsibilities under this Agreement. Pursuant to Section 4.1.4 of the Construction Project Administration Manual (CPAM), the authority of the Consultant's lead person, such as the Senior Project Engineer, and the Consultant's Project Administrator shall be identical to the County's Construction Engineer and Project Administrator respectively and shall be interpreted as such.

Services provided by the Consultant shall comply with County manuals, procedures, and memorandums in effect as of the date of execution of the Agreement unless otherwise directed in writing by the County. Such County manuals, procedures, and memorandums are found at the State Construction Office's website.

On a single Construction Contract, it is a conflict of interest for a professional firm to receive compensation from both the County and the Contractor either directly or indirectly.

**3.0 LENGTH OF SERVICE:**

The services described herein shall coincide with the construction contract. For estimating purposes, a total of 16 (sixteen) months will be assumed to include time prior to the Contractor's notice to proceed and time after the final acceptance of the Construction Contract.

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The anticipated letting schedules and construction times for the project is tabulated below:

Construction Contract Estimate			
County	Letting Date	Start Date	Duration
Project ID	(Mo/Day/Yr)	(Mo/Day/Yr)	(Days)
C19-2747-PW	6/28/2023	08/01/2023	11 months

#### 4.0 **DEFINITIONS:**

- A. **Agreement:** The Professional Services Agreement between the County and the Consultant setting forth the obligations of the parties thereto, including but not limited to the performance of the work, furnishing of services, and the basis of payment.
- B. **Contractor:** The individual, firm, or company contracting with the County for performance of work or furnishing of materials.
- C. **Construction Contract:** The written agreement between the County and the Contractor setting forth the obligations of the parties thereto, including but not limited to the performance of the work, furnishing of labor and materials, and the basis of payment.
- D. **Construction Project Manager:** The County employee assigned to manage the Construction Engineering and Inspection Contract and represent the County during the performance of the services covered under this Agreement.
- E. **Construction Training/Qualification Program (CTQP):** The County program for training and qualifying technicians in Aggregates, Asphalt, Concrete, Earthwork, and Final Estimates Administration. Program information is available at CTQP website.
- F. **Consultant:** The Consulting firm under contract to the County for administration of Construction Engineering and Inspection services.
- G. **CEI Project Administrator/Project Engineer:** The employee assigned by the Consultant to be in charge of providing Construction Contract administration services for one or more Construction Projects.
- H. **CEI Resident Compliance Specialist:** The employee assigned by the Consultant to oversee project specific compliance functions.
- I. **CEI Senior Project Engineer:** The Engineer assigned by the Consultant to be in charge of providing Construction Contract administration for one or more Construction Projects. This person may supervise other Consultant employees and act as the lead Engineer for the Consultant.
- J. **County Construction Engineer:** The administrative head of the County's Construction Offices.
- K. **Engineer of Record:** The Engineer noted on the Construction plans as the responsible person for the design and preparation of the plans.

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**5.0 ITEMS TO BE FURNISHED BY THE COUNTY TO THE CONSULTANT:**

- A. The County, on an as needed basis, will furnish the following Construction Contract documents for each project. These documents may be provided in either paper or electronic format.
1. Construction Plans,
  2. Specification Package,
  3. Copy of the Executed Construction Contract, and
  4. Utility Agency's Approved Material List (if applicable).

**6.0 ITEMS FURNISHED BY THE CONSULTANT:**

**6.1 County Documents:**

All applicable County documents referenced herein shall be a condition of this Agreement and will be furnished by the County.

**6.2 Office Automation:**

Provide all software and hardware necessary to efficiently and effectively carry out the responsibilities under this Agreement.

Provide the inspection staff with a laptop computer (or tablet) with applicable software to provide the County with the required project backup and documentation. All computer coding shall be input by Consultant personnel using equipment furnished by them.

**6.3 Vehicles:**

Vehicles will be equipped with appropriate safety equipment and must be able to effectively carry out requirements of this Agreement. Vehicles shall have the name and phone number of the consulting firm visibly displayed on both sides of the vehicle.

**6.4 Field Equipment:**

Supply survey, inspection, and testing equipment essential to perform services under this Agreement; such equipment includes non-consumable and non-expendable items.

Hard hats shall have the name of the consulting firm visibly displayed.

Equipment described herein and expendable materials under this Agreement will remain the property of the Consultant and shall be removed at completion of the work.

Handling of nuclear density gauges shall be in compliance with their license.

Retain responsibility for risk of loss or damage to said equipment during performance of this Agreement. Field office equipment shall be maintained and in operational condition at all times.

**6.5 Licensing for Equipment Operations:**

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Obtain proper licenses for equipment and personnel operating equipment when licenses are required. The license and supporting documents shall be available for verification by the County, upon request.

Radioactive Materials License for use of Surface Moisture Density Gauges shall be obtained through the State of Florida County of Health.

**7.0 LIAISON RESPONSIBILITY OF THE CONSULTANT:**

For the duration of the Agreement, keep the County's Construction Project Manager in Responsible Charge informed of all significant activities, decisions, correspondence, reports, and other communications related to its responsibilities under this Agreement.

Facilitate communications between all parties (i.e. architectural, mechanical, materials, landscaping, local agencies, etc.) ensuring responses and resolutions are provided in a timely manner. Maintain accurate records to document the communication process.

Inform the designated County project personnel of any design defects, reported by the contractor or observed by the consultant.

Submit all administrative items relating to Invoice Approval, Personnel Approval, User IDs, Time Extensions, and Supplemental Amendments to the Construction Project Manager for review and approval.

**8.0 PERFORMANCE OF THE CONSULTANT:**

During the term of this Agreement and all Supplemental Amendments thereof, the County will review various phases of Consultant operations, such as construction inspection, materials sampling and testing, and administrative activities, to determine compliance with this Agreement. Cooperate and assist County representatives in conducting the reviews. If deficiencies are indicated, remedial action shall be implemented immediately. County recommendations and Consultant responses/actions are to be properly documented by the Consultant. No additional compensation shall be allowed for remedial action taken by the Consultant to correct deficiencies. Remedial actions and required response times may include but are not necessarily limited to the following:

- A. Further subdivide assigned inspection responsibilities, reassign inspection personnel, or assign additional inspection personnel, within one week of notification.
- B. Immediately replace personnel whose performance has been determined by the Consultant and/or the County to be inadequate.
- C. Immediately increase the frequency of monitoring and inspection activities in phases of work that are the Consultant's responsibility.
- D. Increase the scope and frequency of training of the Consultant personnel.



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**9.0 REQUIREMENTS OF THE CONSULTANT:**

**9.1 General:**

It shall be the responsibility of the Consultant to administer, monitor, and inspect the Construction Contract such that the project is constructed in reasonable conformity with the plans, specifications, and special provisions for the Construction Contract.

Observe the Contractor's work to determine the progress and quality of work. Identify discrepancies, report significant discrepancies to the County, and direct the Contractor to correct such observed discrepancies.

Review and negotiate Supplemental Agreements (S/A or C/O). Seek input from the Construction Project Manager relating to all S/A requests. Prepare the S/A as a recommendation to Okaloosa County, which Okaloosa County may accept, modify, or reject upon review.

Inform the designated County project personnel of any significant omissions, substitutions, defects, and deficiencies noted in the work of the Contractor and the corrective action that has been directed to be performed by the Contractor.

**9.2 Survey Control:**

Check or establish the survey control baseline(s) along with sufficient baseline control points and bench marks at appropriate intervals along the project in order to: (1) make and record measurements necessary to calculate and document quantities for pay items, (2) make and record pre-construction and final cross section surveys of the project site in those areas where earthwork (i.e., embankment, excavation, subsoil excavation, etc.) is part of the construction project, and (3) perform incidental engineering surveys.

**9.3 On-site Inspection:**

Monitor the Contractor's on-site construction activities and inspect materials entering into the work in accordance with the plans, specifications, and special provisions for the Construction Contract to determine that the projects are constructed in reasonable conformity with such documents. Maintain detailed accurate records of the Contractor's daily operations and of significant events that affect the work. The County will monitor off-site activities and fabrication unless otherwise stipulated by this Agreement.

Monitor and inspect Contractor's Work Zone Traffic Control Plan and review modifications to the Work Zone Traffic Control Plan, including Alternate Work Zone Traffic Control Plan, in accordance with the County's procedures. Consultant employees performing such services shall be qualified in accordance with the County's procedures.

**9.4 Sampling and Testing:**

Perform sampling and testing of component materials and completed work in accordance with the Construction Contract documents. The minimum sampling frequencies set out in the County's Materials Sampling, Testing and Reporting Guide shall be met. In complying with the aforementioned guide, provide daily surveillance of the Contractor's

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Quality Control activities and perform the sampling and testing of materials and completed work items for verification and acceptance.

The Consultant will perform inspection and sampling of materials and components at locations remote from the project site and the Consultant will subcontract the performing of testing of materials normally done in a laboratory remote from the project site.

Determine the acceptability of all materials and completed work items on the basis of either test results or verification of a certification, certified mill analysis, DOT label, DOT stamp, APL, etc.

The County will monitor the effectiveness of the Consultant's testing procedures through observation and independent assurance testing.

Sampling, testing and laboratory methods shall be as required by the County's Standard Specifications, Supplemental Specifications or as modified by the Special Provisions of the Construction Contract.

Documentation reports on sampling and testing performed by the Consultant shall be submitted during the same week that the construction work is done.

Transport samples to be tested in an approved laboratory to the appropriate laboratory or appropriate local testing facility.

Input verification testing information and data into an appropriate tracking log and logbook verification as required.

**9.5 Engineering Services:**

Coordinate the Construction Contract administration activities of all parties other than the Contractor involved in completing the construction project. Notwithstanding the above, the Consultant is not liable to the County for failure of such parties to follow written direction issued by the Consultant.

Services shall include maintaining the required level of surveillance of Contractor activities, interpreting plans, specifications, and special provisions for the Construction Contract. Maintain complete, accurate records of all activities and events relating to the project and properly document all project changes. The following services shall be performed:

- (1) Attend a pre-service meeting for the Agreement with County personnel. Provide appropriate staff to attend and participate in the pre-service meeting.
- (2) Host a Pre-construction conference meeting prior to the Contractor beginning construction operations. Those in attendance should be in the Contractor, County personnel, utility owners, subcontractors, appropriate CEI staff, etc.
- (3) Verify that the Contractor is conducting inspections, preparing reports and monitoring all storm water pollution prevention measures associated with the project. For each project that requires the use of the NPDES General Permit, provide at least one inspector who has successfully completed the "Florida

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Stormwater, Erosion, and Sedimentation Control Training and Certification Program for Inspectors and Contractors". The Consultant's inspector will be familiar with the requirements set forth in the FEDERAL REGISTER, Vol. 57, No. 187, Friday, September 5, 1992, pages 4412 to 4435 "Final NPDES General Permits for Storm Water Discharges from Construction Sites" and the County's guidelines.

- (4) Analyze the Contractor's schedule(s) (i.e. baseline(s), revised baseline(s), updates, as-built, etc.) for compliance with the contract documents. Elements including, but not limited to, completeness, logic, durations, activity, flow, milestone dates, concurrency, resource allotment, and delays will be reviewed. Verify the schedule conforms with the construction phasing and MOT sequences, including all contract modifications. Provide a written review of the schedule identifying significant omissions, improbable or unreasonable activity durations, errors in logic, and any other concerns as detailed in CPAM.
- (5) Analyze problems that arise on a project and proposals submitted by the Contractor; work to resolve such issues, and process the necessary paperwork.
- (6) Monitor, inspect and document utility relocation self-performed by the contractor for conformance with Utility Agency's Standards and the Utility Agency's Approved Materials List. Document utility construction progress to be performed by Utility Agencies. Facilitate coordination and communication between Utility Agency's representatives, County's staff and Contractors executing the work. Identify potential utility conflicts and assist in the resolution of utility issues including County and Local Government owned facilities.

Identify, review, and track progress of Joint Project Agreements, and/or other County and utility agreements. Address work progress, track reimbursement activities, and address betterment and salvage determination. Prepare all necessary documentation to support reimbursement activities and betterment and salvage determination.

- (7) Produce reports, verify quantity calculations and field measure for payment purposes as needed to prevent delays in Contractor operations and to facilitate prompt processing of such information in order for the County to make timely payment to the Contractor.
- (8) The County will provide Public Information Services.
- (9) Prepare and submit to the Construction Project Manager monthly, a Construction Status Reporting System (CSRS) report, in a format to be provided by the County.
- (10) Video tape the pre-construction conditions throughout the project limits. Provide a digital photo log or video of project activities, with heavy emphasis on potential claim items/issues and on areas of real/potential public controversy.

Provide a digital camera for photographic documentation of pre-construction state and of noteworthy incidents or events during construction. These

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photographs will be filed and maintained on the Consultant's computer using a digital photo management system.

Photographs shall be taken the day prior to the start of construction and continue as needed throughout the project. Photographs shall be taken the days of Conditional, Partial and Final Acceptance.

#### 9.6 Geotechnical Engineering:

The prime Consultant may engage the services of a geotechnical subconsultant to perform some of the services indicated in this section. However, the prime Consultant will be responsible to the County for the satisfactory performance and timeliness of these services.

The prime Consultant will be required to interact with the District Geotechnical Engineer (DGE) office and any geotechnical subconsultant assigned to the project by the DGE office under a District-wide contract. All references to the DGE in the following sections implicitly include the DGE and his/her delegated representative on the project, who may be the DGE office in-house personnel or a subconsultant working for the DGE office.

Become familiar with the existing site conditions and the contract documents. Observe and record the progress and quality of foundation work to determine that the foundations are constructed at the correct locations and elevations, identify discrepancies, and direct the Contractor to correct such observed discrepancies. Attend the Preconstruction Conference and/or special geotechnical meeting for the Construction Contract. All services under this section will be performed in accordance to FDOT Specification Section 455. Inspect and verify that the Contractor has performed the foundation work in accordance with applicable FDOT Specification Section 455 and other contract documents. Provide qualified Geotechnical Engineers and CTQP qualified inspectors in Drilled Shaft/Pile Driving/Auger Cast Pile inspection, relevant to the foundation type(s) required in the plans. Schedule meetings and facilitate communications between the Contractor and any Specialty Contractors, the CEI, and the DGE as needed. Observe and verify that all work is performed in accordance with the contract documents. Assure that any specialty work is completed as necessary to accomplish its intent.

The following geotechnical engineering services shall be performed:

##### 1) Drilled Shafts:

- Process and review the Drilled Shaft Installation Plan in accordance with CPAM.
- Schedule a pre-drilled shaft installation meeting to review and discuss the drilled shaft installation procedures. Make sure that the Contractor's field superintendent, CEI's drilled shaft inspector(s), and the DGE are invited. Prepare and distribute meeting minutes to the attendees.
- Inspect installation of test holes (methods shafts), load test shafts, and production shafts and ensure they are constructed in accordance with the plans, specifications, and special provisions for the Construction Contract. Report to the DGE any problems observed during the installation of the test holes, deviations from the Drilled Shaft Installation Plan or contract documents, and construction quality issues associated with the Contractor's methods.

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- If there are pilot holes in the project, advise the DGE on the pilot hole schedule. Verify the pilot hole locations. Inspect the performance of the pilot holes and complete the proper FDOT inspection form, describing accurately the soils/rocks encountered and corresponding depths, the results of field testing performed (Standard Penetration Test blow counts, Cone Penetration Tests, or other, if applicable) and the results of the rock coring performed (coring time, recovery and RQD).
- Analyze the load test data, pilot holes and any other available soils/rock data as required to establish final drilled shaft tip elevations and minimum rock socket lengths. Submit report(s) recommending production shaft tip elevations, minimum rock socket lengths and any other recommendations that may be required in the project (such as rock socket material definition and impact of permanent or temporary casing on the required minimum socket lengths) to the DGE for approval.
- Inspect the bottom of the shafts for cleanliness using manual soundings or shaft inspection device as required in the contract documents.
- Complete all necessary drilled shaft inspection forms and keep a log of all inspections made of the shafts. Observe the performance of any load tests and verify that the details are implemented as planned.
- Provide completed drilled shaft inspection forms for all production and test shaft installations to the DGE upon completion of the drilled shaft installation.
- When conditions occur which are different from those indicated on the plans, immediately report them to the Geotechnical Engineer of Record and the DGE. Recommend adjustments to the authorized depths as necessary to obtain the shaft capacity to the DGE for approval.
- Review the drilled shaft logs and the concrete placement logs to identify possible shaft integrity problems and potential causes. Communicate identified issues to the DGE.
- a) Hire a Specialty Engineer to perform non-destructive integrity testing of drilled shafts as required to estimate shaft uniformity and to detect possible shaft defects. Report results to the DGE.
- Evaluate problems encountered during construction, and coordinate with the DGE and the Contractor to resolve such problems, including possible withdrawing Drilled Shaft Installation Plan approval.

## 10.0 PERSONNEL:

### 10.1 General Requirements:

Provide prequalified personnel necessary to efficiently and effectively carry out its responsibilities under this Agreement. Method of compensation for personnel assigned to this project is outlined in Exhibit "B."

**Unless otherwise agreed to by the County, the County will not compensate straight overtime or premium overtime for the positions of Senior Project Engineer, Project Administrator/Project Engineer, Contract Support Specialist and Assistant or Associate to any of these positions.**

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**10.2 Personnel Qualifications:**

Provide competent personnel qualified by experience and education. Submit in writing to the Construction Project Manager the names of personnel proposed for assignment to the project, including a detailed resume for each containing at a minimum: salary, education, and experience. The Consultant Action Request form for personnel approval shall be submitted to the Construction Project Manager at least two weeks prior to the date an individual is to report to work.

Personnel identified in the Consultant technical proposal are to be assigned as proposed and are committed to performing services under this Agreement. Personnel changes will require written approval from the County. Staff that has been removed shall be replaced by the Consultant within one week of County notification.

Before the project begins, all project staff shall have a working knowledge of the current CPAM and must possess all the necessary qualifications/certifications for fulfilling the duties of the position they hold. Cross training of the Consultant's project staff is highly recommended to achieve a knowledgeable and versatile project inspection team but shall not be at any additional cost to the County and should occur as workload permits. Visit the training page on the State Construction Office website for training dates.

Minimum qualifications for the Consultant personnel are set forth as follows. Exceptions to these minimum qualifications will be considered on an individual basis. However, a Project Administrator working under the supervision and direction of a Senior Project Engineer or an Inspector working under the supervision and direction of a Senior Inspector shall have six months from the date of hire to obtain the necessary qualifications/certifications provided all other requirements for such positions are met and the Consultant submits a training plan detailing when such qualifications/certifications and other training relative to the County's procedures, Specifications and Design Standards will be obtained. The District Construction Engineer or designee will have the final approval authority on such exceptions.

**CEI SENIOR PROJECT ENGINEER** - A Civil Engineering degree and registered in the State of Florida as a Professional Engineer (or if registered in another state, the ability to obtain registration in the State of Florida within six months) and six (6) years of engineering experience [(two (2) years of which are in major road or bridge construction)] or [(five (5) of which are in major bridge construction) - for Complex Bridge Projects with the exception of PTS projects which require two (2) years of major bridge construction], or for non-degreed personnel the aforementioned registration and ten (10) years of engineering experience (two (2) years of which are in major road or bridge construction). Qualifications include the ability to communicate effectively in English (verbally and in writing); direct highly complex and specialized construction engineering administration and inspection program; plans and organizes the work of subordinate and staff members; develops and/or reviews policies, methods, practices, and procedures; and reviews programs for conformance with County standards. Also must have the following:

**QUALIFICATIONS:**

Attend the CTQP Quality Control Manager course and pass the examination.

**CERTIFICATIONS:**

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FDOT Advanced MOT

**CEI PROJECT ADMINISTRATOR/PROJECT ENGINEER** - A Civil Engineering degree plus two (2) years of engineering experience in construction of major road or bridge structures, or for non-degreed personnel eight (8) years of responsible and related engineering experience, two (2) years of which involved construction of major road or bridge structures with the exception of Complex Category 2 (CC2) bridge structures.

Receives general instructions regarding assignments and is expected to exercise initiative and independent judgment in the solution of work problems. Directs and assigns specific tasks to inspectors and assists in all phases of the construction project. Will be responsible for the progress and final estimates throughout the construction project duration. Must have the following:

**QUALIFICATIONS:**

CTQP Final Estimates Level II

**CERTIFICATIONS:**

FDOT Advanced MOT

**CEI CONTRACT SUPPORT SPECIALIST** - A High School diploma or equivalent and four (4) years of road & bridge construction engineering inspection (CEI) experience having performed/assisted in project related duties (i.e., Materials Acceptance and Certification (MAC) System, progress and final estimates, EEO compliance, processing Construction Contract changes, etc.) or a Civil Engineering Degree. Should exercise independent judgment in planning work details and making technical decisions related to the office aspects of the project. Should be familiar with the County's Procedures covering the project related duties as stated above and be proficient in the computer programs necessary to perform these duties. Shall become proficient in Trimble Business Center - Heavy Construction Edition (HCE) or approved surface to surface comparison software and Engineering Menu.

**QUALIFICATIONS:**

CTQP Final Estimates Level II

**CEI SENIOR INSPECTOR/SENIOR ENGINEER INTERN** - High school graduate or equivalent plus four (4) years of experience in construction inspection, two (2) years of which shall have been in bridge and/or roadway construction inspection with the exception of a Civil Engineering degree and one (1) year of road & bridge CEI experience with the ability to earn additional required qualifications within one year. (Note: Senior Engineer Intern classification requires one (1) year experience as an Engineer Intern.)

Must have the following as required by the scope of work for the project:

**QUALIFICATIONS:**

CTQP Concrete Field Technician Level I

CTQP Concrete Field Inspector Level II (Bridges)

CTQP Asphalt Roadway Level I & II

CTQP Earthwork Construction Inspection Level I & II

CTQP Drilled Shaft Inspection (required for inspection of all drilled shafts including

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miscellaneous structures such as sign structures, lighting structures, and traffic signal structures)

IMSA Traffic Signal Inspector Level I

CTQP Final Estimates Level I

CERTIFICATIONS:

FDOT Intermediate MOT

Nuclear Radiation Safety

IMSA Traffic Signal Inspector Level I

OTHER:

Complete the Critical Structures Construction Issues, Self Study Course, and submit the mandatory Certification of Course Completion form (for structures projects)

Responsible for performing highly complex technical assignments in field surveying and construction layout, making, and checking engineering computations, inspecting construction work, and conducting field tests and is responsible for coordinating and managing the lower level inspectors. Work is performed under the general supervision of the Project Administrator.

CEI INSPECTOR/ENGINEER INTERN - High school graduate or equivalent plus two (2) years experience in construction inspection, one (1) year of which shall have been in bridge and/or roadway construction inspection, or an Engineer Intern with a Civil Engineering degree (requires certificate) having the ability to earn the required qualifications and certifications within one year, plus demonstrated knowledge in the following:

Must have the following as required by the scope of work of the project:

QUALIFICATIONS:

CTQP Concrete Field Inspector Level I

CTQP Asphalt Roadway Level I

CTQP Earthwork Construction Inspection Level I

CTQP Drilled Shaft Inspection (required for inspection of all drilled shafts including miscellaneous structures such as sign structures, lighting structures, and traffic signal structures)

IMSA Traffic Signal Inspector Level I

CTQP Final Estimates Level I

CERTIFICATIONS:

FDOT Intermediate MOT

Nuclear Radiation Safety

IMSA Traffic Signal Inspector Level I

Florida Stormwater, Erosion, and Sedimentation Control Training and Certification Program for Inspectors and Contractors

OTHER:

Complete the Critical Structures Construction Issues, Self Study Course, and submit the mandatory Certification of Course Completion form (for structures projects)



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Responsible for performing assignments in assisting Senior Inspector in the performance of their duties. Receive general supervision from the Senior Inspector who reviews work while in progress.

**CEI ASPHALT PLANT INSPECTOR**- High School Graduate or equivalent plus one (1) years' experience in the surveillance and inspection of hot mix asphalt plant operations or 80 hours working under an approved and qualified asphalt plant inspector at the asphalt plant and have the following:

**QUALIFICATIONS:**

CTQP Asphalt Plant Level I & II

**SURVEY PARTY CHIEF** - High School graduate plus four years of experience in construction surveying (including two (2) years as Party Chief). Experienced in field engineering and construction layout, making and checking survey computations and supervising a survey party. Work is performed under general supervision of Project Administrator.

**INSTRUMENT PERSON** - High school graduate plus three (3) years of experience in construction surveying one (1) year of which shall have been as instrument-man. Responsible for performing assignments in assisting Party Chief in the performance of their duties. Receives general supervision from Party Chief who reviews work while in progress.

**ROD-PERSON/CHAIN PERSON** - High school graduate with some survey experience or training preferred. Receives supervision from and assists Party Chief who reviews work while in progress.

**10.3 Staffing:**

Once authorized, the Consultant shall establish and maintain appropriate staffing throughout the duration of construction and completion of the final estimate. Responsible personnel, thoroughly familiar with all aspects of construction and final measurements of the various pay items, shall be available to resolve disputed final pay quantities until the County has received a regular acceptance letter.

Construction engineering and inspection forces will be required of the Consultant while the Contractor is working. If Contractor operations are substantially reduced or suspended, the Consultant will reduce its staff appropriately.

In the event that the suspension of Contractor operations requires the removal of Consultant forces from the project, the Consultant will be allowed ten (10) days maximum to demobilize, relocate, or terminate such forces.

**11.0 QUALITY ASSURANCE (QA) PROGRAM:**

**11.1 Quality Assurance Plan:**

Within thirty (30) days after receiving award of an Agreement, furnish a QA Plan to the Construction Project Manager. The QA Plan shall detail the procedures, evaluation criteria, and instructions of the Consultant's organization for providing services pursuant

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to this Agreement. Unless specifically waived, no payment shall be made until the County approves the Consultant QA Plan.

Significant changes to the work requirements may require the Consultant to revise the QA Plan. It shall be the responsibility of the Consultant to keep the plan current with the work requirements. The Plan shall include, but not be limited to, the following areas:

**A. Organization:**

A description is required of the Consultant QA Organization and its functional relationship to the part of the organization performing the work under the Agreement. The authority, responsibilities and autonomy of the QA organization shall be detailed as well as the names and qualifications of personnel in the quality control organization.

**B. Quality Assurance Reviews:**

Detail the methods used to monitor and achieve organization compliance with Agreement requirements for services and products.

**C. Quality Assurance Records:**

Outline the types of records which will be generated and maintained during the execution of the QA program.

**D. Control of Subconsultants and Vendors:**

Detail the methods used to control subconsultant and vendor quality.

**E. Quality Assurance Certification:**

An officer of the Consultant firm shall certify that the inspection and documentation was done in accordance with FDOT specifications, plans, standard indexes, and County procedures.

**11.2 Quality Assurance Reviews:**

Conduct semi-annual Quality Assurance Reviews (QAR) to ensure compliance with the requirements of the Agreement. The QAR shall be conducted to evaluate the adequacy of materials, processes, documentation, procedures, training, guidance, and staffing included in the execution of this Agreement. The QAR shall also be developed and performed to achieve compliance with specific QA provisions contained in this Agreement. The semi-annual reviews shall be submitted to the Construction Project Manager in written form no later than one (1) month after the review.

On asphalt projects, the CEI shall perform an initial QA review on its asphalt inspection staff after the Contractor has completed ten (10) full work days of mainline asphalt paving operations, or 25% of the asphalt pay item amount (whichever is less) to validate the sampling, testing, inspection, and documentation are occurring as required of the CEI staff.

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**11.3 Quality Records:**

Maintain adequate records of the quality assurance actions performed by the organization (including subcontractors and vendors) in providing services and products under this Agreement. All records shall indicate the nature and number of observations made, the number and type of deficiencies found, and the corrective actions taken. All records shall be available to the County, upon request, during the Agreement term. All records shall be kept at the primary job site and shall be subject to audit review.

**12.0 CERTIFICATION OF FINAL ESTIMATES:**

**12.1 Final Estimate and As-Built Plans Submittal:**

Prepare documentation and records in compliance with the Agreement, Statewide Quality Control (QC) Plan, or Consultant's approved QC Plan and the County's Procedures as required by CPAM.

Submit the Final Estimate(s) and one (1) set of final "as-built plans" documenting the Contractor's work in accordance with CPAM.

Revisions to the Certified Final Estimate will be made at no additional cost to the County.

**13.0 OTHER SERVICES:**

Upon written authorization by the County Construction Engineer or designee, the Consultant will perform additional services in connection with the project not otherwise identified in this Agreement. The following items are not included as part of this Agreement, but may be required by the County to supplement the Consultant services under this Agreement.

- A. Assist in preparing for arbitration hearings or litigation that occurs during the Agreement time in connection with the construction project covered by this Agreement.
- B. Provide qualified engineering witnesses and exhibits for arbitration hearings or litigation in connection with the Agreement.
- C. Provide inspection services in addition to those provided for in this Agreement.
- D. Provide services determined necessary for the successful completion and closure of the Construction Contract.

**14.0 POST CONSTRUCTION CLAIMS REVIEW:**

In the event the Contractor submits a claim for additional compensation and/or time after the Consultant has completed this Agreement, analyze the claim, engage in negotiations leading to settlement of the claim, and prepare and process the required documentation to close out the claim. Compensation for such services will be negotiated and effected through a Supplemental Amendment to this Agreement.

**15.0 COUNTY AUTHORITY**

The County shall be the final authority in considering modifications to the Construction Contract for time, money or any other consideration.