

EXHIBIT A

**SCOPE OF SERVICES
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E)
STUDIES**

Financial Project ID: 410674-1-22-01, 410675-1-22-01, 410676-1-22-01
Work Program Item No.:
Federal Aid Project No.:
County Section No.:
Description: SR 40 from end of 4-lane section to SR 15 (US 17), a distance of 40 miles. Marion, Lake, and Volusia Counties, Florida

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**SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDIES**

This Exhibit forms an integral part of the agreement between the State of Florida Department of Transportation (hereinafter referred to as the DEPARTMENT) and _____ (hereinafter referred to as the CONSULTANT) relative to the transportation facility described as follows:

Financial Project ID: 410674-1-22-01, 410675-1-22-01, 410676-1-22-01

Description: SR 40 from end of 4-lane section to SR 15 (US 17) in Marion, Lake and Volusia Counties, Florida

PURPOSE

The purpose of this Exhibit is to describe the scope of work and the responsibilities of the CONSULTANT and the DEPARTMENT in connection with the Preliminary Engineering (Conceptual Design), and Environmental Studies necessary to comply with Department procedures and to obtain Federal Highway Administration (FHWA) Location and Design Concept Acceptance (LDCA) of proposed improvements to this transportation facility.

The Project Development Process shall follow the DEPARTMENT'S publication titled "Project Development and Environment Manual", published 07/01/88 and all subsequent revisions. Throughout this Scope of Services portion of this CONSULTANT Contract, the publication will be referred to as the "PD&E Manual". All tasks identified in this scope of work will be done in accordance with the Department's PD&E Manual, unless otherwise stated.

The PD&E Manual incorporates all the requirements of the National Environmental Policy Act (NEPA); Federal law and executive orders; applicable Federal regulations included in the Federal Highway Administration Federal-Aid Policy Guide; and applicable State laws and regulations including Chapter 339.155 of the Florida Statutes. The project documentation prepared by the CONSULTANT in accordance with the PD&E Manual shall therefore be in compliance with all applicable State and Federal laws, executive orders, and regulations.

The CONSULTANT shall perform those engineering services required for LDCA studies, including consideration of all social, economic, environmental effects, and mitigation as required by the FHWA and/or the Project Development and Environment (PD&E) Manual, along with the required environmental documents, engineering reports, preliminary plans, public hearing, and right-of-way maps.

Sections 1 through 4 of the Scope of Services will establish which items of work described in the PD&E Manual are specifically included in this contract, and also which of the items of work will be the responsibility of the CONSULTANT or the DEPARTMENT.

The DEPARTMENT will provide contract administration and provide management services and technical reviews of all work associated with the development and preparation of the engineering/environmental study reports for the transportation facility.

STUDY OBJECTIVE

The CONSULTANT is to study the:

- widening & rehabilitation (2 to 4 Lanes)

of State Road 40 from end of 4-lane section to SR 15 in Marion, Lake and Volusia Counties, Florida.

STUDY REQUIREMENTS AND PROVISIONS FOR WORK

Governing Regulations

The services performed by the CONSULTANT shall be in compliance with all applicable DEPARTMENT Manuals and Guidelines. The DEPARTMENT'S Manuals and Guidelines incorporate by requirement or reference all applicable State and Federal regulations. The current edition, including updates, of the following DEPARTMENT Manuals and Guidelines shall be used in the performance of this work. It is understood that AASHTO criteria shall apply as incipient policy.

- Florida Statutes
- Florida Administrative Codes
- Applicable federal regulations, and technical advisories.
- Project Development and Environment Manual
- Plans Preparation Manual
- Roadway Traffic and Design Standards
- Highway Capacity Manual
- Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways
- Bicycle Facilities Planning and Design Manual
- Right-of-Way Mapping Handbook
- Location Survey Manual
- EFB User Guide
- Drainage Manual
- Outline Specifications - Aerial Surveys/Photogrammetry
- Soils and Foundations Manual
- Structures Design Guidelines
- CADD Manual (No. 625-050-001)
- CADD Production Criteria Handbook
- Florida's Level of Service Standards and Guidelines Manual for Planning (No. 525-000-005)
- Equivalent Single Axle Load Guidelines (No. 525-030-121)
- Design Traffic Procedure (No. 525-030-120)
- K-Factor Estimation Process
- Project Traffic Forecasting Guidelines
- Florida Highway Landscape Guide
- Basis of Estimates Manual

Liaison Office

The DEPARTMENT will designate a Liaison Office and a Project Manager who shall be the representative of the DEPARTMENT for the Project. While it is expected the CONSULTANT shall seek and receive advice from various State, regional, and local agencies, the final direction on all matters of this Project remain with the Project Manager.

Key Personnel

The CONSULTANT'S work shall be performed and directed by the key personnel identified in the proposal presentations by the CONSULTANT. Any changes in the indicated personnel shall be subject to review and approval by DEPARTMENT.

Meetings And Presentations

The CONSULTANT shall attend a Notice to Proceed Meeting with DEPARTMENT representatives, where relevant project information will be provided by the DEPARTMENT, along with procedures for administering the contract. The CONSULTANT and his staff shall also be available with no more than a five (5) workday notice to attend meetings or make presentations at the request of the DEPARTMENT. Such meetings and presentations may be held at any hour between 8:00 A.M. and 12:00 midnight on any day of the week. The CONSULTANT may be called upon to provide maps, press releases, advertisements, audiovisual displays and similar material for such meetings.

Quality Control

The CONSULTANT shall be responsible for insuring that all work products conform to DEPARTMENT standards and criteria. This shall be accomplished through an internal Quality Control (QC) process performed by the CONSULTANT. This QC process shall insure that quality is achieved through checking, reviewing, and surveillance of work activities by objective and qualified individuals who were not directly responsible for performing the initial work.

Prior to submittal of the first invoice, the CONSULTANT shall submit to the DEPARTMENT'S Project Manager for approval the proposed method or process of providing Quality Control for all work products. The Quality Control Plan shall identify the products to be reviewed, the personnel who perform the reviews, and the method of documentation.

Correspondence

Copies of all written correspondence between the CONSULTANT and any party pertaining specifically to this study shall be provided to the DEPARTMENT for their records within one (1) week of the receipt of said correspondence.

Submittals

The CONSULTANT shall provide copies of the required documents as listed below. These are the anticipated printing requirements for the project. This tabulation will be used for estimating purposes, and the Project Manager will determine the number of copies required prior to each submittal. In addition, all deliverables will be provided on computer discs. Project Manager will determine number of additional electronic copies required.

<u>Engineering Items:</u>	<u>Copies:</u>
Corridor Report	8
Design Traffic Technical Memorandum	NA
First Draft Preliminary Engineering Report	18
Second Draft Preliminary Engineering Report	18
Final Preliminary Engineering Report (Signed and Sealed)	12
Location Hydraulics Report	6
Drainage/Pond Siting Report	6
Conceptual Design Roadway Plan Set	6
Right of Way Plans (each phase submittal)	6
Geotechnical Report	4
Typical Section Package	4
Bridge Hydraulic Report	NA
Bridge Development Report	NA
Value Engineering Information Report	8
Interchange Modification/Justification Report	NA

<u>Environmental Items:</u>	<u>Copies:</u>
Advance Notification Package	6
Public Involvement Plan	4
Class of Action Determination	6
State Environmental Impact Report	NA
Type II Categorical Exclusion	NA
Draft Environmental Assessment	8
Environmental Assessment	10
Finding of No Significant Impact	10
Pre-Draft Environmental Impact Statement	10
Draft Environmental Impact Statement	10
Final Environmental Impact Statement	12
Section 4(f) Statement	6
Noise Study Report	6
Air Quality Report	4
Contamination Screening Evaluation Report	6
Conceptual Stage Relocation Plan	6
Public Hearing Transcript	6
Endangered Species Biological Assessment	12
Essential Fish Habitat	12
Wetlands Evaluation Report	10
Cultural Resource Assessment	10

Upon completion of the study, the CONSULTANT shall deliver to the DEPARTMENT, in an organized manner, all project files, maps, sketches, worksheets, and other materials used or generated during the study process.

All reports, graphics, presentations and CADD files developed during the course of the PD&E Study shall be submitted in electronic format on CD-R or DVD-R. These files shall be in their native format from the source program they were created in. The directory structure of the CD-R

or DVD-R shall meet the requirements of the current FDOT CADD Production Criteria Handbook. In addition, all reports, associated graphics and concept plans shall be submitted in PDF Format on a separate CD-R or DVD-R. The CONSULTANT shall submit 10 copies of each CD-R or DVD-R clearly labeled with the Financial Management Number, project description, name of firm doing the work and the creation date of the media.

Computer Automation

The project will be developed utilizing Computer Aided Drafting and Design (CADD) systems. The DEPARTMENT makes available software to help assure quality and conformance with the policy and procedures regarding CADD. It is the responsibility of the CONSULTANT to meet the requirements in the FDOT CADD Manual (Topic No. 625-050-001). The CONSULTANT will submit final documents and files as described therein. Additional related information is found in the FDOT Plans Preparation Manual (Topic No. 625-000-008).

All computer disks shall be scanned for viruses prior to submitting to FDOT. Failure to scan for viruses may result in a lower Consultant work performance evaluation.

Coordination With Other Consultants and Entities

The CONSULTANT is to coordinate their work with any ongoing and/or planned projects that may affect this study.

The CONSULTANT is to coordinate with local governmental entities to ensure design and right of way requirements for the project are compatible with local public works improvements and right of way activities.

Optional Services - NA

1.0 PUBLIC INVOLVEMENT

Public involvement includes communicating to and receiving information from all interested persons, groups, and government organizations information regarding the development of the project. The CONSULTANT shall coordinate and perform the appropriate level of public involvement for this project as outlined in Part 1, Chapter 8, and Part 2, Chapter 9 of the PD&E Manual and the following sections.

The CONSULTANT shall provide to the DEPARTMENT drafts of all Public Involvement collateral (i.e., newsletters, property owner letters, advertisements, etc.) associated with the following tasks for review and approval at least five (5) business days prior to printing and / or distribution.

1.1 Public Involvement Program

1.2 Public Involvement Data Collection

In addition to public involvement data collection, the CONSULTANT shall assist the DEPARTMENT in preparing responses to any public inquiries as a result of the public involvement process.

1.3 Notice Of Intent – (Optional)

1.4 Advance Notification

At the beginning of the project, the CONSULTANT shall prepare the Advance Notification and transmittal letter as per Part 1, Chapter 2 of the PD&E Manual for the DEMO Manager / Engineer to submit to the State Clearing House.

1.5 Scheduled Public Meetings

The CONSULTANT shall provide all support necessary for the DEPARTMENT to hold or participate in various public meetings, which may include but not limited to:

- Scoping Meetings - 6
- Elected Officials/Agency Kick-off Meeting - 3
- Public Kick-off Meeting - 2
- Corridor or other Public Meeting
- Alternatives Public Meeting - 2

For any of the above type meetings, the CONSULTANT shall prepare and/or provide:

- Scripts or agenda for presentation.
- Handouts
- Graphics for presentation.

- Meeting equipment set-up and tear-down.
- Legal and/or display advertisements. (The CONSULTANT will pay the cost of publishing.)
- Letters for notification of elected and appointed officials, property owners and other interested parties. (The CONSULTANT will pay the cost of first class postage.)
- News releases, for use three to five days prior to meeting.
- Summary notes of meetings to be provided to the Department no later than 5 business days after the meeting.
- Briefing and debriefing of Department staff.

The CONSULTANT will investigate potential meeting sites to advise the DEPARTMENT on their suitability. The CONSULTANT will pay all costs for meeting site rents and insurance.

The CONSULTANT will attend the meetings with an appropriate number of personnel to assist the DEPARTMENT'S Project Manager.

It is estimated for this project there will be 13 Public meetings during the study.

1.6 Unscheduled Public And Agency Meetings

In addition to scheduled public meetings the CONSULTANT may be required to participate in unscheduled meetings with the public, elected officials, or public agencies. The CONSULTANT's participation will be limited to participation during the meeting, note taking, and summarizing the meeting in a memo to the file. It is estimated for this project there will be 36 meetings during the study.

1.7 Public Hearing

The CONSULTANT shall provide all the support services listed in Sections 1.2 and 1.5 above, and in addition shall prepare:

Public officials and Agency letters. The CONSULTANT will prepare the letters, insert them in envelopes, and address the envelopes. The CONSULTANT will pay for first class postage

Property owner letters. The CONSULTANT will provide marked tax maps of the project alternatives and identify the names and addresses of the property owners from county tax rolls. The CONSULTANT will prepare the letters, insert them in envelopes, and address the envelopes. The CONSULTANT will pay for first class postage.

- All elements of the multi-media presentation.
- Graphics Displays of plans and report(s) for the public display.
- Brochures or handouts.

- Prepare public advertisements.
- Court Reporter
- Briefing and debriefing of Department staff.

The CONSULTANT will procure a verbatim transcript of the Public Hearing. The CONSULTANT will combine the transcript with any letters received by the DEPARTMENT as part of the public hearing record, and affidavits of publication of legal ads, and will provide copies of the transcript for the DEPARTMENT'S use. The CONSULTANT will also prepare a Public Hearing Summary if the project will be processed as a Categorical Exclusion.

1.8 Location And Design Concept Acceptance

1.9 Special Public Involvement Requirements

- Public Involvement Report
- 6 newsletters
- website

1.10 Quality Control

2.0 ENGINEERING ANALYSIS AND REPORTS

The CONSULTANT shall coordinate and perform the appropriate level of engineering analysis for this project as outlined in Part 1, Chapter 9 of the PD&E Manual and the following sections.

Data Collection

Immediately following the Advance Notification, the CONSULTANT shall begin preliminary assessments of the study corridor from an engineering standpoint. The CONSULTANT shall utilize, to the greatest extent possible, any data from previous studies and reports pertaining to SR 40 from one mile west of SR 326 to SR 15 (US 17) including previous corridor analyses. This task is largely of a data gathering nature. This activity consists of collecting various information and materials relative to the performance of engineering analyzes within the study area. The information should include all data necessary to perform adequate evaluation of the location and design of a transportation facility.

2.1 Field Review

The CONSULTANT shall conduct all anticipated field trips needed to collect engineering data

2.2 Aerial Photography

Aerial Photography shall be used as a basis for plotting various data necessary for both engineering and environmental analysis, alternative corridor and design studies, and the development of the preliminary plans of conceptual design. Copies of aerial photography are the prime source of information used to convey project considerations to the public at public meetings.

The CONSULTANT will furnish the necessary aerial photography to be used in the study. Aerial photography shall be prepared for the following uses at the noted ratios:

(SEE SOS specify scales)

Overall Project Location Map	1"=400'
Drainage master Plan	1"=200'
Corridor Location Maps	1"=400'
Alternative Plans	1"=200'
Details	1"= 100'

Sheet size shall be in accordance with the Department's Roadway Plans Preparation Manual.

2.3 Survey Coordination

2.4 Existing Roadway Characteristics

2.5 Existing Structure Characteristics

2.6 Traffic Data – The Department will provide all traffic data

2.7 Crash Data

The CONSULTANT shall obtain available data from DEPARTMENT'S COMPUTER (Program numbers AARPJ12 and AARPJ13) and local sources for various highway segments required. Obtain data for previous five years. The data collected shall include the number and type of accidents, accident locations, number of fatalities and injuries, and estimates of property damage and economic loss.

2.8 Existing Signage Inventory

The CONSULTANT will be responsible for inventorying the existing signage along the project corridors.

2.9 Utilities

In accordance with Part 2, Chapter 10 of the PD&E Manual.

2.10 Railroads

In accordance with Part 2, Chapter 10 of the PD&E Manual.

2.11 Transportation Plans

The CONSULTANT shall obtain plans for all modes of transportation including surface, transit and non-motorized modes. The following plans or studies should be obtained:

- Urban Area Transportation Study. If applicable, County Cost Feasible and Needs Plans.
- Local Comprehensive Plans; city and county.
- Transit; rail, bus, other.
- Non-motorized modes, including bikeways and pedestrian walkways.

2.12 Soils

The CONSULTANT shall review the United States Department of Agriculture, Geological Survey, Soil Conservation Service Maps and summarize the findings.

2.13 Base Map

The CONSULTANT shall develop a CADD database that includes existing characteristics. CADD data base information shall be compatible for use on aerial photography used for public hearing presentations, corridor maps, and alternative plans.

1" = 200'

Needs

The CONSULTANT shall establish and/or verify the purpose and need for the project as outlined in Part 2, Chapter 5 of the PD&E Manual.

2.14 Safety

Based on the information obtained from the crash data the CONSULTANT shall identify project needs associated with the safety of the existing facility.

2.15 Analysis of Existing Conditions

The CONSULTANT shall analyze the existing conditions in order to identify any deficiencies that are to be identified in the Needs section.

2.16 Development of Needs Statement

Design Analysis

Utilizing the data collected as part of this scope of work, the CONSULTANT shall perform the engineering analysis necessary to complete the project development process. The task of engineering analysis will be ongoing throughout the duration of the project and will be performed with consideration to the results of the environmental impacts analysis.

After selection of viable corridor, the CONSULTANT shall develop and analyze alternate conceptual design alternatives. The development of the design alternatives shall consider the desires of the community with respect to landscaping, aesthetics, or other special features in order to satisfy the requirements of the Department's policy on Transportation Design for Livable Communities.

The CONSULTANT shall develop and evaluate all viable alternatives in order to address the project needs.

2.17 Corridor Analysis

CONSULTANT shall evaluate and document that alternative corridors have been considered and were not feasible.

2.18 Traffic Analysis - NA

2.19 Typical Section Analysis

The CONSULTANT shall develop all appropriate typical sections alternatives for the project. These will include the department's standard typical sections, and any typical sections that may result in minimizing right of way, or those proposed in light of the Department's policy on Transportation Design for Livable Communities.

2.20 Roadway Design Alternatives

2.21 Prepare Concept Plans

The CONSULTANT will overlay Concept Plans on the base maps. At a minimum, the concept plans should include horizontal roadway, geometry, bridges, intersections, drainage details, existing and proposed right-of-way lines, edge of pavement and median openings.

2.22 Drainage Analysis and Pond Siting Report

The CONSULTANT shall perform preliminary drainage design in order to determine potential outfall locations and preliminary sizes (volume and area) of required detention and/or retention facilities for storm water treatment or attenuation. The location and size of potential detention/retention areas will be determined for all viable alternate alignments.

The CONSULTANT shall prepare a "Pond Siting Report" for the project in accordance to the Department's Stormwater Facilities Handbook.

2.23 Structures

The CONSULTANT shall evaluate conceptual design alternatives for bridge structures within the project limits. The evaluation shall include investigation of the existing bridge structures to determine whether replacement or widening is the most appropriate alternative (See Section 2.5). Consideration will be given to existing condition, estimated remaining life and the ability to widen in a feasible manner.

The CONSULTANT shall identify the proposed bridge location and alignment, approximate bridge length, horizontal and vertical clearance requirements, preliminary structure types, approximate span lengths, preliminary pier locations, aesthetic level, ship impact load controls and potential wall locations.

The Consultant will analyze the design alternatives for constructability and the ability to maintain traffic. New design alternatives will also be evaluated for their ability to improve upon existing conditions such as substandard shoulders or clearances, and the potential to accommodate desired facilities such as the Shingle Creek Trail Crossing.

2.24 Access Management

The CONSULTANT shall review the Department's State Highway System Access Management Classification System and Standards (Rule 14-97) and determine their application to the project. The CONSULTANT shall determine the proper access classification and standard to be applied to the project and coordinated with the Districts' Access Management Review Committee.

The proposed access management plan shall be presented as part of the public involvement process. If an Access Management Classification/Reclassification Public Hearing is required, it will be combined with another public meeting.

2.25 Multi-modal Accommodations

The CONSULTANT will coordinate with transit and local government officials in order to determine what multi-modal accommodations will be studied and evaluated as part of the project alternatives. This task only includes existing and planned multi-modal facilities.

2.26 Maintenance of Traffic Analysis

The CONSULTANT will analyze the design alternatives for constructability, and the ability to maintain traffic. If the analysis indicates that there will be a substantial cost to maintain traffic this cost will be included in the final estimate for that alternative.

2.27 Geotechnical Coordination

2.28 Intelligent Transportation Systems - NA

Comparative Analysis Of Alternatives

The DEPARTMENT will determine which viable alternative(s) will be evaluated further through the public involvement process and environmental analysis. The possibility exists that the No-Build alternate may be selected at this point.

2.29 Comparative Analysis and Evaluation Matrix

After developing the viable alternatives and costs, the CONSULTANT will prepare a matrix comparing the impacts and costs of the alternatives evaluated, with a recommendation of the most viable alternative(s). The CONSULTANT shall present their recommendations to the DEPARTMENT for consideration.

2.30 Selection of Preferred Alternative(s)

The CONSULTANT shall recommend a preferred alternative(s) based on a review and analysis of all engineering, environmental, and public involvement issues related to the project.

2.31 Conceptual Design Plans (Preferred)

The CONSULTANT will finalize concept plans for the preferred alternative that include refinements from the public hearing.

2.32 Identify Construction Segments

2.33 Value Engineering

This project will be subject to a Value Engineering (VE) review during the alternatives analysis activities. VE reviews will be conducted by a multi-disciplined team of DEPARTMENT personnel whose purpose will be to consider value improvements to proposed concepts and designs.

Value Engineering is an event oriented function and will occur at a specific time in the progress of the project. For this study the VE study will take place: in March 2007

At the end of the alternatives analysis phase and before the public hearing. The CONSULTANT should provide the VE team with the materials and information necessary for an effective review and evaluation of the various alternatives and major cost elements of the project.

The CONSULTANT Project Manager and other key project personnel shall meet with the VE team to provide a detailed review of the development of the project to date. The information will be presented in conjunction with a report titled "Value Engineering Information Report" (VEIR). This service will be conducted at the Department's District Office and will include follow-up telephone and written communications.

Develop construction costs for each feasible design alternative. Estimated cost should be shown by major elements of each alternative.

Estimated R/W costs for each alternate based upon recent sales of property in the project area. Categorize as follows:

- R/W to be purchased (no. parcels & cost)
- Construction easements (no. easements & cost)
- Business relocations (no. locations & cost)
- Residential relocations (no. locations & cost)
- Business damages (no. locations & est. cost)
- Aerial photography depicting feasible alternatives with R/W items identified as indicated in item (c), above.
- Traffic Technical Memorandum reviewed and approved by the District Planning Department.
- Design traffic analysis.

Provide a matrix in a VE format which shows the criteria and the weighted impact used by the CONSULTANT to make design alternative selection decisions. Criteria such as safety, operation and public acceptance must be fully documented.

The CONSULTANT shall submit data and information, referenced above, in the format of a Value Engineering Information Report (VEIR), or the Draft Preliminary Engineering

Report (DPER), for each VE phase review. The VEIR, or DPER is to be submitted to the DOT Project Manager two (2) weeks prior to the VE team review. Copies of each report are to be provided by the CONSULTANT, to the DOT Project Manager.

2.34 Construction Cost Estimates

The CONSULTANT shall develop construction cost estimates for each design alternative. The cost estimate is to be developed independently and also by using the Department's long range estimating (LRE) program .

2.35 Right Of Way Cost Estimates

The CONSULTANT is to prepare maps and parcels for the Departments ROW staff to prepare estimates. This includes but is not limited to determination of parcel size and percentage of acquisition units in square feet.

2.36 Typical Section Package

The CONSULTANT will prepare the Typical Section Package in accordance with the Department's Plans Preparation Manual.

2.37 Design Exceptions and Variances:

The CONSULTANT will identify and prepare exception and variance package(s) for approval in accordance with the Department's Plan Preparation Manual.

2.38 Preliminary Engineering Report (PER)

2.39 Lighting Justification Report

The CONSULTANT shall perform the necessary analysis to complete the Lighting Justification Report in accordance with the DEPARTMENT's Manual on Uniform Traffic Studies (Highway Lighting Justification Procedure).

2.40 Quality Control

3.0 ENVIRONMENTAL ANALYSIS AND REPORTS

The CONSULTANT shall coordinate and perform the appropriate level of environmental analysis for this project as outlined in the PD&E Manual and the following sections.

The CONSULTANT shall utilize the Florida Geographic Data Library (FGDL), or other appropriate database that includes all existing features. This data base information shall be compatible for use on base maps used for public hearing presentations, corridor maps, and alternative plans.

Social and Cultural Impacts

In accordance with Part 2, Chapter 9 of the PD&E Manual, unless otherwise noted.

3.1 Land Use Changes

3.2 Community Cohesion

3.3 Community Services

3.4 Social And Economic Impacts

3.5 Relocation Potential

The CONSULTANT shall collect the data and perform the analysis necessary to complete a Conceptual Stage Relocation Plan for the proposed alternatives.

3.6 Archaeological and Historical Sites

The CONSULTANT shall collect data necessary to completely analyze the impacts to all cultural and historic resources by all proposed alternatives and prepare a Cultural Resource Assessment Request Package as described in Part 2, Chapter 12, of the PD&E Manual.

3.7 Section 4(F)

In accordance with Part 2, Chapter 13 of the PD&E Manual.

3.8 Visual Impacts and Aesthetics

In accordance with Part 2, Chapter 15 of the PD&E Manual.

3.9 Utilities and Railroads

Based on the coordination with the utility companies along the project the CONSULTANT shall prepare a Utility Assessment Package as described in Part 2, Chapter 10 of the PD&E Manual. The CONSULTANT will also address impacts to existing and proposed railroads.

Natural Impacts

3.10 Wetlands

In accordance with Part 2, Chapter 18 of the PD&E Manual.

3.11 Conceptual Mitigation Plans

In accordance with Part 2, Chapter 18 of the PD&E Manual.

3.12 Water Quality

In accordance with Part 2, Chapter 20 of the PD&E Manual.

3.13 Outstanding Florida Waters, Wild And Scenic Rivers, And Aquatic Preserves

In accordance with Part 2, Chapters 19, 21, and 23, of the PD&E Manual, respectively.

3.14 Floodplains

In accordance with Part 2, Chapter 24 of the PD&E Manual.

3.15 Coastal Barrier Resources

In accordance with Part 2, Chapter 26 of the PD&E Manual.

3.16 Wildlife And Habitat

In accordance with Part 2, Chapter 27 of the PD&E Manual.

3.17 Essential Fish Habitat

In accordance with Part 2, Chapter 11 of the PD&E Manual.

3.18 Identify Permit Conditions

The CONSULTANT shall identify permit conditions, and type of permits required. This task includes the review of maps and data in order to determine permit related information for the project.

3.19 Farmlands

In accordance with Part 2, Chapter 28 of the PD&E Manual.

Physical Impacts

3.20 Noise

In accordance with Part 2, Chapter 17 of the PD&E Manual.

3.21 Air Quality

In accordance with Part 2, Chapter 16 of the PD&E Manual.

3.22 Construction Impact Analysis

In accordance with Part 2, Chapter 30 of the PD&E Manual.

3.23 Contamination

The CONSULTANT shall perform the necessary analysis to complete the Contamination Screening Evaluation for all proposed alternatives, and complete the Contamination Screening Evaluation Report as described in Part 2, Chapter 22, of the PD&E Manual.

Environmental Reports

The Environmental Documents prepared by the CONSULTANT will comply with the procedures listed in the PD&E Manual, Part 1, and will also follow the format and include content described in Part 2 of the PD&E Manual. The task of documentation includes the preparation of draft and interim reports prepared by the CONSULTANT for review and comment upon by the DEPARTMENT prior to producing final reports and documents.

3.24 Class Of Action Determination

The CONSULTANT shall prepare the Environmental Determination Form and any attachments that will be required for FHWA to make their determination as per Part 1, Chapter 3, of the PD&E Manual.

3.25 Environmental Assessment

In accordance with Part 1, Chapter 4 of the PD&E Manual.

3.26 Finding Of No Significant Impact - Optional

In accordance with Part 1, Chapter 5 of the PD&E Manual.

3.27 Draft Environmental Impact Statement - Optional

In accordance with Part 1, Chapter 6 of the PD&E Manual.

3.28 Final Environmental Impact Statement - Optional

In accordance with Part 1, Chapter 7 of the PD&E Manual.

3.29 Quality Control

4.0 MISCELLANEOUS SERVICES

4.1 Geotechnical Investigations and Analysis

Introduction:

The CONSULTANT shall be responsible for a preliminary geotechnical investigation. All work performed by the CONSULTANT shall be in accordance with DEPARTMENT standards, related directives, Federal Highway Administration Checklist and Guidelines for review of Geotechnical Reports and Preliminary Plans and Specifications. The District Geotechnical Engineer (DGE) will make interpretations regarding Department geotechnical standards, policies and procedures and provide guidance to the Consultant. Prior to beginning the investigation, the CONSULTANT shall meet with the DEPARTMENT's Geotechnical Project Manager to review the project scope and FDOT requirements.

Field Investigation – Swales and Trenches: The soils investigation shall include, but not be limited to:

Auger borings, every 500-feet or 150 meters for exfiltration trench and swale areas as directed by the DGE.

Roadway and Structures (bridges and walls) Reports:

A draft of the Roadway report and the Structures report (separate reports required) shall be submitted to the District Geotechnical Engineer for review prior to incorporation of the CONSULTANT'S recommendations in the project design. The final submittal of these reports shall incorporate comments of the FDOT District Geotechnical Department.

After incorporating the review comments by the District Geotechnical Engineer, the reports (signed and sealed by a Professional Engineer registered by the State of Florida) shall be submitted (up to eight original reports).

Method of Compensation: The proposal will show the base unit costs and shall state the upset limit fee estimated to complete this activity. Negotiated unit estimates may vary to meet the project requirements. Prices will adhere to the fee schedule and remain under the upset limit. Actual payment for the geotechnical investigation will be based on the work actually performed at the unit prices stipulated in the price proposal.

4.2 Surveying/Mapping

The CONSULTANT shall provide all necessary surveying/mapping services necessary to rectify the required aerial photography (place, locate and maintain aerial targets, etc.) for the study and any other miscellaneous surveying tasks requested by the DEPARTMENT.

4.3 Contract and Project Files

Project Management efforts for complete setup and maintenance, developing monthly progress reports, schedule updates, work effort to develop and execute sub-consultant agreements etc. Progress reports shall be delivered to the DEPARTMENT in a format as prescribed by the Department and no less than 10 days prior to submission of the corresponding invoice. Judgment on whether work of sufficient quality and quantity has been accomplished will be made by the Project Manager by comparing the reported percent complete against actual work accomplished.

Within ten (10) days after the Notice to Proceed, the CONSULTANT shall provide a schedule of calendar deadlines accompanied by an anticipated payout curve. Said schedule and anticipated payout curve shall be prepared in a format prescribed by the DEPARTMENT.

4.2 Project Management Meetings And Coordination

The CONSULTANT shall meet with the DEPARTMENT as needed throughout the life of the project. It is anticipated 24 meetings will be needed. These meetings will include progress and miscellaneous review and other coordination activities with the Department.

Additional Services

5.0 METHOD OF COMPENSATION

Payment for the work accomplished will be in accordance with Exhibit B of this contract. Invoices shall be submitted in quintuplicate to the DEPARTMENT, in a format prescribed by the DEPARTMENT. The DEPARTMENT'S Project Manager and the CONSULTANT shall monitor the cumulative invoiced billings to insure the reasonableness of the billings compared to the project schedule and the work accomplished and accepted by the DEPARTMENT.

Payments will not be made that exceed the percentage of work identified in the approved payout curve and schedule provided in accordance with Section 4.1.

6.0 SERVICES TO BE PERFORMED BY THE DEPARTMENT

The DEPARTMENT will provide those services and materials as set forth below:

- Project data currently on file.
- All available information in the possession of the DEPARTMENT pertaining to utility companies whose facilities may be affected by the proposed construction.
- All future information that is in possession or may come to the DEPARTMENT pertaining to subdivision plans, so that the CONSULTANT may take advantage of additional areas that can be utilized as part of the existing right-of-way.
- Process Advance Notification and all environmental and engineering documents including Permit Coordination Package.
- Coordinate with the State Historic Preservation Officer.
- Existing FDOT right-of-way maps.
- The DEPARTMENT will permit the CONSULTANT to utilize the DEPARTMENT'S computer facilities upon proper authorization as described in the DEPARTMENT Procedure No. 261 □009. The models anticipated for use in this project are CAL3QHC2, COSCREEN98, MOBILE 5a, FSFAC05, FSFAC08, TEXIN, and STAMINA 2.1.
- The DEPARTMENT will provide available FDOT crash data.
- Design Traffic