# State of Florida Department of Transportation



### **EXHIBIT "A", SCOPE OF SERVICES**

TO PROVIDE DISTRICTWIDE ENVIRONMENTAL COMPLIANCE MONITORING OF CONSTRUCTION OR MAINTENANCE PROJECTS FOR COMPLIANCE WITH ALL PERMITS, NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) DOCUMENTS, AND OTHER ENVIRONMENTAL COMMITMENTS FOR THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT).

PROJECT/PROPOSAL NUMBER: RFP-DOT-17/18-6163RC

FINANCIAL PROJECT NUMBER: 250680-2-22-02

#### DISTRICT WIDE ENVIRONMENTAL COMPLIANCE MONITORING SERVICES

### Table of Contents

Section	<u>on</u>			
I.		Description of Services	A-3	
П.		Consultant Responsibilities	A-3	
	A.	Environmental Commitment and Permit Compliance Inspections	A-3	
	B.	Liaison for Communication/Coordination Between the District Environmental		
		Management Office and Project Construction Personnel	A-6	
	C.	Permit Applications/Modifications	A-6	
	D.	Water Quality Studies/Inspections	A-6	
	E.	Jurisdictional Wetland Delineation and Mitigation	A-7	
	F.	Biological Sampling and Characteristics	A-7	
	G	Endangered and Threatened Species and Other Wildlife Studies	A-7	
	H.	Hydrodynamic Investigations	A-8	
	I.	Public Involvement	A-8	
	J.	Expert Witness Services	A-8	
	K	Quality Assurance Reviews	A-9	
	L.	Value Engineering	A-9	
	M.	Literature Searches, Background Research, Manual Preparation, and		
		Training on Permit or Environmental Compliance Issues	A-9	
	N.	Permit /Environmental Compliance Tracking Services	A-9	
	O.	Survey Services	A-10	
	P.	Additional Consultant Responsibilities	A-10	
	Q.	Progress Reporting/ Coordination	A-10	
	R.	Sanction/ Penalties/ Fines	A-10	
	S.	Equipment	A-11	
III.	Person	nnel Standards	A-11	
IV.	Department Responsibilities		A-13	
V.	Subcontracting		A-13	
VI.	Projec	et Assignments	A-13	
VII.	Comp	Computer Services		
VIII.	Standards and Guidelines for Work			

#### SCOPE OF SERVICES

#### DISTRICTWIDE ENVIRONMENTAL COMPLIANCE MONITORING SERVICES

#### I. DESCRIPTION OF SERVICES

The DEPARTMENT desires to obtain assistance from the CONSULTANT for permit and environmental commitment compliance monitoring activities on a Districtwide basis. Primary services will include inspections of construction or maintenance projects for compliance with all permits, National Environmental Policy Act (NEPA) documents and other environmental commitments. The CONSULTANT will prepare documentation of field inspections and any non-compliance situations. The CONSULTANT may also serve as a liaison between the District Environmental Permit Office (DEPO) and District Construction personnel for communication on environmental compliance issues and coordination of environmental compliance related activities.

Supplemental services may also be desired from the CONSULTANT. These services could include preparing permit application or modification packages; reviewing plans; preparing reports; and conducting biological surveys, water quality testing, agency coordination, landscape inspections, archaeological monitoring, mitigation site development, mitigation site maintenance and monitoring, report preparation, and other related tasks on a District-wide basis.

#### II. CONSULTANT RESPONSIBILITIES

The CONSULTANT's team shall consist of specialists in the following disciplines: environmental commitment compliance procedures during construction and post-construction phases of a project, environmental permitting, ecologically valuable or endangered flora and fauna, environmentally sensitive areas (wetlands, hammocks), landscape architecture, South Florida archaeological and historical resources, hydrological analysis, water sampling, NPDES permitting procedures and Certification training,

and mitigation monitoring.

Tasks of each topical area may include inspection, review of construction documents, written and verbal reporting, data collection, sampling, analysis, document preparation, monitoring activities, agency coordination, and training of construction personnel.

The CONSULTANT will provide any one or more of the following services as required by the DEPARTMENT.

#### A. Environmental Commitment and Permit Compliance Inspections

The CONSULTANT may be required to provide inspection services for FDOT construction projects, maintenance activities, or mitigation sites. Results of the inspections will be provided in a previously approved memorandum format to the DEPO Project Manager on a weekly, or as needed basis. The memorandum may include but not be limited to, the status of the project, activities observed at the site, non-compliance activities, a photographic log, and a record of conversations held with FDOT staff members, CEI consultants and/or contractors. The CONSULTANT will report non-compliance activities immediately to the FDOT Construction Project Manager or designee with corrective action recommendations. The CONSULTANT shall provide verbal updates to the DEPO Project Manager or designee during inspection activities.

The CONSULTANT will determine during these inspections if the contractor is complying with the environmental permits issued for the project, the construction plans, and/or other environmental commitments made by the DEPARTMENT as part of the NEPA process or during design.

#### Specific tasks to be performed by the CONSULTANT may include, but not be limited to:

- 1. <u>Permit Conditions</u> inspect project site for compliance with permit conditions and sketches. Report potential or current non-compliance with any permit to the DEPO Project Manager. Attend field meetings with permitting agency field representatives to insure their agreement and concurrence with permit-related activities. Track submittal of needed items to permitting agencies. For projects with NPDES permits, review the contractor's Storm Water Pollution Prevention Plan (SWPPP) and assist FDOT Construction with processing the NPDES permit documents and notifications.
- 2. <u>Turbidity/Erosion Control Inspections and/or Monitoring</u>--inspect installation of all erosion/turbidity control devices. Evaluate and report on effectiveness of erosion control devices. Recommend methods to increase effectiveness of erosion control devices. Develop project-specific turbidity monitoring forms. Instruct construction personnel in the use of turbidity monitoring equipment and procedures. Monitor turbidity levels in receiving or adjacent bodies of water and/or review turbidity monitoring logs maintained by the construction staff, CEI consultants, or Contractor. Make recommendations for corrective actions. Conduct water quality sampling and analysis in accordance with current State or NPDES permit requirements. Report non-conformity with FDOT specifications or standards, State Water Quality Standards or permits to the District Environmental Permits Coordinator.
- 3. <u>Endangered/Threatened Species Special Provisions</u>-review or maintain endangered/threatened species monitoring logs. Inspect FDOT construction sites for proper posting of required endangered/threatened species information, presence of required endangered species observers, or other relevant conditions. Insure compliance with commitments made in NEPA documents, Endangered Species Special Provisions, and/or permit conditions regarding listed species. Provide training for FDOT construction personnel and contractors on observation techniques or other endangered species protection measures required for a project.
- 4. Tree Preservation/Relocation/Planting Inspections—evaluate FDOT tree relocation and/or planting activities for compliance with FDOT specifications and with specific landscape plans. Inspect planting material prior to final acquisition to insure the material meets FDOT specifications and quality standards. Determine if proper schedules for planting, watering, or other essential actions are being followed in accordance with plans and/or specifications. Inspect plantings to insure proper procedures were followed (e.g., trees properly guyed and staked, mulch added, etc.). Inspect tree preservation measures (e.g., tree barricades, root pruning, etc.) and report deficiencies to the DEPO Project Manager and to the District Landscape Architect. Document that all trees designated on the project plans or other contract documents for preservation are being avoided and/or protected. Monitor tree trimming and pruning activities conducted during construction or maintenance activities. Monitor plantings, including relocated material, for survivorship and overall vigor. Inspect landscaped areas within FDOT right of way for compliance with FDOT maintenance commitments or other interagency maintenance agreements. Make recommendations for corrective actions for any observed problems or non-compliance. Some tasks under this section may require the services of a Landscape Architect, registered in the State of Florida and experienced in transportation landscape design.
- 5. Exotic or Nuisance Plant Species Concerns conduct inspections of corridor for presence of exotic or nuisance species before, during and following construction to determine if exotic or nuisance species are introduced during the project. Insure compliance with permit conditions or other relevant documents regarding exotic plant control and/or removal.
- 6. <u>Staging Areas</u> conduct assessments of proposed staging areas for construction sites for compliance with all NEPA requirements including, but not limited to, potential impacts to wetlands or other surface waters, historic, social and/or cultural resources, 4(f) resources (parklands, recreation areas),

endangered or threatened species habitat, other wildlife, water quality, desirable tree species, and/or archaeological sites. Staging areas will also be confirmed as being within FDOT right of way. A written assessment will be provided to the DEPO Project Manager. Any potential contamination concerns within the staging area will be referred to the DEPO Project Manager to be relayed to the District Contamination Coordinator.

- 7. <u>Benthic Surveys</u> Conduct Pre- and Post-Construction benthic surveys to document pre- and post-construction subsurface presence of resources and/or debris.
- 8. Archaeological Monitoring inspect construction projects for proper compliance with archaeological monitoring commitments or conduct archaeological monitoring activities. Report any apparent disregard of archaeological monitoring requirements. Personnel conducting historical or archaeological monitoring must meet the minimum criteria for historians and archaeologists as set forth in the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation and 36 CFR 61. Insure historical and archaeological monitoring reports are completed by the construction team and submitted as required to the Florida Division of Historical Resources (DHR) with a copy to the DEPO Project Manager to be transmitted to the District Six Cultural Resources Coordinator.``
- 9. <u>Noise Abatement Concerns</u>- monitor noise levels of active construction projects in accordance with special provisions. Make recommendations for corrective actions. Conduct inspections of noise barrier construction, painting, and placement as per Noise Studies, construction plans, NEPA documents, or other relevant documents. Insure compliance with placement, height, length, color, and/or decorative features. Inspect existing noise walls for damage (e.g., automobile damage, mismatched paint, graffiti). Please report damage verbally and in writing to the DEPO Project Manager or designee.
- 10. <u>Contamination</u>- report any concerns regarding contamination or hazardous materials to the DEPO Project Manager for further investigation by appropriate FDOT staff.
- 11. Cultural/Social/Community/4(f) Resources Concerns conduct inspections of construction project for compliance with commitments contained within NEPA documents, construction plans, or other relevant documents in regard to cultural, social, community, or Section 4(f) resources. Such concerns may include, but are not limited to, commitments to retain community cohesiveness (i.e. maintaining operational lanes for public transit, maintaining pedestrian access and mobility throughout the construction zone, avoiding construction during certain hours, etc.), provisions for advance notification of construction activities, or retention of aesthetically valued features. Inform the FDOT and DEPO Project Manager of any activities which are not in agreement with prior commitments or agreements made during the NEPA process or Final Design, or are not in compliance with any Technical Special Provisions or plans notes incorporated as part of the final plans or contract documents. Recommend corrective actions. Assist with agency coordination as needed. Insure Section 4(f) resources (parklands, historic resources, etc.) along the corridor are protected as per plan and that work is conducted within FDOT right of way. Report any apparent disregard of commitments made to avoid impacts to Section 4(f) resources.
- 12. Other NEPA/Environmental Commitments-conduct construction inspections for compliance with any and all NEPA requirements or other environmental commitments made by the FDOT, including but not limited to, aesthetic commitments, commitments regarding timing of construction activities, and notification of individuals or groups regarding certain activities.
- 13. <u>Post-Construction Monitoring of Mitigation Sites</u> after the construction phase of a mitigation site is completed and maintenance responsibilities have been assumed by the DEPARTMENT, the

CONSULTANT shall provide assistance to the DEPARTMENT in the monitoring of the mitigation site. The CONSULTANT shall monitor each site and prepare reports in accordance with the specific conditions of the environmental permits and in the format specified and or approved by the DEPO Project Manager. Monitoring Duties may include, but not be limited to the following: taking all field measurements, establishing permanent monitoring stations, inspecting the mitigation area for the presence or invasion of nuisance/exotic species and submitting recommendations for control or eradication if necessary, establishing permanent photography stations and/or collecting any other field data required by the permits. The CONSULTANT will report non-compliance conditions immediately to the DEPO Project Manager and will recommend corrective actions if the mitigation area is not functioning as designed.

## B. Liaison for Communication/Coordination Between the District Environmental Permit Office and Project Construction Personnel

The CONSULTANT may be required to assist in communication and resolution of compliance related issues between DEPO, District Construction Personnel, and the project Construction Contractors. The CONSULTANT may also be required to assist in coordination of environmental compliance-related activities between these same parties. An important objective of this Districtwide contract is to assist, as necessary, in training FDOT construction personnel to conduct daily environmental compliance oversight responsibilities associated with their projects. Towards this objective, the consultant will advise and educate FDOT construction personnel or project contractors on environmental compliance issues or monitoring techniques as directed by the DEPO Project Manager.

#### C. Permit Applications/Modifications

The services performed by the CONSULTANT may consist of obtaining and/or partially assisting in obtaining environmental regulatory agency permits for DEPARTMENT construction, maintenance, or mitigation projects. The CONSULTANT may obtain modifications to existing permits or may obtain new permits for unanticipated construction needs.

#### D. Water Quality Studies/Inspections/Sampling

For the purposes of obtaining drainage permits, evaluating mitigation plans or sites, and insuring compliance with State Water Quality Standards during construction, the services to be performed may include the sampling of wells and water bodies and analysis of water quality. Sufficient data will be collected for the determination of the impact of a project. Additionally, the compilation, synthesis and interpretation of existing data from various sources may be necessary. A Water Quality Report will be prepared containing sufficient data relative to the proposed undertaking. CONSULTANT services will be in compliance with applicable Federal, State and local regulations. This includes P.L. 92-500, F.S. 253, and 17-3 F.A.C. Specific procedural guidance will be provided by the DEPARTMENT upon assignment of this task.

The CONSULTANT may also be required to establish and carry out a sampling protocol to assess DEPARTMENT compliance with NPDES Total Maximum Daily Load (TMDL) requirements.

Specific tasks to be performed by the CONSULTANT may include, but not be limited to:

- 1. <u>Monitoring</u> collect and preserve shoreline/littoral samples, well samples, and water column samples from specific water strata. Take turbidity readings as required by environmental permits for construction or mitigation sites. These readings will be presented to the DEPARTMENT in the format specified by the permit.
- 2. Analysis analyze water and soil samples for metals, physical, organic and inorganic constituents,

microorganisms, dissolved oxygen content, or other parameters as required. The laboratory will be certified by one or all of the following agencies as required by law: Florida Department of Environmental Protection (FDEP), Florida Department of Health and Rehabilitative Services (FDHRS) or the U.S. Environmental Protection Agency (USEPA). Sampling and analytical services by the CONSULTANT shall be in compliance with the latest edition of <u>Standard Methods for the Examination of Water and Wastewater</u>, or approved USEPA methodology.

3. <u>Report</u> - the Water Quality Report will contain all data used, sampling methodology, quality control documentation, interpretation, and recommendations.

#### E. Jurisdictional Wetland Delineation and Mitigation

An investigation or confirmation of wetland limits, wetland communities or mitigation alternatives may be necessary. This task may include wetlands impact analysis by habitat type and impact amount, analysis of avoidance and minimization alternatives, assessment of suitable alternative wetland mitigation sites, and coordination with regulatory agencies. The CONSULTANT may be required to flag the limits of wetland areas to clearly delineate them during construction.

A report detailing results of wetland impacts analyses or surveys may be required. This report will contain all data used and generated in the analysis, results of the survey/analysis conducted, graphic representations of existing habitat types or communities, and a discussion of conclusions, findings, and recommendations including mitigative measures or other permitting concerns. Data shall be presented in a manner which allows for easy interpretation. A written report detailing recommendations for minimizing wetland impacts or providing mitigation alternatives may be required.

#### F. Biological Sampling and Characteristics

Specific tasks to be performed by the CONSULTANT may include, but not be limited to:

- 1. <u>Biological Inspection</u> conduct site inspection of a construction project area to survey all affected and possibly affected flora and fauna.
- 2. <u>Monitoring/Data Collection</u> collect and preserve samples of sediment (chemical and physical constituents), benthos, macro-invertebrates, plankton, fish, vegetation and periphyton.
- 3. <u>Analysis and Evaluation</u> analyze and evaluate, as directed, including documentation of quality control
- 4. <u>Report</u> the Biological Report will contain all data used, survey or data collection methodology, results, interpretation, discussion of findings, and recommendations.

#### G. Endangered and Threatened Species and Other Wildlife Studies

The services performed by the CONSULTANT may consist of, but not be limited to, performing a field survey for threatened and endangered species to identify those federally and state listed species and critical habitats present within the area affected by the project or staging areas. Additionally, the compilation, synthesis and interpretation of existing data from various sources may be necessary. The CONSULTANT may be required to prepare an Endangered Species Biological Assessment (ESBA) or other appropriate report containing sufficient data relative to the construction area. CONSULTANT services will be in compliance with applicable Federal, State, and local regulations including the Endangered Species Act of 1973 (as amended).

Wildlife studies will contain all data used and generated in the study, survey methodology, results of the studies, and a discussion of conclusions, findings and recommendations including mitigative measures that might be necessary. Data shall be reported in a manner which allows for easy interpretation. Quality

control will be documented.

The CONSULTANT may be required to coordinate with environmental regulatory or wildlife agencies to assist with the acquisition of necessary regulatory permits or resolve an unanticipated construction conflict with wildlife.

#### H. Hydrodynamic Investigations

Specific tasks to be performed by the CONSULTANT may include, but not be limited to:

- 1. <u>Analysis</u> analyze the hydrodynamics of water movement, including currents, surface and internal water movements, entrainments, stratification characteristics, associated computer modeling of sediment transport, scouring and related hydrological studies.
- 2. <u>Report</u> prepare a Hydrological Report to include all data used, methodology, interpretation, and discussion of findings, conclusions and recommendations.

#### I. Public Involvement

Specific tasks to be performed by the CONSULTANT may include, but not be limited to:

- 1. <u>Audio-Visual Preparation</u> preparation of all displays which may consist of aerial maps, typical sections, schematic impact areas, schematic mitigation sites, 35 mm multi-image power point, slide and/or video presentations, video animation and computer imaging, and scripts, including the set-up and breakdown of displays and programming equipment.
- 2. <u>Documentation of Environmental Activities</u> through the use of audio visual aids such as photographs, slides, video, computer imaging for such activities as mitigation site construction, mitigation site documentation, time zero reports, or other activities for future public involvement use, project files and/or permit compliance reports shall be produced by the CONSULTANT.
- 3. <u>Attendance and Documentation of Public Hearings</u> attend any formal or informal Public Meetings or Hearings conducted by either the DEPARTMENT or other permitting agencies, as necessary. Provide for official hearing transcript or meeting minutes, hearing certification and a list of attendees if deemed necessary by the DEPARTMENT.
- 4. <u>Project File</u> maintenance of a project compliance profile to include newspaper clippings, letter, etc. Preparation of a Final Report as required.
- 5. <u>Documentation of Permit or Environmental Compliance Activities</u> such as mitigation site construction, noise barrier construction, landscaping, and other activities for use in project permit or permit compliance files.
- 6. <u>Preparation of Responses to Public Notices or Other Citizen Complaints</u> such as responses from U.S. Coast Guard or Water Management District Public Notices, questions from citizens on projects to be permitted or mitigation projects, and other permit-related inquiries.

#### J. Expert Witness Services

The CONSULTANT may be required to provide expert witness services for any and all scope tasks listed in Exhibit A for legal proceedings on DEPARTMENT issues or projects. This may include, but is not limited to, preparation for litigation/court proceedings, answering interrogatory documents, and

participation in court proceedings on behalf of the DEPARTMENT.

#### **K.** Quality Assurance Reviews

The CONSULTANT may be required to provide a quality assurance review of environmental permit documents or studies performed by the DEPARTMENT or it's CONSULTANTS to insure a quality product in compliance with all applicable standards and guidelines. This may include, but is not limited to, review of federal and state environmental documents or permit application packages to insure preparation in accordance with the PD&E Guidelines Manual, Final Design Manual, Drainage Manual or other applicable manuals, and all other applicable federal, state and local regulations.

#### L. Value Engineering

The CONSULTANT may be required to provide environmental permitting expertise or support to Value Engineering studies performed by the DEPARTMENT. This may include, but is not limited to, preparation for Value Engineering studies including familiarization with permitting issues or other relevant aspects of the project, participation in a Value Engineering Team Study, providing research materials for Value Engineering study results, and assisting in making Value Engineering Team Study recommendations.

# M. Literature Searches, Background Research, Manual Preparation, and Training on Permit or Environmental Compliance Issues

The CONSULTANT may be required to research permitting legislation, existing regulations relevant to the permit conditions or other information pertinent to mitigation or environmental compliance needs of the DEPARTMENT. All data collected will be presented to the DEPARTMENT in a report format which is to include, but not be limited to, sources utilized, data or information collected, interpretation and discussion of the findings, and recommendations as appropriate. The CONSULTANT may also be required to present the data collected to FDOT staff members or to other parties involved in the permitting or implementation of permits for FDOT District Six projects.

The CONSULTANT may be required to develop and/or update informational or training manuals to be utilized by FDOT staff, design consultants, or contractors to facilitate the permit compliance and/or successful mitigation of FDOT projects. The CONSULTANT may be required to present the information included in the manual to FDOT staff members or other parties involved in the permit or environmental compliance. All such manuals or presentations are to done under the direction and approval of the DEPO Project Manager and the District Drainage Engineer or designee.

The CONSULTANT may also be required to provide training or presentations to the construction staff on permit or environmental compliance issues.

#### N. Permit/Environmental Compliance Tracking Services

The CONSULTANT may be required to assist the DEPARTMENT with the development and/or updating of computer programs, spreadsheets or other techniques utilized to track the status of permit conditions, mitigation requirements and/or reports, environmental commitments, or other permit compliance and site mitigation documents or schedules. Examples of such schedules/trackers may include but are not limited to, permit expiration date tracker, project-specific summaries of field and written permit requirements, environmental compliance and mitigation site inspection schedule, status of permits routed for signature, project anticipated start and end dates, and landscape warranty inspection schedule.

The Consultant may also be asked to maintain project files containing field notes, meeting minutes, telephone logs, photo logs and various other project documents.

#### O. Survey Services

The CONSULTANT may be required to acquire and/or provide survey information to be utilized for the production of permit sketches or mitigation plans, verification of elevations for mitigation sites or wetland areas adjacent to or within construction sites, or other sites relevant to the successful permitting or mitigation of a FDOT District Six construction project.

#### P. Additional Consultant Responsibilities

The CONSULTANT shall have the following additional responsibilities in performing the services listed above.

The CONSULTANT will report directly to the DEPO Project Manager. The CONSULTANT shall maintain frequent contact and close communication with the DEPO Project Manager via telephone or other manner specified by the DEPARTMENT.

The DEPARTMENT will be allowed the opportunity to have a representative at all meetings and/or field reviews between the CONSULTANT and construction personnel or permitting agencies and shall review and be copied on all correspondence between these parties.

The CONSULTANT will be available to conduct emergency or unanticipated compliance inspections as needed with minimal notice (2 hours or greater) from the DEPARTMENT. Because the DEPARTMENT's construction contractors work irregular hours, the CONSULTANT will be available to conduct inspections outside of regular business hours (Monday-Friday, 8am - 5pm), including but not limited to early morning hours, night hours, or weekends.

#### Q. Progress Reporting/Coordination

The CONSULTANT is required to provide on a monthly basis environmental inspection and monitoring progress reports for FDOT construction projects, maintenance activities, or mitigation sites to the DEPO Project Manager (or his/her designee). Results of the inspections shall be provided within one business day (i.e., 24 hours) of the date performed in writing in a previously approved memorandum format and electronically delivered to the DEPARTMENT and/or the Department's Project Manager (or his/her designee).

#### R. Sanctions/ Penalties/ Fines

Non-Compliance/ Non-Performance of work will be subject to sanctions and /or penalties under this contract. If the DEPARTMENT and/or the Department's Project Manager (or his/her designee) determines that the performance of the CONSULTANT is not satisfactory; and/or the CONSULTANT fail to perform the work specified in this CONTRACT and cause the DEPARTMENT to intervene to complete the work as specified, all costs incurred by the DEPARTMENT shall be charged to the CONSULTANT and shall result in the immediate suspension of work, CONSULTANT placement in non-compliance status and/or CONTRACT/ AGREEMENT termination as described in Section 6 of the State of Florida Department of Transportation Contractual Services Standard Agreement. Any necessary default action will be processed in accordance with the Department of Management Services Rule 60A-1.006(3).

#### S. Equipment

The CONSULTANT shall have the necessary equipment available for the tasks included in the Scope of Services. The following equipment, at a minimum, shall be considered standard operating equipment and

shall be considered as part of overhead (not subject to any additional fee): all office equipment, including but not limited to, faxes, telephones, beepers, cellular phones and computer usage, vehicles used for inspections, turbidity meters, water sampling equipment (Hydrolab 600 XLM or equivalent), GPS data collector with sub-foot accuracy (Trimble Geo XH or equivalent) and digital cameras. The CONSULTANT should provide a list of all equipment and materials (if any) that are subject to a fee.

#### III. PERSONNEL STANDARDS

Personnel qualified to conduct cultural resource assessments and/or monitoring for the DEPARTMENT are those individuals who meet at least the minimum criteria as set forth in the U.S. Secretary of the Interior Standards and Guidelines for Archaeology and Historical Preservation and 36 CFR Part 61. An additional consideration is that all Principal Investigators should be able to demonstrate appropriate knowledge and experience pertinent to the State of Florida. Individuals responsible for conducting DEPARTMENT-related cultural resource projects must have the requisite knowledge of regional prehistory and history to make informed decisions regarding NRHP eligibility, as well as, be familiar with the types of resources likely to be encountered during these projects, and the methods for identifying, evaluating, and documenting them.

**Principal Investigator** – The person or persons responsible for supervising the identification, evaluation, and documentation of archaeological and/or historic resources on FDOT cultural resource projects. In addition to an advanced degree in a Cultural Resources related field and at least five years of related work experience, the resume shall document and provide references to demonstrate five years of experience with FDOT PD&E studies or similar NEPA studies and show timely project completion and successful FHWA/SHPO review.

**Project Manager** – Bachelor's or Master's Degree with contract management experience. Five years of experience with FDOT Project Development and Environment (PD&E) studies or similar NEPA studies. Tasks will include: conducting professional cultural resource and Section 4(f) studies and resource reviews for the Department; managing Department relationships; analyzing project budgets; supervising staff; reviewing technical reports; overseeing sub-Vendor management; planning and scheduling for projects as needed; handling Quality Assurance/Quality Control (QA/QC); and managing project accounting.

Senior Environmental Scientist – a Master's degree in physical or natural sciences with four year experience in South Florida Ecosystems, or a Bachelor's Degree in natural resource or related work, with six year experience (including Work experience in environmental monitoring and compliance inspections as well as experience with environmental permitting and identification of native flora and fauna, endangered species and invasive exotic vegetation). Five years of FDOT PD&E Study or similar NEPA study experience. Must have extensive experience in technical report writing. Tasks will include: Completion of documents related to specific NEPA issues on transportation projects (such as Section 4(f) Determination of Applicability (DOA) documents or Negative 4(f) Declarations); participation in agency coordination to resolve NEPA issues as required. Must be a Certified Florida Stormwater, Erosion, and Sedimentation Control Inspector.

**Environmental Scientist** – Bachelor's degree in physical or natural sciences with two or more years' experience in South Florida Ecosystems (Work experience should include experience in environmental monitoring and compliance inspections as well as experience with environmental permitting and identification of native flora and fauna, endangered species and invasive exotic vegetation). Must be able to identify potential NEPA environmental impacts associated with transportation improvement projects and assist in the resolution of environmental issues. Must be a Certified Florida Stormwater, Erosion, and Sedimentation Control Inspector.

Sciences or at least five (5) years of experience in Environmental Monitoring and Compliance Inspections. Must be a Certified Florida Stormwater, Erosion, and Sedimentation Control Inspector.

**Historical Technician** – The minimum professional qualifications are a Bachelor's degree in history and one of the following:

At least one year of full time experience in research, writing, teaching, interpretation, or other demonstrable professional activity with an academic institution, historic organization or agency, museum, or other professional institution, six months of which must be in South Florida - substantial contribution through research and publication to the body of scholarly knowledge in the field of South Florida history.

**Archaeological Technician** – The minimum professional qualifications are a Bachelor's degree in archaeology or in anthropology with archaeology as a major area of emphasis plus:

At least one year of full time professional experience or equivalent specialized training in archaeological research, administration or management. In addition, a professional in pre-contact archaeology shall have at least one year of full time professional experience at a supervisory level in the study of archaeological resources of the pre-contact period.

At least four months of supervised field and analytic experience in general North American archaeology and at least six months of field experience in South Florida.

Demonstrated ability to carry out research to completion in a timely fashion.

Clerical Support – Clerical persons will be responsible for assisting with the following tasks regarding deliverables: formatting; printing/binding; creation of electronic copies and discs; uploading/downloading of deliverables and associated materials; and document delivery. Some portions of deliverables may not require technical expertise to write and could be completed by clerical staff. In addition, clerical staff will be required to assist with the coordination of meetings, conference calls, and site visits. Quality Assurance/Quality Control and Accounting/Financial Management are considered overhead and are not billable.

**Draftsperson** – Demonstrated proficiency in the preparation of clear, complete and accurate working plans, maps, graphics, and drawings from rough or detailed sketches or notes for final report production and other projects. Makes final sketch of proposed drawing, map, charts, or other product. Makes any adjustments or changes necessary or desired. Proficient with graphics software, including Adobe, Illustrator, and Photoshop.

Resumes of the proposed Project Manager, Senior Environmental Scientists, Environmental Scientists, Environmental Technician/Inspectors, Principal Investigator, Historical Technician, Archaeological Technician, and other key staff, documenting their qualifications to conduct work in their stated area of expertise (as defined in Exhibit "C", Price Proposal), must accompany the contract proposal. The classification of each individual (Project Manager, Environmental Scientist, etc.) must be indicated. Those individuals who will actually be performing compliance inspections in the field should be specifically identified. Each individual's resume must be signed and dated by that individual. If other consultants or specialists are to be hired on an as-needed basis during the course of a project, then documentation concerning these professionals should be provided at the appropriate time for review and approval by the Department.

Cultural Resources personnel conducting historical or archaeological assessments or evaluations, or performing archaeological monitoring during construction, must meet the minimum as set forth in the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation and 36 CFR 61.

The CONSULTANT team should also include individuals with the following registration or certification:

- 1. Landscape Architect, registered in the state of Florida and experienced in transportation landscape design;
- 2. FDEP-qualified NPDES Inspector (as defined by FDEP);

- 3. Professional Land Surveyor registered in the State of Florida
- 4. Professional Association of Dive Instructors (PADI)-certified diver(s) (Minimum "Open Water Dive" certification and/or National Association of Underwater Instructors (NAUI)-certified diver(s).
- 5. Licensed Herbicide Applicator

The proposed participation of the above individuals in Department projects is subject to approval by the DEPO Project Manager, based on their meeting the minimum qualifications for proposed work, based on a review of their work history. Any change in key personnel during the course of the contract must be requested by the CONSULTANT in writing to the DEPARTMENT Project Manager and must have the written prior approval of the DEPO Project Manager.

#### IV. DEPARTMENT RESPONSIBILITIES

The DEPARTMENT will ensure the Consultant is notified of all up-coming projects going to Construction and will make accessible the permit documents, construction plans, and all other documentation pertinent to the environmental commitments.

The DEPARTMENT will provide guidance in permit application and documentation preparation, including review and commentary of draft reports, and will provide all necessary assistance and interagency coordination.

In addition, the DEPARTMENT will maintain close contact with the CONSULTANT to ensure that major purchases are not incurred for materials, goods, and services that can be provided by the DEPARTMENT.

#### V. SUBCONTRACTING

Due to the nature and scope of the required services, it may be necessary for the CONSULTANT to subcontract portions of the environmental permitting work, archaeological monitoring, public involvement, and surveying. The subcontracted firm(s) must be approved and qualified by the DEPARTMENT and prior to the initiation of any work.

The CONSULTANT shall be fully responsible for the satisfactory completion of all subcontracted work.

#### VI. PROJECT ASSIGNMENTS

Individual projects shall be assigned on an "as needed" basis. For each project, the CONSULTANT will be required to respond with a written proposal of the tasks to be conducted as well as a schedule of starting and ending dates and a manpower and cost estimate (personnel, job classification, areas of specialty, percent of time devoted to task and estimated cost). Once the DEPARTMENT and the CONSULTANT agree as to services to be performed and the associated costs, the Project Manager shall furnish the CONSULTANT a "Letter of Authorization." Unless the work is required in response to an emergency declaration by the Secretary of the Department of Transportation, no work shall be commenced by the CONSULTANT until receipt of a Letter of Authorization.

Copies of all correspondence and memos regarding major public and agency contacts will be provided to the DEPARTMENT. Frequent telephone contact will be maintained with the DEPO Project Manager, as well as other key project personnel in both the District and Central offices of the DEPARTMENT.

Progress Reports will be submitted to the DEPARTMENT Project Manager on a monthly basis in the manner specified by the DEPARTMENT. MONTHLY progress meetings will be held throughout the course of the project.

#### VII. COMPUTER SERVICES

Should the CONSULTANT desire to use any of the DEPARTMENT computer programs, permission must be obtained in accordance with Section 23.00 of the Standard Consultant Agreement. Computations based on other computer programs must conform to the DEPARTMENT's general format (see "Plan Preparation Manual" Chapter 27 & 33).

#### VIII. STANDARDS AND GUIDELINES FOR WORK

In addition to all Laws, Regulations, Standards and guidelines previously mentioned, all work will conform to the following:

- A. Section 403.918 (2) (b) F.S.
- B. Chapter 62-312, F.A.C.
- C. SFWMD Permit Info Manual, Vol. 4
- D. Chapter 40E-4.091 F.A.C.
- E. SFWMD Basis of Review Appendix 7, Section 253 F.S.
- F. Chapter 62-3 F.A.C.
- G. Chapter 62-301 F.A.C.
- H. Chapter 62-302 F.A.C.
- I. Chapter 62-25 F.A.C.
- J. Endangered Species Act of 1973 (as amended)
- K. 23 CFR 771
- L. Section 106 of the National Historic Preservation Act (as amended)
- M.F.S. Chapter 267, Historic Preservation
- N. F.S. Chapter 373, Water Resources
- O. 42 U.S.C., National Environmental Policy Act (NEPA)
- P. Clean Water Act, Section 404 (33 U.S.C. 1344)
- Q. Rivers and Harbors Act of 1899, Section 10 (33 U.S.C. 403)
- R. All applicable guidelines for incorporation of the use of the metric system.
- S. All other applicable DEPARTMENT Procedures and Directives and their updates.