

## **Exhibit “A” Scope of Services**

### **PROJECT DEVELOPMENT AND ENVIRONMENT AND ETDM SUPPORT ACTIVITIES CONTINUING SERVICES CONTRACT**

#### **I. PURPOSE**

The Department requires planning and professional engineering consultant services to identify, evaluate, analyze and develop engineering alternatives, and reviews related to Implementation of Efficient Transportation Decision Making (ETDM), Environmental Studies, Project Planning (Corridor Location), Feasibility Studies and Preliminary Engineering (Conceptual Design).

The Consultant shall perform all or part of the implementation of ETDM Community Impact Assessment and Socio-Cultural Effects Evaluation and the engineering services required for location/design studies, as directed by the Department. This would include consideration of all social, economic, environmental, and mitigation effects as required by federal agencies and Department procedures. Assigned tasks can be of a multi-disciplinary nature, which may involve environmental inventory and assessment, interagency coordination, public involvement, economic evaluations, safety studies, corridor planning studies, conceptual engineering, review or development of conceptual design plans, travel forecasting, traffic analysis, freight planning support, assessment and needs identification, right-of-way impact evaluation, and access management plan development.

These activities shall assist in obtaining approval of the Environmental Document (i.e. Location Design Acceptance [LDCA]) from the Office of Environmental Management (OEM), or State Environmental Impact Report (SEIR) from the District Secretary. The Project Development Process and documentation shall follow the PD&E Manual and the ETDM Manual with all subsequent revisions. Engineering reports are required to be signed and sealed by a Registered Professional Engineer (P.E.) working for the Consultant.

#### **II. REQUIREMENTS AND PROVISIONS FOR WORK**

The services performed by the Consultant shall comply with all applicable FDOT Manuals and Guidelines. These Manuals and Guidelines incorporate, by requirement or reference, all applicable State and Federal regulations. The current edition, including updates, of the following FDOT Manuals and Guidelines shall be used in the performance of this work. The American Association of State Highway Transportation Officials (AASHTO) criteria shall apply as incipient policy.

- Florida Statutes
- Florida Administrative Codes
- Applicable Federal Regulations, U.S. Codes and Technical Advisories
- Project Development and Environment Manual
- ETDM Manual
- Sociocultural Effects Evaluation Handbook
- Public Involvement Handbook
- Public Engagement Resource Kit (PERK)
- Interchange Access Request User’s Guide
- Florida Design Manual
- FDOT Context Classification Guide

- Florida Intersection Design Guide
- Highway Capacity Manual
- Manual on Uniform Traffic Studies (MUTS)
- Manual of Uniform Traffic Control Devices (MUTCD)
- Minimum Standards for Design, Construction, and Maintenance Streets and Highways (Florida Greenbook)
- A Policy on Geometric Design of Highways and Streets (AASHTO)
- Guide for the Development of Bicycle Facilities (AASHTO)
- Guide for the Development of Pedestrian Facilities
- Highway Safety Manual
- Right of Way Mapping Handbook
- Right of Way Procedures Manual Survey and Mapping Handbook
- Electronic Field Book (EFB) User Handbook
- Drainage Design Guide
- Stormwater Management Facilities Handbook
- Structures Design Guidelines
- CADD Manual
- CADD Production Criteria Handbook
- FDOT Quality/Level of Service Standards Handbook
- Project Traffic Forecasting Handbook
- Basis of Estimates Manual

### **III. SUMMARY OF SERVICES**

The Consultant will be required to perform public involvement activities professional transportation planning, preliminary design, environmental evaluation, planning and environmental linkages (PEL), transportation economic and financial analysis.

The Consultant work will be managed by the Department Project Manager. The Department Project Manager will define the work for each task to be performed by the Consultant, as described in this Scope of Services, through preparation of a task work order for each task. For each task work order, the Consultant Project Manager and the Department Project Manager will discuss the requirements of each task as well as negotiate the staff hours. The Consultant shall submit a scope and staff hours based upon discussion with the Department for task work order execution. The task work order shall include product requirements, schedules, labor requirements, documentation requirements, and total allowable task costs. The required Task Work Order will be prepared and signed by both the Consultant Project Manager and Department Project Manager or Contract Coordinator prior to the initiation of any work.

#### **A. EFFICIENT TRANSPORTATION DECISION MAKING**

Enter, track and update projects in the ETDM Environmental Screening Tool (EST) as requested by the District ETDM Coordinator in accordance to the FDOT ETDM Manual.

- Prepare project descriptions and purpose and need statements and enter them into the Environmental Screening Tool (EST)
- Prepare the Preliminary Environmental Discussion and enter information into the EST
- Prepare Sociocultural Effects Evaluations and enter information into the EST
- Prepare Advance Notification packages utilizing the EST for distribution to

the State Clearinghouse, federal, state and local offices and the transmittal letter as per the PD&E Manual

- Review ETAT comments from Planning and Programming Screens
- Prepare Summary Degrees of Effect and responses to ETAT comments and enter them into the EST
- Prepare Class of Action recommendation summaries and provide to the ETDM Coordinator for review
- Prepare Planning and Programming Summary Reports
- Identify required Technical Studies and Permits and enter them into the EST
- Prepare Summaries of Public Comment for entry into the EST
- Assist the ETDM Coordinator with ETDM tracking and performance measurement including and Quality Assurance Reviews (QAR's)

## **B. PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) SUPPORT**

### **1. PUBLIC INVOLVEMENT**

Public involvement includes communicating to and receiving input from all interested persons, groups, and government organizations regarding the development of the project. The Consultant shall coordinate and perform the appropriate level of public involvement as outlined in *the PD&E Manual, the FDOT Public Engagement Resource Kit (PERK), Social-Cultural Evaluations Manual, and the ETDM Manual*. In addition, the Consultant shall coordinate with the Department's Public Information Office, the Public Involvement Coordinator, and project teams.

The Consultant shall attend a Notice to Proceed Meeting with Department representatives, where relevant project information will be provided along with procedures for administering the contract. The Consultant and staff shall also be available with no more than five (5) workday notice to attend in-person, virtual and/or hybrid 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.

All Public Involvement collateral (i.e., newsletters, property owner letters, advertisements, etc.) associated with the following tasks shall be provided to the Department for review and approval at least 14 business days prior to printing and/or distribution.

#### **a) PUBLIC INVOLVEMENT PLAN (PIP)**

Complete a Public Involvement Plan to be approved by the Department. This would be developed, documented and implemented once the Class of Action Determination has been approved. The plan must be in written form and incorporated into the SWEPT project file. The PIP is a "living document" that should be updated as needed.

**b) PUBLIC INVOLVEMENT DATA COLLECTION**

All data collection and prepared responses to any public inquiries from the public involvement process shall be prepared and provided to FDOT. The project mailing list must be collected, maintained, updated and submitted to the Department electronically, including the following:

- A complete list of corridor property owners, business owners and tenants.
- A complete list of elected and appointed officials; local, state and federal officials; Native American Tribes; municipal sub committees, and other community leaders and groups, in or with jurisdiction in the project areas should also be identified.
- A complete list of Environmental Technical Advisory Team members, technical staff of all agencies and municipalities. Any permitting or reviewing agencies identified should be included and added to the project mailing list.
- A complete list of Community and cultural services groups, such as schools, religious organizations, home-owner associations and emergency services.
- A complete list of any media within the project area should be identified, placed on the mailing list, and the Department uses this information for the press releases or advertisements. The DEPARTMENT will issue these news releases or advertisements as needed.
- A complete list of any person or institution who expresses an interest in the project.

**c) PUBLIC MEETINGS**

Potential meeting sites must be considered for suitability and approved by the Department. The Consultant will schedule, reserve, pay all costs for meeting site rental and insurance, and provide the following items for public meetings and hearings as requested by the Department:

- Project fact sheets, multicolor newsletters and duplicates. Distribution shall be through the project website, mailing list and hand delivered to various locations as appropriate. The Consultant will pay for postage.
- Meeting materials and visual aids
- Agenda or scripts for the presentation and Moderator
- Handouts for presentation, "Request to Speak" cards, and Comment cards
- Graphics and plans for presentation
- All equipment and audio-visual set-up and tear down

- Legal and/or display advertisements. The Consultant must have an account with Florida Administrative Register. The Consultant will pay the cost of publishing.
- Letters of notification for the elected and appointed officials, property owners and other interested parties. The Consultant will pay the cost of first class postage.
- Press releases for use seven to ten days prior to the meeting

Attend the in-person, virtual and/or hybrid meetings with an appropriate number of personnel to assist the FDOT Project Manager. The consultant's role will include participation during the meeting, note taking, and summarizing the meeting. Summary notes of meetings to be provided to the Department one (1) business day after the meeting.

**d) PUBLIC HEARINGS**

Provide all services listed above, and in addition shall prepare the following:

**Elected Officials and Agency letters:** Prepare the letters, insert them in envelopes, and address the envelopes. The Consultant will pay for first class postage.

**Property Owner letters:** Provide a list of the names and addresses of the property owners from county tax rolls in a format specified by the District. The Consultant will prepare the letters, insert them in envelopes, and address the envelopes. The Consultant will pay for first class postage.

The Consultant will provide the following:

- All elements of the multi-media presentation such as Power Point presentations, 3D renderings or videos.
- Displays of graphics, plans and report(s).
- Title VI boards, ADA, and NEPA Assignment.
- Color brochures or handouts, comment cards, staff name tags and other miscellaneous items.
- Prepare public advertisements for approval by the District
- Court Reporter(s)
- Department staff briefing and debriefing
- Security officer/law enforcement

The Consultant will procure a verbatim transcript of the Public Hearing and combine the transcript with any other comments 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 attached to the Public Hearing Transcript.

## **C. ENGINEERING ANALYSIS AND REPORTS**

### **1. DATA COLLECTION**

This task consists of collecting engineering data through field reviews and review of other information and materials relative to engineering analysis within the area of interest. The information should include all data necessary to perform adequate evaluation of the location and design of a transportation facility.

#### **a) TOPOGRAPHIC SURVEY**

Record all field survey work on approved media, including notes and computations, and submit to the Department. Field books submitted to the Department must be of an approved type. Electronic field books shall be certified by the surveyor in responsible charge, on work being performed before the final product is submitted.

#### **b) EXISTING CHARACTERISTICS**

Obtain the physical features and characteristics of roadways and structures using Department sources including, roadway characteristics inventory, project files, as-built plans, right-of-way maps, bridge logs, straight-line diagrams, computer programs files, drainage maps, historical traffic data and previous studies as available. Other sources may also include field observations, and local governments.

The Consultant will be responsible for collecting inventory of the existing signage along the project corridors.

#### **c) TRAFFIC DATA COLLECTION**

Conduct traffic counts at various locations simultaneously throughout the District using most cost-effective methodologies. The counts may include vehicle classification, bi-directional, turning movement counts, right-turn-on-red counts, and pedestrian counts for any duration (period of time) required by the Department.

Document the field conditions at the time of the counts. Field documentation may include counter location and geometric measurements such as number of lanes, length of storage and taper for turn/merge lanes, type of traffic control, traffic signal timing and the location and/or presence of signal boxes and loop detectors.

Ensure the quality and accuracy of the data. Document the data collection effort and provide this documentation and collected data in Excel, SPF and PDF format.

Perform additional data collection activities and analyses including but not limited to:

- Origin-destination surveys
- Stated Preference surveys
- Public transportation surveys
- Travel time and delay surveys
- Spot speed surveys
- Draw bridge closing/boat volume surveys
- Trip generation rate surveys
- Saturation flow rate surveys
- Parking demand surveys
- Census data compilation
- Zonal data development
- Transit ridership studies
- Transit ridership surveys
- Crash data collection
- Park-and-ride lot usage studies
- Traveler intercept surveys
- Freight movement

**d) TRAFFIC DATA FOR NOISE ANALYSIS**

Provide traffic data required for the Noise Study and will include the following data for each road segment (i.e., intersection to intersection), ramps, cross streets, and frontage roads, for the existing year, opening year, and the design year for Build and No-Build alternatives:

- LOS C directional hourly volumes
- Demand hourly volumes (peak and off-peak directions)
- Existing and proposed posted speed
- Percentage of heavy Trucks (HT) in the design hour
- Percentage of medium trucks (MT) in the design hour
- Percentage of buses in the design hour
- Percentage of motorcycles (MC) in the design hour

**e) UTILITIES & RAILROADS**

Obtain information in accordance with the PD&E Manual. Copies of the base maps for utility comments and sketches shall be provided on 11" x 17" sheets. The owner of the utility shall be contacted to obtain the necessary information to identify/locate the facilities on the plans and plot the results as appropriate.

**f) PLANNING CONSISTENCY**

The Consultant will review transportation plans for all modes of transportation including freight, transit, and non-motorized; and prepare the Planning Consistency Form.

The following plans or studies should be obtained at minimum:

- MPO's adopted Long Range Transportation Plan (LRTP) Cost Feasible Plan
- MPO's Transportation Improvement Program (TIP)
- State Transportation Improvement Program (STIP)

- Local Government Comprehensive Plans (LGCPs)
- Local Transit Development Plans (TDPs) for bus, rail, or other services
- Non-motorized (bicycle-pedestrian) plans

**g) EXHIBITS**

Produce exhibits and figures of the project using the Department's CADD standards containing an aerial photo and existing characteristics for the project. Exhibits must also show environmental issues that are specific to the area of interest such as cemeteries, wetlands, historic properties, high-risk contamination sites, public parks, property lines, etc. This information shall be compatible for use at public meetings, public hearing presentations, or other Department uses.

**2. NEEDS**

Utilizing the data collected as part of this Scope of Services, perform engineering analysis as necessary to complete the project development phase described in the PD&E and the ETDM Manual. Design alternatives and context sensitive solutions shall be considered. All viable alternatives shall be developed and evaluated to address the project needs. The Department will determine which viable alternative(s) are further evaluated through the public involvement process and environmental analysis.

**a) TRAFFIC FORECASTING**

Develop traffic demand forecasts for proposed facility designs. Project future Annual Average Daily Traffic (AADT) and design hour traffic volumes using latest approved travel demand models, historical traffic growth, land use data, or other appropriate traffic forecasting methodologies; as agreed upon by the District 4 Planning and Environmental Management Office. Forecast and balance intersection turning movement volumes using the Department's latest approved tools such as TmTools and TURNS5, and according to the Department's Project Traffic Handbook.

Provide highly technical model application and model output evaluation services for both highway and transit facilities. These services may include, but are not limited to: model performance evaluation, demand forecasts for all transportation modes, model output post processing refinements, scripting analysis procedures, sub-area validation, and documentation.

In addition, the Consultant may also be required to provide services of applying modeling results for dynamic traffic simulation using Cube Avenue, matrix estimation using Cube Analyst, Synchro, CORSIM or other similar dynamic assignment and traffic simulation software for analysis and presentation. Forecasting transit ridership and bicycle/pedestrian volumes as well as analysis and planning of transit, bicycle and pedestrian facilities may also be required.

**b) TRAFFIC ANALYSIS**

Prepare and/or review corridor or interchange traffic operational studies such as level of service analysis, capacity calculations, and other transportation/traffic studies in accordance with the Highway Capacity Manual methodology and FDOT's Quality/LOS Handbook. The review and/or development of proposed Interchange Justification Reports (IJR), Interchange Modification Reports (IMR), or Interchange Operation Reports (IOAR) may be required following the State and Federal requirements and guidelines.

Perform existing, and future no-build and build conditions traffic operational analysis at different horizon years of the study roadways and intersections. Provide justification and documentation of all input factors such as peak hour factor (PHF), truck percentages, lane utilization factors, etc., used in the analysis. Provide engineering guidance on traffic and geometry mitigation measures to achieve an acceptable level of service or other performance measures as agreed upon by the Department.

Develop and utilize macroscopic, mesoscopic, or microscopic transportation models using such software tools as Cube, Cube Avenue, Synchro, CORSIM, VISSIM, or other travel demand and/or traffic operational analysis software tools to analyze and evaluate transportation facilities performance.

Conduct Intersection Control Evaluation (ICE) process as required.

**c) SAFETY ANALYSIS**

Obtain at least five years of crash data for transportation facilities to summarize and analyze historical crash patterns and evaluate mitigation options as part of the capacity driven alternatives. Crash data summary and analysis include the use of crash statistics, crash rates, and crash diagrams. The crash mitigation analysis may include the use of crash modification factors and comprehensive application of the Highway Safety Manual procedures.

Safety analysis for build alternatives should occur after evaluation of crash data to determine any existing safety deficiencies and appropriate corrective measures. Evaluation of existing safety can also include a Road Safety Audit (RSA), which is an examination of safety conditions of a road by an independent audit team. Safety analysis for build alternatives should analyze potential hazardous elements on the proposed project conditions and draw inferences based on interactions of these elements and users. Development of build alternatives must correct existing safety deficiencies.

**d) ACCESS MANAGEMENT**

Review the Florida Design Manual and the Department's State Highway System Access Management Classification System and Standards and determine their application to the project. Determine the proper access

classification and standard to be applied to the project and coordinated with the Districts' Access Management Engineer.

Present the proposed access management plan 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 if possible.

**e) DRAINAGE AND FLOODPLAIN ANALYSIS**

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. Additional drainage analysis may be necessary at intersections where transit stations are proposed.

Prepare a Pond Siting Report for the project in accordance to the Department's Stormwater Facilities Handbook.

Prepare a Location Hydraulics Report for the project in accordance with the PD&E Manual.

Meet with the District Drainage Engineer prior to finalizing the Drainage Design and Permitting Requirements for this project. This meeting should be held with sufficient time in the project schedule to make changes as deemed required by the Department. The consultant shall coordinate this meeting through the Departments project manager.

**f) GEOTECHNICAL COORDINATION**

The Consultant will be required to coordinate with the District Geotechnical Engineer (DGE) Office to obtain and provide all soil surveys and geotechnical information to the Department. A written request shall be made to the Project Manager stating the specific needs for soil and/or geotechnical information. The FDOT Project Manager shall be included on all correspondence and provided deliverables in a timely manner.

**g) ALTERNATIVE CORRIDOR DEVELOPMENT**

The Consultant will be required to prepare design concepts for alternatives under consideration. The designs should be prepared on a Department approved CADD software and follow the latest design standards and guidelines per the Department's Roadway Design office. The consultant shall determinate the appropriate context classification for the facility.

All design concepts shall incorporate Transportation Systems Management and Operations (TSM&O) improvements and multimodal bike and pedestrian improvements. TSM&O may include Intelligent Transportation Systems (ITS) devices and advanced traffic signal equipment as appropriate.

The Consultant shall apply the Department Intersection Control Evaluation (ICE) process during alternative development. The ICE activities consist of three stages; however, determining the selected intersection control strategy may not require all three stages. The Consultant shall be familiar with all three stages of the ICE process and conduct each stage as needed.

The Consultant shall identify any potential design exceptions and variations needed for the proposed alternatives. In addition, any structures being proposed shall be properly vetted and conceptualized by a Consultant staff specialized in structural design.

The CONSULTANT will evaluate the need for improvements, preservations, or modifications to the existing TSM&O system in relation to the alternatives being considered. This includes reviewing the existing as-built information provided by the DEPARTMENT, identifying impacts to the existing TSM&O infrastructure due to the other project work, identifying opportunities to preserve or enhance TSM&O infrastructure, and developing a high-level cost estimate for the changes necessary to the infrastructure in order to meet project TSM&O needs and goals.

The CONSULTANT will coordinate with both the District TSM&O Engineer and the County Traffic Engineer concerning existing and proposed Intelligent Transportation Systems (ITS) and Advanced Traffic Management System (ATMS) infrastructure. The CONSULTANT will consider the presence of the ITS infrastructure when analyzing the traffic for the corridor, as well as any proposed improvements that may impact the underground fiber optic cable infrastructure and associated roadside devices.

**h) ROADSIDE DESIGN ALTERNATIVES**

Develop and analyze alternate conceptual design of alignment alternatives as described in the PD&E Manual. The No Build option shall be identified, as well as alternate conceptual designs associated. All alternatives considered and rejected should be documented in the project file.

The roadway design element must evaluate the existing roadway and roadside to identify the deficiencies or items to be improved to current design standards. This includes but not limited to all typical section elements, horizontal & vertical geometry, lighting access management, drainage and bicycle/pedestrian facilities.

Identify any design variances or exceptions required as a result of alternatives that are developed. A plan shall be submitted for review by the FDOT District Design Engineer prior to the selection of viable alternatives. If the variance or exceptions remain in the plan, then the CONSULTANT will prepare the design variance/exception package as noted in the Florida Design Manual.

**i) TYPICAL SECTION ANALYSIS**

Develop conceptual typical sections for the Project alternatives addressing transportation needs and context. Typical sections must consider Context Sensitive Classification and Complete Street approaches. These will include typical sections meeting design standards, and identification of any design variation or exceptions needed to minimize right of way. The typical section for the preferred alternative will be signed and sealed by the Consultant.

### **3. COMPARATIVE ANALYSIS OF ALTERNATIVES**

- a) **COMPARATIVE ANALYSIS AND EVALUATION MATRIX**  
Prepare a matrix to compare the impacts and costs of the alternatives evaluated, with a recommendation of the most viable alternative(s) presented to the Department for consideration.
- b) **SELECTION OF PREFERRED ALTERNATIVE(S)**  
Recommend a preferred alternative(s) incorporating both roadway and transit components based on a review and analysis of all engineering, environmental, and public involvement issues related to the project.
- c) **CONCEPTUAL DESIGN PLANS (PREFERRED)**  
Finalize conceptual plans for the preferred alternative.
- d) **IDENTIFY CONSTRUCTION SEGMENTS**  
Determine feasible segments for construction projects within the project limits with consideration to MPO priorities, budget, and coordination with other projects, priority needs, and maintenance of traffic.
- e) **VALUE ENGINEERING**  
Participate in a Value Engineering Study that would be conducted by a multi-disciplined team of personnel whose purpose will be to consider value improvements to proposed concepts and designs.  
  
VE team recommendations concerning modified or additional concepts will continue forward to the alternatives analysis phase of the PD&E Study following approval by District Management.
- f) **COST ESTIMATES**
  - (1) **CONSTRUCTION**  
Develop construction cost estimates and updates for design alternatives. The cost estimates are to be developed using the Department's Long-Range Estimating (LRE) program. The cost estimates must be updated on a regular basis to reflect unit price increases and refined to reflect changes in the alternatives as needed. A Cost Risk Assessment may also be required to assist in the development of the Construction Cost Estimates.
  - (2) **RIGHT-OF-WAY**

Prepare maps and identify parcels for the Department's staff to complete the costs for right of way acquisition and cost estimates for relocations & business damages.

**(3) BENEFIT-COST ANALYSIS**

Perform benefit-cost analysis, net-present-value, and/or return on investment calculation to be used in the decision making and project prioritization.

**D. ENVIRONMENTAL ANALYSIS AND REPORTS**

The appropriate level of environmental analysis shall be coordinated and performed as outlined in the PD&E Manual and the following references. The Consultant will also be responsible for conducting Environmental Impact Reviews. This will include tasks such as: addressing projects as assigned, conducting re-evaluations, and entering updated information and documents into computer systems such as the Department's Electronic Review Comments (ERC) program, Project Suite Enterprise, and StateWide Environmental Project Tracker (SWEPT).

Tasks will also be assigned to assist the Department in preparing environmental surveys, data collection, analysis and documentation as Pre-Work. Utilization of the Programming Summary Report and graphical information from the Environmental Screening Tool (EST) available at <https://www.fla-etat.org/est/>, or other appropriate databases is required. This information will be used to prepare resource maps and other graphical presentations as needed.

The level of effort for the following work activities shall be commensurate with the level of impact identified in the Final Programming Summary Report. If the Summary Degree of Effect from the Final Programming Summary Report is "No Involvement", or "None", for an activity, the activity will be marked N/A in the Scope of Services. The following information will be documented subsequent reports as well as in the Preliminary Environmental Discussion (PED) as part of the Advanced Notification Package prior to the ETDM screening event.

**1. SOCIOCULTURAL EFFECTS**

**a) LAND USE CHANGES**

In accordance with the PD&E Manual, the following must be documented:

- Data regarding past and present land usage as well as future land use plans, proposed developments, guidelines; municipal comprehensive plans, and observed growth trends
- Existing and future land use map(s) indicating at a minimum, residential, commercial, industrial, public, agricultural, and undeveloped areas adjacent to the alignment.
- Data on recent or active development activity along the highway corridor, especially preliminary and filed plats which have the potential for dedication of highway right of way and for possible evaluation during the Noise Study.

**b) SOCIAL (COMMUNITY CHARACTERISTICS)**

Collect the data, complete the Community Characteristics Inventory (CCI), and perform the analysis necessary to determine Title VI/VIII involvement, evaluate community cohesion, and community services. This will be completed in accordance with the PD&E Manual.

- c) **ECONOMIC IMPACTS**  
Evaluate and document the potential economic impacts of the project in accordance with the PD&E Manual. This will also document how public comments, ideas and concerns were addressed during the PD&E phase of a project.
- d) **MOBILITY**  
Analyze the mobility of all proposed alternatives in accordance with the PD&E Manual.
- e) **AESTHETICS**  
Analyze the aesthetic impacts of all proposed alternatives in accordance with the PD&E Manual.
- f) **RELOCATION POTENTIAL**  
Identify locations which may require relocation and provide these locations to the Department for further analysis.

## 2. **CULTURAL RESOURCES**

- a) **ARCHAEOLOGICAL AND HISTORIC RESOURCES**  
Collect and document data, as necessary, to completely analyze the impacts to all archaeological and historic resources by all viable alternatives and conduct a Cultural Resource Assessment Survey as described in the PD&E Manual including the following:
  - Archaeology
  - Historic Sites
  - Florida Master Site Files
  - Pond Site Addendum
  - Cultural Resources Assessment Survey
  - Determinations of Eligibility
  - Case Study Report
  - Memorandum of Agreement
- b) **SECTION 4(F)**  
Identify and document all 4(f) protected resources and collect necessary data to completely analyze the impacts and prepare Determination of Applicability (DOA's) or other appropriate documentation; such as: Programmatic, demonisms 4(f)determinations, etc. for all viable alternatives and conduct a Cultural Resource Assessment Survey in accordance with the PD&E Manual.
- c) **NATURAL RESOURCES**

**(1) WETLANDS AND ESSENTIAL FISH HABITAT**

Complete a wetland and impact analysis in accordance with the PD&E Manual. This part of the environmental permitting process could include the development of a Conceptual Mitigation Plan.

**(2) WATER QUALITY**

In accordance with the PD&E Manual.

**(3) SPECIAL DESIGNATIONS**

Complete the following items in accordance with the PD&E Manual, if necessary:

- Outstanding Florida Waters
- Wild and Scenic Rivers
- Aquatic Preserves
- Coastal Barrier Resources

**(4) WILDLIFE AND HABITAT**

Complete an Endangered Species Biological Assessment report in accordance with the PD&E Manual and the results of the Programming Screen Summary Report.

**(5) IDENTIFY PERMIT CONDITIONS**

Identify permit conditions and type of permits required. This task includes reviewing maps and data to determine permit related information for the project or add scope to identify what tasks should be done in accordance with agreements with the permitting agencies.

Meetings with the permitting agencies which have jurisdiction may be necessary. The Consultant shall provide notice to the District Environmental Permit Coordinator and the District Project Manager of all scheduled meetings and provide meeting minutes for each meeting conducted and provide a detailed account of all key permitting requirements that will need to be addressed during the final design phase and any commitments agreed upon with the agencies.

Research existing files with each permitting agency with jurisdiction to determine if an existing permit has been issued. The District Environmental Permit Coordinator and the District Project Manager should be furnished with copies of any existing permits.

Submit the appropriate permit applications in accordance with the Department's ETDM initiative.

**(6) FARMLANDS**

Determine if a farmland evaluation is required by any proposed alternatives. If so, perform the evaluation in accordance with the PD&E Manual.

**d) PHYSICAL IMPACTS**

**(1) NOISE**

Collect the data necessary and perform the noise impact analysis utilizing methodology approved by the Project Manager in coordination with the District 4 Noise Specialist. Complete an evaluation in accordance with the PD&E Manual.

**(2) AIR QUALITY**

Collect the necessary data and perform the air quality impact analysis for the proposed alternatives as described in accordance with the PD&E Manual.

**(3) CONSTRUCTION IMPACT ANALYSIS**

Analyze the construction impacts of all proposed alternatives in accordance the PD&E Manual.

**(4) CONTAMINATION**

Identify areas for potential contamination impacts and document findings in the Preliminary Environmental Discussion.

**3. ENVIRONMENTAL REPORTS**

The prepared Environmental Documents 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 preparation of the Environmental Documents shall be coordinated with the District Environmental Administrator or a representative from the District Environmental Management Office. The task of documentation includes the preparation of draft and interim reports for review and comment by the District Environmental Management Office and OEM prior to producing final reports and documents.

**a) ENVIRONMENTAL CLASS OF ACTION DETERMINATION**

A Class of Action Determination is required for all Federal actions and establishes the level of environmental documentation require to comply with the National Environmental Policy Act (NEPA) and the regulations of the Council on Environmental Quality (CEQ). The Class of Action will be determined on a project in accordance the PD&E Manual. Minor classes of action will be prepared such as: Programmatic Categorical Exclusions (PCE), Categorical Exclusions Type 1, and Non-Major State Actions as applicable.

- b) **ENVIRONMENTAL ASSESSMENT (EA)**  
Prepare the EA after the Programming Summary Report is completed in the Efficient Transportation Decision Making (ETDM) process. In accordance with the PD&E Manual.
- c) **FINDING OF NO SIGNIFICANT IMPACT (FONSI)**  
Prepare the FONSI once the preferred alternative has been determined and all the environmental & mitigation impacts have been summarized. This will be completed in accordance with the PD&E Manual.
- d) **DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)**  
Prepare the DEIS after the Programming Summary Report is completed in the Efficient Transportation Decision Making (ETDM) process. This will be completed in accordance with the PD&E Manual.
- e) **FINAL ENVIRONMENTAL IMPACT STATEMENT (FEIS)**  
Prepare the FEIS after the District has completed the review and is ready for approval by the Federal Highway Administration (FHWA) or other Lead Federal Agency. This will be completed in accordance with the PD&E Manual.
- f) **TYPE 2 CATEGORICAL EXCLUSIONS (CE)**  
Prepare the Type 2 Categorical Exclusion after the Programming Summary Report is completed in the Efficient Transportation Decision Making (ETDM) process. The Environmental Determination Form will be completed to document the Categorical Exclusion as described in the PD&E Manual. All documentation will be provided as required by the PD&E Manual.

**E. DELIVERABLES**

Below is a list of common deliverables. When multiple originals are required, the Project Manager will identify in task work orders.

Engineering Reports:

Corridor Report  
Design Traffic Report  
Design Traffic Technical Memorandum  
Draft Preliminary Engineering Report  
Final Preliminary Engineering Report (Signed and Sealed)  
Feasibility Study Report  
Location Hydraulics Report  
Drainage/Pond Siting Report  
Conceptual Design Roadway Plan Set  
Geotechnical Report (Optional)  
Typical Section Package  
Value Engineering Information Report  
Design Variations and Exceptions Package (Optional)

Public Involvement

Public Involvement Plan (PIP)  
Public Hearing Transcript

Environmental Items:

Advance Notification Package (if applicable)  
Section 4(f) Evaluation (if applicable)  
Noise Study Report  
Air Quality Technical Memorandum  
Natural Resource Evaluation  
Cultural Resource Assessment Survey  
Programmatic Categorical Exclusion  
Categorical Exclusion Type 1  
Categorical Exclusion Type 2  
Environmental Assessment  
Environmental Impact Statement  
Finding of No Significant Impact  
Draft Environmental Impact Statement  
Final Environmental Impact Statement  
Pre-Permit Application Package (Optional)  
Permit Application Package

Upon completion, deliverables will be provided to the Department in an organized manner, including all project files, maps, sketches, worksheets, and other materials used or generated.

**F. RESPONSIBILITIES OF THE DEPARTMENT**

The Department shall provide a Project Manager who shall be responsible for all coordination with the Consultant pertaining to all contractual matters, invoicing and reporting. The Department may also designate a manager for each Task Work Order who shall be responsible for working with the Consultant Project Manager to define the specific work to be performed and the schedule for completion of each task, the Consultant staffing to be provided, and the cost. The Department Project Manager shall be responsible for approval of any additional staffing to be provided including additional consultant staff and shall give approval of all products and services.

The Department shall approve, prior to the initiation of any tasks described in this exhibit, a specific Task Work Order defining the work to be accomplished and the total reimbursement due the Consultant. The Task Work Order shall specify the Department Task Work Order Manager, when it is different from the Project Manager.

The Department shall furnish, without charge, the following services and data to the Consultant for the performance of the services requested:

- i. All criteria and full information as to the Department's requirements for the Consultant's services including objectives, constraints, budgetary limitations and time restraints.
- ii. All Department rules, policies, procedures, standards and other information applicable to the services.
- iii. All drawings, specifications, schedules, reports and other information prepared by and/or for the Department by others which are available to the Department and which the Department considers pertinent to the Consultant's responsibilities described herein.

Computer access (mainframe and personal) if needed by Consultant staff to perform assigned tasks. Specific computer access requirements will be specified in each individual Task Work Order.

**G. RESPONSIBILITIES OF THE CONSULTANT**

The Consultant shall provide an overall Project Manager, acceptable to the Department, who will be the primary point of contact with the Department for the scope, schedule, manpower coordination and completion of all Task Work Orders. The Consultant Project Manager shall appoint, with the concurrence of the Department Project Manager and Department Individual Task Work Order Managers, a Consultant Individual Task Work Order Manager. The Consultant Project Manager shall meet with the Department staff on a regular basis as requested by the Department Project Manager and shall provide monthly progress reports in a mutually agreeable format, by Task Work Order, no later than two weeks after the end of the billing cycle of each month unless agreed to by the Department Project Manager. These progress reports shall be the basis for evaluation and processing of invoices for payment, unless otherwise stated in the Task Work Order.

The Consultant shall provide and maintain an up-to-date list of staff with agreed-to classifications and approved salaries (subject to the contract Exhibit "B") that would be available to be assigned to specific Task Work Orders. No consultant staff, except those specifically identified in a Task Work Order or those specifically agreed to by the Department Project Manager, shall charge time to that particular Task Work Order. The Consultant shall provide and maintain a list of staff for this contract.

Consultant must request approval from the Department's Project Manager for any modifications or additions to the list of available staff prior to the initiation of any work by that individual. If applicable, new job classifications may be added to the contract via contract amendment. Consultant shall submit a copy of the resume and payroll register when staff is added.

The Consultant shall provide sufficient staff, either the specific staff person requested or acceptable staff at defined levels of expertise as agreed to by the Department's Task Work Order Manager, in a timely manner to complete all assigned work. If, at any time, the Department Task Work Order Manager determines that the number or expertise of particular staff assigned to a specific task is inadequate, the Department Project Manager and the Task Work Order Manager shall coordinate with the Consultant Project Manager to ensure adequate staff with the proper level of expertise is made available to ensure the timely completion of the work.

The Consultant shall provide all agreed to services, products and documentation within the required time schedule as defined in the individual Task Work Order.

The Consultant shall provide monthly invoices for work performed within 15 days of the end of the month for work performed during the preceding month, unless specifically agreed to by the Department Project Manager. A final invoice for "operating budget" Task Work Orders shall be provided no later than 30 days after the Task Work Order terminates.

The Consultant shall verify to the Department Project Manager that all computers used by Consultant staff have a resident anti-virus program acceptable to the Department.

The Consultant shall ensure that all documents and support forms have been prepared on a compatible hardware using software approved by the Department's Project Manager

and stored as specifically agreed to in an individual Task Work Order. A sequential naming convention should be applied to the files and documentation provided to the Department. Specific project documentation requirements will be specified in the respective Task Work Orders.

#### **H. COMPUTING REQUIREMENTS**

The Consultant shall develop concept plans and alternatives designs utilizing Computer Aided Drafting and Design (CADD) systems. It is the responsibility of the Consultant to meet the CADD production requirements in the **FDOT CADD Manual**. The Consultant must submit final documents and files as described in the **CADD Manual**. Additional related information is found in the **Florida Design Manual**. Concept plans and alternatives designs shall also be displayed using Google Earth-ready KMZ files. The concept plans must have both existing and proposed engineering and environmental features. The Department is not responsible for providing proprietary software packages to the Consultant. Computations or graphics based on computer programs other than the Department's must conform to the formats approved by the Department.

Upon Department approval, the Consultant may also use computer tools and software to conduct some of the engineering and environmental analyses. The Consultant must have access to the Department's Electronic Review Comments (ERC) program, Project Suite Enterprise (PSEE), Environmental Screening Tool (EST), and StateWide Environmental Project Tracker (SWEPT). Prior to using these tools, the Consultant must agree to provide original electronic files in a format and standard consistent with the Department's policies and procedures.

For electronic submittals of large files and deliverables, the Consultant must use the FDOT File Transfer Application or other Department Office of Information System (OIS) approved application.

All electronic files must be scanned for viruses prior to submitting to the Department. Failure to scan for viruses may result in a lower Consultant work performance evaluation.

The Consultant is required to have access to the following software for use as needed, including:

- A. Latest version available of the Highway Capacity Software, Synchro and SimTraffic, SIDRA, CORSIM, VISSIM, LOSPLAN
- B. FSUTMS and CUBE/Voyager on Windows Operating Systems
- C. ESRI's ArcView, and/or ArcINFO Geographic Information Systems
- D. Microstation CADD/Geopak
- E. Any other traffic operations or planning software as indicated in the individual Task Work Orders

#### **I. OWNERSHIP OF WORKS AND INVENTIONS**

The Department shall have full ownership of any works of authorship, inventions, improvements, ideas, data, processes, computer software programs, and discoveries (hereafter called intellectual property) conceived, created, or furnished under this Agreement, with no rights of ownership in Consultant or any subconsultants/subcontractors. Consultant and subconsultants/subcontractors shall fully and promptly disclose to the Department all intellectual property conceived, created, or

FM # 417073-7-22-01 and 421832-6-22-01  
June 8, 2026

furnished under this Agreement. Consultant or subconsultant/subcontractor hereby assigns to the Department the sole and exclusive right, title, and interest in and to all intellectual property conceived, created, or furnished under this Agreement, without further consideration. This Agreement shall operate as an irrevocable assignment by Consultant and subconsultants/subcontractors to the Department of the copyright in any intellectual property created, published, or furnished to the Department under this Agreement, including all rights thereunder in perpetuity. Consultant and subconsultants/subcontractors shall not patent any intellectual property conceived, created, or furnished under this Agreement. Consultant and subconsultants/subcontractors agree to execute and deliver all necessary documents requested by the Department to affect the assignment of intellectual property to the Department or the registration or confirmation of the Department's rights in or to intellectual property under the terms of this Agreement. Consultant agrees to include this provision in all its subcontracts under this Agreement.