

**EXHIBIT “A”**

**CONSTRUCTION ENGINEERING AND INSPECTION  
SCOPE OF SERVICES**

**FOR  
CONTINUING SERVICES CONSTRUCTION ENGINEERING AND  
INSPECTION**

**Financial Project ID(s):**

**Various**

**Federal Project No.:**

**Various**

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

**1.0 PURPOSE:**

This scope of services describes and defines the services, which are required for construction engineering and inspection (CEI), materials sampling and testing, and contract administration for projects assigned in the District Three area.

The Department shall request Consultant services on an as-needed basis. There is no guarantee that any or all of the services described in the Agreement will be assigned during the term of the Agreement. Further, the Consultant is providing these services on a nonexclusive basis. The Department, at its option, may elect to have any of the services set forth herein performed by other consultants or Department staff.

**2.0 SCOPE:**

The Consultant shall be responsible for providing services as defined in this Scope of Services, the referenced Department manuals and procedures.

The Consultant shall provide Construction Engineering and Inspection Services within District Three for the projects assigned.

The Consultant shall provide personnel meeting the requirements set forth in the section labeled **Personnel Training and Experience Standards** in appropriate numbers at the proper times to ensure that the responsibilities assigned under this Agreement are effectively carried out.

In order for the Consultant to schedule its activities, the Department will endeavor to provide the Consultant at least three (3) calendar days advance notice of the award date of each construction contract where Consultant Engineering Inspections Services are required. The Consultant shall maintain close coordination with the Department and each Contractor in order to minimize rescheduling of the Consultant's activities due to construction delays or changes in scheduling of the Contractor's activities.

The Consultant shall exercise their independent professional judgment in performing their 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 Project Administrator shall be identical to the Department's Project Administrator and shall be interpreted as such.

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

**3.0 BEGINNING AND LENGTH OF SERVICES:**

This is a continuing contract subject to Department periodic review, approval and satisfaction with the Consultant's performance and may be terminated by the Department at any time in accordance

with Paragraph 6 of the Standard Professional Services Agreement Terms. This Agreement shall have an initial term commencing on the effective date of the first Letter of Authorization issued there under and continuing for a period of five (5) years.

Services to be provided by the Consultant will be initiated and completed as directed by the Director of Transportation Operations (hereinafter referred to as the Director) for each Assignment authorized under this Agreement. The Director shall furnish the Consultant with a "Letter of Authorization" outlining the services to be performed, and the estimated fees to be paid for services authorized pursuant to the Scope of Services document attached to the "Letter of Authorization". No payment for work performed shall be made to the Consultant, unless a "Letter of Authorization" has been issued (refer to attached Exhibit "B," Method of Compensation).

Individual projects in the consultant contract will be assigned specific time restraints that will be met by the consultant. The consultant will submit a work schedule showing key phases which will establish the time restraints agreed upon at the time of fee approval. A time extension will be an exception to the specific restraints and will only occur if the delay is caused by the Department, not the consultant.

#### **4.0 DEFINITIONS:**

- A. District Secretary: The Chief Executive Officer in each of the Department's eight (8) Districts.
- B. District Director of Transportation Operations: The Director of Construction, Maintenance, Traffic Operations, Materials, and Safety.
- C. District Construction Engineer: The administrative head of the District's Construction Offices.
- D. District Consultant CEI Manager: The Department employee assigned to administer the Construction Engineering and Inspection Program in the District.
- E. District Final Estimates Manager: The administrative head of the District Final Estimates Office.
- F. District Contract Compliance Manager: The administrative head of the District Contract Compliance Office.
- G. Operations Engineer: The Engineer assigned to a particular County or area to administer Construction and Maintenance Contracts for the Department.
- H. Resident Engineer: The Engineer assigned to a particular County or area to administer Construction Contracts for the Department.
- I. Construction Project Manager: The Department employee assigned to manage the Construction Engineering and Inspection Contract and represent the Department during the performance of the services covered under this Agreement.

- J. District Professional Services Administrator: The Administrative Head of the Professional Services Office.
- K. Public Information Office: The Department's office assigned to manage the Public Information Program.
- L. Engineer of Record: The Engineer noted on the Construction plans as the responsible person for the design and preparation of the plans.
- M. Consultant: The Consulting firm under contract to the Department for administration of Construction Engineering and Inspection services.
- N. Agreement: The Professional Services Agreement between the Department 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.
- O. Consultant Project Administrator: The employee assigned by the Consultant to be in charge of providing Construction Contract administration services one or more Construction Projects.
- P. Resident Compliance Specialist: The employee assigned by the Consultant to oversee project specific compliance functions.
- Q. Contractor: The individual, firm, or company contracting with the Department for performance of work or furnishing of materials.
- R. Construction Contract: The written agreement between the Department 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.
- S. Construction Training/Qualification Program (CTQP): The Department program for training and qualifying technicians in Aggregates, Concrete, Earthwork, and Asphalt. The University of Florida Transportation Research Center (TRC) administers this program. Program information is available at CTQP website.

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

- A. The Department, on as needed basis, will furnish the following Contract documents for each project. These documents may be provided in either paper or electronic format.
  - 1. Construction Plans,
  - 2. Special Provisions,
  - 3. Copy of the Executed Construction Contract, and
- A. The Department will allow connection to the FDOT Network by the Consultant through either dialup communications, authorized Virtual Private Network (VPN) or approved

leased lines. Appropriate approvals must be received from the Department prior to their use.

- B. The Department will furnish, install, and support the software packages for SiteManager, and Site Pad.
- C. Contract Documents for each assigned project will be furnished by the District Professional Services Administrator.
- D. The Department will furnish to the Consultant an adequate supply of all sampling containers to be used in carrying out inspection services under this Agreement. Some of these are, but not limited to: disposable type molds for casting concrete test cylinders, sample cartons, sample bags, and other expendable type testing supplies.
- E. All test report forms, report forms, and all other forms necessary for project documentation will be furnished by the Department.
- F. Field office space required to perform services authorized under this Agreement.

## **6.0 ITEMS FURNISHED BY THE CONSULTANT:**

### **6.1 Department Documents:**

All applicable Department documents referenced herein shall be a condition of this Agreement. All Department documents, directives, procedures, and standard forms are available through the Department's Internet website. Most items can be purchased through the following address. All others can be acquired through the District Office or on-line at Department's website.

Florida Department of Transportation  
Maps and Publication Sales  
605 Suwannee Street, MS 12  
Tallahassee, Florida 32399-0450  
Telephone No. (850) 488-9220

### **6.2 Office Automation:**

The Consultant shall provide and have available for their use a computer, modem, printer, and software capable of emulating a terminal on the Department of Transportation's mainframe computer. The computer will be used by the Consultant for all transactions with the DOT's mainframe computer.

The Consultant shall comply with the Department's Information Technology Resource Standards. The Consultant will obtain FDOT userids as appropriate and maintain current passwords. Standard Desktop will meet the minimum standards for the Department which are Intel Pentium 4 processor with HT up to 3.4 GHz processor with 800 MHz front side bus, Windows XP Professional (latest version), 1GB RAM, 80 GB Hard Drive, DVD/CDRW-48X/32X/48X, CDRW with DVD playback, dual monitor capability, 64 MB of video

memory, PS/2 keyboard, optical USB mouse, and standard external amplified computer speakers.

Standard Laptop will meet the minimum standards for the Department which are Intel Pentium M Processor 2.0 GHz, 15 inch Ultra XGA +ATA 64 MB DDR 4X AGP Video, Microsoft Windows XP Professional (latest version), 512 MB DDR SD RAM 2 DIMMS, Internal Wireless Networking Card (compatible), 24X CDRW/DVD Combo Drive, 60 GB Ultra ATA Hard Drive, Compatible Battery, Modular Floppy Drive, Wireless 2100 802.11b 11Mbps Networking Card, docking station (advanced port replicator, designed for easy docking and undocking of laptop (no built in key locks), must have same NIC, USB and I/O port availability (to include the VGA video port) or pass through system as listed for the laptop, Nylon Carrying Case, 3ft Power Cord, and Auto/Air AC Adapter.

The consultant shall provide a flatbed color scanner and scanner software capable of interfacing with the Department's Electronic Document Management system (EDMS). Scanners, which interface with the EDMS system, can be viewed on the Department's Information Technology Resource Standards List at [http://www.dot.state.fl.us/OIS/itrstds\\_current.htm](http://www.dot.state.fl.us/OIS/itrstds_current.htm). The supported platform is Windows 2000 and the required scanner drivers are TWAIN or ISIS format.

A modem shall be required for connecting to the Department of Transportation's mainframe. The modem shall be fully Hayes compatible capable of transmitting and receiving data using 56K or higher. Communications software, e.g. Advantis, ProComm Plus, or equivalent shall be required. The Consultant will also be required to obtain monthly Internet access and maintain an e-mail address for the project.

The Consultant shall use Microsoft Word 2000 and Microsoft Excel 2000 or latest version in order to be compatible with the Department's word processing and spreadsheet software.

All computer coding shall be input by Consultant personnel using equipment furnished by them.

Ownership and possession of computer equipment and related software, which is provided by the Consultant, shall remain at all times with the Consultant. The Consultant shall retain responsibility for risk of loss or damage to said equipment during performance of this Agreement. Field office equipment should be maintained and operational at all times.

### **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:**

The Consultant shall supply survey, inspection and testing equipment, essential in order to carry out the work under this Agreement. Such equipment includes those non-consumable

and non-expendable items, which are normally needed for a CEI project and are essential in order to carry out the work under this Agreement.

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.

The Consultant's handling of nuclear density gauges shall be in compliance with their license.

The Consultant shall 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:**

The Consultant will be responsible for obtaining proper licenses for equipment and personnel operating equipment when licenses are required. The Consultant shall make the license and supporting documents available to the Department, for verification, upon request.

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

#### **7.0 LIAISON:**

The Consultant shall keep the Construction Operations Engineer informed of all significant activities, decisions, correspondence, reports, and other communications related to its responsibilities under this Agreement, and seek input from the Construction Operations Engineer in order for the Construction Operations Engineer to oversee the Consultant's performance.

Agreement administrative duties relating to Invoice Approval Requests, Personnel Approval Requests, User ID Requests, Time Extension Requests, and Supplemental Amendment Requests shall be reviewed and approved by the Construction Operations Engineer.

#### **8.0 PERFORMANCE OF THE CONSULTANT:**

During the term of this Agreement and all supplements thereof, the Department will review various phases of Consultant operations, such as construction inspection, materials sampling and testing, and administrative activities, to determine compliance with this Agreement. The Consultant shall cooperate and assist Department representatives in conducting the reviews. If deficiencies are indicated, the Consultant shall implement remedial action immediately upon the approval of the Project Manager. Department 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. Replace personnel whose performance has been determined by the Department to be inadequate. Personnel whose performance has been determined to be unsatisfactory shall be removed immediately.
- 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.

## **9.0 REQUIREMENTS:**

### **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.

The Consultant shall observe the Contractor's work to determine the progress and quality of work identify discrepancies, report significant discrepancies to the Department, and direct the Contractor to correct such observed discrepancies.

Pursuant to Section 337.11(8)(a), Florida Statutes, the Consultant is hereby designated by the Secretary of the Department to negotiate and approve Supplemental Agreements within the thresholds established in the CPAM. However, the Consultant must seek input from the Construction Operations Engineer. All such Supplemental Agreements must be determined to be in accordance with Florida law by the Department prior to approval by the Consultant. For any Supplemental Agreement, which exceeds the thresholds, the Consultant shall prepare the Supplemental Agreement as a recommendation to the Department, which the Department may accept, modify or reject upon review. The Consultant shall consult with the Construction Operations Engineer, as it deems necessary and shall direct all issues, which exceed its delegated authority to the Construction Operations Engineer for Department action or direction.

The Consultant shall advise the Construction Operations Engineer 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. Work provided by the Consultant shall not relieve the Contractor of responsibility for the satisfactory performance of the Construction Contract.

### **9.2 Survey Control:**

The Consultant shall 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 such measurements as are 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. The District Final Estimates Manager and the Project Administrator will establish the specific survey requirements for each project prior to construction.

Any questions or requests for “Waiver of Survey” should be directed to the District Final Estimates Manager by the Construction Operations Engineer.

### **9.3 On-site Inspection:**

The Consultant shall 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. The Department will monitor all off-site activities and fabrication. The Consultant shall keep detailed accurate records of the Contractor’s daily operations and of significant events that affect the work.

Consultant shall be responsible for monitoring and inspection of Contractor’s Work Zone traffic control plan and review of modifications to the Work Zone Traffic Control Plan, including alternate Work Zone Traffic Control Plan, in accordance with the Department’s procedures. Consultant employees performing such services shall be qualified in accordance with the Department’s procedure.

### **9.4 Sampling and Testing:**

The Consultant shall 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 Department’s Materials Sampling, Testing and Reporting Guide shall be met. In complying with the aforementioned guide, the Consultant shall provide daily surveillance of the Contractor’s Quality Control activities at the project site and perform the sampling and testing of materials and completed work items that are normally done in the vicinity of the project for verification and acceptance.

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

The Consultant shall be specifically responsible for job control samples determining 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, etc.

The Department will monitor the effectiveness of the Consultant’s testing procedures through surveillance and obtaining and testing independent assurance samples.

Sampling, testing and laboratory methods shall be as required by the Department’s Standard Specifications, Supplemental Specifications or as modified by the special provisions of the Construction Contract.

Documentation reports on sampling and testing shall be submitted to responsible parties during the same week that the construction work is done.

The Consultant shall be responsible for transporting samples to be tested in a Department laboratory to the appropriate laboratory or appropriate local FDOT facility.

The Consultant will input verification testing information and data into the Department's database. Designated Consultant personnel will be provided written instructions from the Department for performing this task.

## **9.5 Engineering Services:**

The Consultant shall 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 Department for failure of such parties to follow written direction issued by the Consultant.

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

- (1) Attend, within ten (10) days after the Notice to Proceed, a pre-service conference for the project in accordance with Department's procedure if required. The Consultant shall provide appropriate staff to attend and participate in the pre-service meeting.

Likewise, if required, the Consultant shall record a complete and concise record of the proceedings of the pre-service meeting and distribute copies of this summary to the participants and other interested parties within seven (7) days. The Consultant shall submit Action Request packages for Personnel Approval for immediate staff needs and a copy/computer file of the final negotiated staffing to the Construction Project Manager, either at this meeting or within seven (7) days.

- (2) If requested, attend, within ten (10) days after the Notice to Proceed, a Final Estimate informational meeting with the District Construction Final Estimates Office. The Consultant shall provide appropriate staff to attend and participate in this meeting.
- (3) If requested, within ten (10) days after the Notice to Proceed, attend a meeting with the District Compliance Officer prior to the Pre-construction Conference. The Operations Engineer, Project Administrator and Resident Compliance Officer shall attend this meeting.

In most cases, the above will take two separate meetings based on experience and knowledge of the particular firm.

- (4) Prepare and submit to the Construction Operations Engineer for approval, within thirty (30) days after the pre-service meeting, a hard copy of the applicable

documents for use of DOT Data Center Facilities and access to the Department's Computer Systems.

- (5) If requested, within ten (10) days after the Notice to Proceed, attend SiteManager/EDMS informational meeting with the District Construction Office. The Consultant shall provide appropriate staff to attend and participate in this meeting.

Provide personnel proficient in the use of computers and scanner operation to input construction documents into an EDMS. This will require familiarity with the documents and guidelines, posted on the Department's website for EDMS. Duties will include scanning, attributing and retrieving documents that are to be archived electronically.

- (6) 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 Storm water, 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 guidelines developed by Department.
- (7) Analyze problems that arise on a project and proposals submitted by the Contractor, endeavor to resolve such issues, and process the necessary paperwork.
- (8) Produce reports, verify quantity calculations, field measure for payment purposes as needed to prevent delays in Contractor operations and ensure prompt processing of such information in order for the Department to make timely payment to the Contractor.
- (9) If requested, prepare and make presentation before the Dispute Review Boards in connection with the project covered by this Agreement.
- (10) Monitor each Contractor and subcontractor's compliance with specifications and special provisions of the Construction Contract in regard to payment of predetermined wage rates in accordance with Department procedures if requested.
- (11) The Consultant shall have a digital camera for photographic documentation of noteworthy incidents or events to cover the following areas:
  - (a) Pre-construction photographs
  - (b) Normal and exceptional progress of work

- (c). Critical path activities
- (d). Accidents showing damage
- (e). Unsafe working conditions
- (f). Unusual construction techniques
- (g). Damaged equipment or materials
- (h). Any activity, which may result in claims

These photographs will be filed and maintained on the Consultant's computer using the LYNX Digital Photo Management system or equivalent. Copies of photographs will be electronically transferred to the CPM at an interval determined by the Department Project Administrator and the Construction Operations Engineer.

The taking of the photographs shall begin the day prior to the start of construction and continue regularly throughout this project. Photographs shall be taken the days of Conditional, Partial and/or Final Acceptance.

## **10.0 PERSONNEL:**

### **10.1 General Requirements:**

The Consultant shall staff the project with the qualified 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."

### **10.2 Personnel Qualifications:**

The Consultant shall utilize only competent personnel, qualified by experience, and education. The Consultant shall submit in writing to the Construction Operations Engineer 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 Operations Engineer 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 Department. Previously approved staff, whose performance is unsatisfactory, shall be replaced by the Consultant within one week of Department 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 obtaining the duties of the position they hold. Cross training of the Consultant's project staff is highly recommended to ensure a knowledgeable and versatile project inspection team but shall not

be at any additional cost to the Department 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. The District Construction Engineer or designee will have the final approval authority.

**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 Complex Category 2 (CC2) bridge structures.

For CC2 bridge structures, be a high school graduate or equivalent and have five (5) years of general bridge construction experience of which two (2) years must have been with the type of CC2 bridge construction project for which CEI services are being provided by this scope. Additionally, a minimum of twelve (12) months of experience as the Senior Inspector in primary control of the type CC2 construction project for which CEI services are being provided by this scope. To be in primary control, a Senior Inspector must have supervised two or more inspectors and must have been directly responsible for all inspection requirements related to the construction operations assigned.

CPTS years of experience must have included a minimum of twelve (12) months of inspection experience in one or both of the following depending on which area the inspector is being approved for: (1) casting yard inspection; (2) erection inspection. In addition, two (2) years of geometry-control surveying experience is required for inspectors that perform or monitor geometry control surveying in a casting yard.

CPTCB years of experience must include monitoring and inspection of the following: girder erection, safe use of girder erection cranes, girder stabilization after erection, false work for temporary girder support, and PT and grouting operations.

MB years of experience must have included the inspection of MB mechanical components for machinery inspectors and MB electrical components/systems for electrical inspectors.

Must have the following:

Qualifications:

CTQP Concrete Field Inspector Level I

CTQP Concrete Transportation Construction Inspector (CTCI) Level II (all bridges)

CTQP Asphalt Roadway Level I (If applicable)

CTQP Asphalt Roadway Level II (If applicable)

CTQP Earthwork Construction Inspection Level I

CTQP Earthwork Construction Inspection Level II

CTQP Pile Driving Inspection (If applicable)

CTQP Drilled Shaft Inspection (If applicable – required for inspection of all drilled shafts including miscellaneous structures such as Sign structures, Lighting structures, and Traffic Signal structures)

CTQP Grouting Technician Level I (If applicable)  
CTQP Post-Tensioning Technician Level I (If applicable)  
FDOT Intermediate MOT  
CTQP Final Estimates Level I

Certifications:

Nuclear Radiation Safety  
SSPC course: C-3 Supervisor/Competent Person Training for Deleading of Industrial Structures (If applicable)  
Or 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.)

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.

**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, plus the following:

Qualifications:

CTQP Concrete Field Inspector Level I  
CTQP Asphalt Roadway Level I (If applicable)  
CTQP Earthwork Construction Inspection Level I  
CTQP Pile Driving Inspection (If applicable)  
CTQP Drilled Shaft Inspection (If applicable– required for inspection of all drilled shafts including miscellaneous structures such as Sign structures, Lighting structures, and Traffic Signal structures)  
CTQP Final Estimates Level I  
FDOT Intermediate MOT  
IMSA Traffic Signal Inspector Level I

Certifications:

Nuclear Radiation Safety  
Florida Stormwater, Erosion, and Sedimentation Control Training and Certification Program for Inspectors and Contractors.  
Or a Civil Engineering degree with the ability to earn additional required qualifications within one year. (Note: Engineer Intern classification requires E.I.T. certificate.)

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. Civil Engineering graduates must obtain certifications within the first year of working as an inspector or Engineer Intern. Exceptions will be permitted on a case-by-case

basis so long as qualifications and certifications are appropriate for specific inspection duties.

**ASPHALT PLANT INSPECTOR** - High School graduate or equivalent plus one (1) year experience in the surveillance and inspection of hot mix asphalt plant operations and the following:

Qualifications:

CTQP Asphalt Plant Level I  
CTQP Asphalt Plant Level II  
CTQP Final Estimates Level I

Certifications:

None

**INSPECTORS AIDE** - High School graduate or equivalent and able to perform basic mathematical calculation and follow simple technical instructions. Duties are to assist higher-level inspectors.

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

**CEI BRIDGE SENIOR INSPECTOR (PAINTING/ LEAD ABATEMENT/ STRUCTURAL STEEL REPAIR):**

Certifications:

NACE Level III Certified or BCI Level II Certified  
SSPC C-3 Lead Paint Removal  
AWS Certified Welding Inspector (CWI) familiar with ANSI/AASHTO/AWS Bridge Welding Code

**CEI BRIDGE INSPECTOR (PAINTING/ LEAD ABATEMENT/ STRUCTURAL STEEL REPAIR):**

Certifications:

NACE Level I or BCI Level I  
SSPC C-3 Lead Paint Removal  
AWS Certified Welding Inspector (CWI) familiar with ANSI/AASHTO/AWS Bridge  
Welding Code

**GEOTECHNICAL TECHNICIAN** - Knowledge in the use and provisions of the PDA system, WEAP and CAPWAP computer programs to analyze concrete/steel/timber piling in conjunction with dynamic load tests with a minimum of three (3) years of experience on at least two (2) Department bridge projects.

Qualifications:

CTQP Pile Driving Inspection  
CTQP Drilled Shaft Inspection

**SENIOR ITS INSPECTOR** - High school graduate or equivalent plus four (4) years of experience in construction inspection, two (2) years of which shall have been in ITS construction inspection, plus the following:

Qualifications:

Fiber Installation Inspection and OTDR Fiber Testing  
DMS Operation and Testing  
Controller Operation and Testing  
CCTV Installation, Operation and Testing  
Familiarity with Existing Communication Equipment and Switches

Certifications:

IMSA Level II

Or a Civil Engineering degree and one (1) year of ITS CEI experience.

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.

**ITS INSPECTOR** - High school graduate or equivalent plus two (2) years experience in construction inspection, one (1) year of which shall have been in ITS construction inspection, plus the following:

Qualifications:

Fiber Installation Inspection and OTDR Fiber Testing  
DMS Operation and Testing  
Controller Operation and Testing  
CCTV Installation, Operation and Testing  
Familiarity with Existing Communication Equipment and Switches

Certifications:

None

Or a Civil Engineering degree.

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. Civil Engineering graduates must obtain certifications within the first year of working as an inspector or Engineer Intern. Exceptions will be permitted on a case-by-case basis so long as qualifications and certifications are appropriate for specific inspection duties.

**CEILANDSCAPE INSPECTOR**- High School Graduate or equivalent plus five (5) years of commercial or roadway landscape construction experience or F.D.L.C. Certification plus two (2) years of commercial or roadway landscape construction experience or a degree in a related field plus three (3) years of commercial or roadway landscape construction experience. The individual must be skilled at plant identification, classification, and grades and standards for nursery plants as established by the manual “Grades and Standards for Nursery Plants” by the Florida Department of Agriculture and Consumer Services. The individual must be knowledgeable of current industry standards for landscape installation, including plans reading and irrigation system construction. The individual must have the ability to read and interpret contract documents. The individual will receive general supervision from the Senior Inspector who reviews work while in progress.

**GEOTECHNICAL TECHNICIAN for Pile Foundations**- Qualified CTQP Pile Driving Inspector, knowledgeable in pile installation in conjunction with dynamic load tests with a minimum of three (3) years of experience on at least two (2) Department bridge projects: for projects with Embedded Data Collectors (EDCs), certified EDC monitoring equipment operator.

**GEOTECHNICAL TECHNICIAN for Drilled Shaft Foundations**- Qualified CTQP Drilled Shaft Inspector, knowledgeable in drilled shaft installation with a minimum of three (3) years of experience on at least two (2) Department bridge projects.

### **10.3 Staffing:**

Once authorized, the Consultant shall establish and maintain an appropriate staff through 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.

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

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

### **11.1 Quality Reviews:**

The Consultant shall conduct semi-annual reviews to make certain his own organization is in compliance with the requirements cited in the Scope of Services. Quality Reviews shall be conducted to evaluate the adequacy of materials, processes, documentation, procedures, training, guidance, and staffing included in the execution of this Agreement. Quality Reviews 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 Operations Engineer in written form no later than one (1) month after the review.

On short duration CCEI projects (nine (9) months or less), the CCEI shall perform an initial QA review within the first two (2) months of the start of construction. A copy of all QA reviews shall be submitted to the District CCEI Manager.

On asphalt projects, the CCEI 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 ensure all sampling, testing, inspection, and documentation are occurring as required of the CCEI staff.

### **11.2 QA Plan:**

Within thirty (30) days after receiving award of an Agreement, the Consultant shall furnish a QA Plan to the Construction Operations Engineer and District CCEI Manager. The QA Plan shall detail the procedures, evaluation criteria, and instructions of the Consultant's organization to assure conformance with the Agreement. Unless specifically waived, no payment shall be made until the Department 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 Reviews:**

The Consultant QA shall detail the methods used to monitor and achieve organization compliance with Agreement requirements for services and products.

**C. Quality Records:**

The Consultant will outline the types of records, which will be generated and maintained during the execution of his QA program.

**D. Control of Sub-consultants and Vendors:**

The Consultant will detail the methods used to control sub-consultants 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 Department procedures.

**11.3 Quality Records:**

The Consultant shall maintain adequate records of the quality assurance actions performed by his 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. These records shall be available to the Department, 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 AGREEMENT MANAGEMENT:**

**12.1 General:**

- (1) With each monthly invoice submittal, the Consultant will provide a reviewed and approved Status Report for the Agreement. This report will provide the Consultant's accounting of the additional Agreement calendar days allowed to date, an estimate of the additional Agreement calendar days anticipated to be added to the original agreement schedule time, an estimate of the Agreement completion date, and an estimate of the Consultant funds expiration date per Agreement schedule for the prime Consultant and for each sub-consultant.
- (2) When the Consultant identifies a condition that will require an Amendment Request (AR) to the Agreement, the Consultant will communicate the need to the District CCEI Manager and the Construction Operations Engineer for an approval in concept. Once received, the Consultant shall prepare and submit the AR, and all accompanying documentation to the District CCEI Manager for approval and further processing. The Consultant shall submit ARs to allow the Department 12 weeks to process, approve, and execute the AR. The content and format of the AR and accompanying documentation shall be in accordance with the instructions and format to be provided by the Department.

- (3) When the Consultant identifies a condition that will require a Supplemental Amendment Request (SAR) to the Agreement, the Consultant will communicate this condition/need to the District CCEI Manager and the Construction Operations Engineer and request approval in concept. Once received, the Consultant shall prepare and submit the SAR, and all accompanying documentation to the District CCEI Manager for approval and further processing. The Consultant shall submit SARs to allow the Department 12 weeks to process, approve, and execute the SAR. The content and format of the SAR and accompanying documentation shall be in accordance with the instructions and format to be provided by the Department.
- (4) The Consultant shall be responsible for performing follow-up activities to determine the status of each AR and SAR submitted to the Department.

## **12.2 Invoicing Instructions:**

Monthly invoices shall be submitted to the Department in a format and distribution schedule defined by the Department, no later than the 20<sup>th</sup> day of the following month.

If the Consultant cannot submit their monthly invoice on time, the Consultant shall notify the Department, prior to the due date the reason for the delay and the planned submittal date. Once submitted, the Consultant Project Principal or Senior Project Engineer shall notify the District CCEI Manager and the Construction Project Administrator via e-mail of the total delay in calendar days and the reason(s) for the delay(s).

All invoices shall be submitted to the Department in electronic and hard copy formats in accordance with District Construction and Contract Invoice Tracking System (CITS) procedures. The Construction Operations Engineer and District CCEI Manager must receive hard copy documentation within three (3) workdays of electronic submittal or the electronic submittal will be rejected. (Saturday, Sunday, and Department holidays are not considered workdays).

A Final Invoice will be submitted to the Department no later than the 20<sup>th</sup> day of the month following Final Acceptance of the individual project.

## **13.0 SUBCONSULTANT SERVICES**

Upon written approval by the Construction Operations Engineer and the Department, and prior to performance of work, the Consultant may subcontract for engineering surveys, materials testing, or specialized professional services.

## **14.0 OTHER SERVICES:**

Upon written authorization by the District 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 Department 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 any litigation or hearings in connection with the Agreement.
- C. Provide on- and off-site inspection services in addition to those provided for in this Agreement.

**15.0 CONTRADICTIONS:**

In the event of a contradiction between the provisions of this Scope of Services and the Consultant's proposal as made a part of their Agreement, the provisions of the Scope of Services shall apply.

**16.0 THIRD PARTY BENEFICIARY**

It is specifically agreed between the parties executing this Agreement that it is not intended by any of the provisions of any part of the Agreement to create in the public or any member thereof, a third party beneficiary hereunder, or to authorize anyone not a party to this Agreement to maintain a claim, cause of action, lien or any other damages or any relief of any kind pursuant to the terms or provisions of this Agreement.

**17.0 DEPARTMENT AUTHORITY**

The Department shall be the final authority in considering contract modification of the Contractor for time, money or any other consideration except matters agreed to by the Contractor through contract changes negotiated by the Consultant, as authorized in Section 9.1 herein.

**18.0 PROJECT COST ACCOUNTING**

Although the Consultant is assigned work by Task Work Order and each Task Work Order is assigned in a single general financial project identification number for billing purposes, the Consultant and its subconsultants shall have staff performing work on this contract charge their time to the nearest quarter hour to each specific project on which work is being performed. The Department shall provide the Consultant and its subconsultants the eleven digit project number assigned to each specific project in which the Department requires the Consultant to capture time and cost. At any given time, there may be several specific projects in which staff would be charging time. The Consultant shall provide the Department with each invoice the cost incurred for each specific project. Time expended by accounting personnel of the Consultant in preparation of invoices associated with this contract is an unallowable direct project cost.

**EXHIBIT B**

**METHOD OF COMPENSATION**

**for**

**Financial Project No.: (Various)**

**F.A.P. No.: Various**

Continuing Services Construction Engineering & Inspection

**EXHIBIT “B”**  
**METHOD OF COMPENSATION**

**1.0 PURPOSE**

This exhibit defines the method of compensation to be made to the Consultant for the services described in Exhibit “A”, Scope of Services, and the method by which payments will be made.

**2.0 COMPENSATION**

For satisfactory completion of all services detailed in Exhibit “A” (Scope of Services of this Continuing Services Agreement, the Department will pay the Consultant a Total Maximum Amount not to exceed [REDACTED]. Funding for individual task assignments will be encumbered separately. Task Assignments will be issued and work authorized only upon receipt of funding approval. The Department will furnish the Consultant a task work order specifying the financial project number, the services to be performed and the fees to be paid for each project assigned under this agreement.

The Department shall request Consultant services on an as-needed basis. There is no guarantee that any or all of the services described in Exhibit A of this Agreement will be assigned during the term of this Agreement. Further, the Consultant is providing these services on a non-exclusive basis. The Department may, at its option, elect to have any of the services set forth herein performed by other consultants or Department staff.

This is a continuing services contract subject to Department periodic review, approval and satisfaction with the Consultant’s performance, and may be terminated by the Department at any time in accordance with Item No. 6, Termination and Default, of Page 6 of 9 of the Standard Professional Services Agreement Terms, dated June, 2011.

**2.1 Summary of Compensation**

Fees for each task work order will be negotiated either as a lump sum amount (fixed price), a limiting amount (cost reimbursement), or as a combination lump sum and limiting amount. Where lump sum amounts are established, fees will be negotiated in accordance with Section 2.2. Where limiting amount fees are established, compensation will be in accordance with Section 2.2. Compensation for direct expense costs may be included in task work order fees, in accordance with Section 2.2.

The above defined elements of this Agreement do not involve the purchase of Tangible Personal Property, as defined in Section 273.02 Florida Statutes.

## 2.2 Details of Compensation

### Lump Sum Elements

For task work order compensation elements established as lump sum, the Department may compensate the Consultant in accordance with one or more of the following methods of payment:

#### **LS12 - % of Direct Salary Costs, Balance at End**

(LS-12) The Consultant will receive progress payments based on the percentage provided for operating margin in Table 4 of Section 5.0. Payment will be the tabulated percentage applied to approved direct salary costs. Any balance remaining upon completion and approval of project services will be due at that time.

### Limiting Amount/Cost Reimbursable Elements

For elements established as limiting amounts, the Department will compensate the Consultant, subject to the total established limiting amount, for all reasonable, allocable and allowable costs incurred in the categories defined below. The reasonableness, allocability and allowability of compensation sought under this agreement is expressly made subject to the terms of this Agreement; Federal Acquisition Regulations; Office of Management and Budget Circulars A-21, A-87, A-102, A-110; and any pertinent Federal and State Law.

#### **Defined Salary Rates Per Class/Person – Contract Rates (LA-3)**

Subject to the established limiting amount, the Consultant will receive progress payments for direct salaries and wages for time/work effort expended by personnel in the performance of authorized work during the billing period, at the contract rates established in Table 5 of Section 5.0.

Administrative overhead and fringe benefit costs will be applied to approved salary and wage costs at the combined overhead rates provided in Table 5 of Section 5.0.

The Consultant will receive compensation for allowable Facilities Capital Cost of Money (FCCM) in association with salaries. FCCM will be calculated as a percentage of chargeable direct salary and wages at the rates provided in Table 5 of Section 5.0.

The Consultant will be compensated for direct expenses in accordance with salaries. Direct Expenses will be calculated as a percentage of chargeable direct salaries and wages at the rates provided in Table 5 of Section 5.0.

For task work orders established using this method of payment, operating margin will be established as a lump sum (fixed fee) in accordance with Federal Aid requirements.

#### **Premium Overtime – LA4**

When authorized in advance in writing by the Department, premium overtime will be paid at the rates specified in Table 6 of Section 5.0 for employees paid premium overtime by the Consultant. Only the following firms listed in Table 6 of Section 5.0 are authorized for direct reimbursement of premium overtime:



Subject to the established limiting amount, the Consultant will be compensated for these services based on the rates provided in Table 6 of Section 5.0. No multipliers will be applied to these rates. Payment for such services will be based on approved time incurred during the billing period.

### **3.0 INVOICING PROCEDURE**

The Consultant will be eligible for progress payments under this agreement at monthly intervals or when individual tasks or mileposts defined in this agreement are completed or reached.

Invoices for this agreement will be prepared by the Consultant and submitted through the Department's web-enabled Consultant Invoice Transmittal System (CITS) Internet application. The invoices will be supported by such information as may be required by Department procedures to substantiate the charges being invoiced. The Consultant will maintain for this purpose a job cost accounting system that is acceptable to the Department.

If requested by the Department, the final invoice for this agreement will be accompanied by a certified job cost summary report generated by the Consultant's accounting system. The report will include at a minimum the total number of hours and salary cost actually charged to the project, the total direct vehicle expense, the total miscellaneous direct expense, and total sub-consultant cost charged to the project.

The consultant will report sub-consultant payments through the Department's Equal Opportunity Compliance System on the Internet. Failure to submit sub-consultant payment information may be cause for rejection of the invoice. Within thirty days after receipt of final payment, the Consultant will report final sub-consultant payments through the Equal Opportunity Compliance System. The Consultant will pay all sub-consultants their proportionate share of payments received from the Department within thirty days of the Consultant's receipt of payment from the Department.

The Department will render a decision on the acceptability of services within ten working days of receipt of either the services or invoice, whichever is later. The Department reserves the right to withhold payments for work not completed, or work completed unsatisfactorily, or work that is deemed inadequate or untimely by the Department. Any payment withheld will be released and paid to the Consultant promptly when work is subsequently performed.

## 4.0 PROJECT CLOSEOUT

### 4.1 Final Audit

If requested, the Consultant will permit the Department to perform an audit of the records of the Consultant and any or all sub-consultants to support the compensation paid the Consultant. The audit will be performed as soon as practical after completion and acceptance of the contracted services. In the event funds paid to the Consultant under this Agreement are subsequently properly disallowed by the Department because of accounting errors or charges not in conformity with this Agreement, the Consultant agrees that such disallowed amounts are due to the Department upon demand. Further, the Department will have the right to deduct, from any payment due the Consultant under any other contract, any amount due the Department.

### 4.2 Certificate of Completion

A Certificate of Completion will be prepared for execution by both parties stating the total compensation due the Consultant, the amount previously paid, and the difference.

Upon execution of the Certificate of Completion, the Consultant will either submit a termination invoice for an amount due or refund overpayment, provided the net difference is not zero.

## 5.0 COMPENSATION RATES

The following tables are provided for definition of contractual rates. Table numbers not listed are not included in this document.

**Table 4 – Salary Multipliers**

**Table 5 – Unloaded Hourly Rates**

**Table 6 – Loaded Billing Rates**

<b>Table 4 Salary Multiplier for Fixed Fee (Operating Margin)</b>	
<b>Consultant/Sub-consultant</b>	<b>Fixed Fee (Operating Margin)%</b>
[REDACTED]	30%
[REDACTED]	32%
[REDACTED]	27%
[REDACTED]	27%
[REDACTED]	27%
[REDACTED]	25%
[REDACTED]	21%
[REDACTED]	36%
[REDACTED]	20%
[REDACTED]	25%



5B. Contract Rates (Continued)	
Job Class/Name	Hourly Rate
<b>Consultant/Sub-consultant</b>	
[REDACTED]	
CEI Inspector/Engineer Intern	\$19.29
CEI Senior Inspector/Senior Engineer Intern	\$26.13
[REDACTED]	
CEI Landscape Inspector	\$23.42
CEI Senior Inspector/Senior Engineer Intern	\$24.88
CEI Senior ITS Inspector	\$26.92
[REDACTED]	
CEI Asphalt Plant Inspector	\$21.89
CEI Inspector/Engineer Intern	\$21.63
CEI Senior Inspector/Senior Engineer Intern	\$20.60
[REDACTED]	
CEI Inspector/Engineer Intern	\$21.01

**Table 6**  
**Premium Overtime**  
**Loaded Billing Rates**

**No Multipliers will be added to the following rates.**

Consultant/Sub-consultant		
Job Class/Name	Unit	Rate
[REDACTED]		
CEI Asphalt Plant Inspector	Hour	\$11.56
CEI Inspector/Engineer Intern	Hour	\$10.16
CEI Senior Inspector/Senior Engineer Intern	Hour	\$12.28
[REDACTED]		
CEI Inspector/Engineer Intern	Hour	\$8.24
CEI Senior Inspector	Hour	\$12.09
[REDACTED]		
CEI Inspector/Engineer Intern	Hour	\$10.51