

**TAMPA-HILLSBOROUGH COUNTY
EXPRESSWAY AUTHORITY**

ADDENDUM NO. 2

FOR

EXPANDED LETTER OF INTEREST (ELOI)

PD&E WHITING STREET

ELOI No. O-00519

ADDENDUM NO. 2

PROJECT NAME: **PD&E WHITING STREET** ~ DATE OF ADDENDUM: **3/27/19**

TO ALL PROSPECTIVE FIRMS:

PLEASE NOTE THE FOLLOWING ADDENDUM TO THE ELOI:

The following are changes to the Environmental Reports section of the ELOI:

3.24 Categorical Exclusion Type II

Prepare a Type II Categorical Exclusion in accordance with ~~*Part 1, Chapter 2 of the PD&E.*~~

Not applicable.

[See attached revised 3/27/19, Scope with highlighted revisions]

Firms MUST acknowledge receipt of this Addendum by signing, dating and returning the completed Acknowledgement of Receipt of Addendum form **with the Firm's proposal**.

All other items, conditions, and specifications in the ELOI document not specifically changed by the Addendum remain unchanged.

Firms failing to acknowledge the addendum issued may be deemed non-responsive to the ELOI. Please send all questions to THEA's Procurement Manager, Man Le, via email at Man.Le@tampa-xway.com.

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDUM and/or LETTER OF CLARIFICATION

Were Addenda issued on this Solicitation?

Yes

No

Were Letter of Clarification issued on this Solicitation?

Yes

No

I (We) hereby acknowledge receipt of the following Addendum/Addenda issued in reference to this solicitation by listing the Addenda by number, date and signing the form:

Addendum _____ Date: _____

Addendum _____ Date: _____

Addendum _____ Date: _____

Letter of Clarification _____ Date: _____

Letter of Clarification _____ Date: _____

Letter of Clarification _____ Date: _____

BIDDER:

By: _____

Authorized Signature

Printed Name of Signer

Title of Signer

Date Signed

[END OF ACKNOWLEDGMENT OF RECEIPT FORM]

Scope of Services ~ ELOI O-00519

Tampa Hillsborough Expressway Authority
Project Environmental Impact Report (PEIR)

PROJECT DESCRIPTION AND PURPOSE AND NEED:

Project Information

Project Name: Whiting Street Ultimate – Whiting Street and Washington Street Extension and Ramps
Project Development and Environment Study

Project Limits: Whiting Street from Jefferson Street to North Meridian Avenue and Washington Street from Nebraska Avenue to North Meridian Avenue
Including Reconfiguration of Selmon Expressway on-ramps at Jefferson Street and off-ramps at Florida Avenue and Channelside Drive.

County: Hillsborough

Tampa Hillsborough Expressway Authority Number: HI-0141

Project Manager: Christina Kopp

The Tampa Hillsborough Expressway Authority (THEA) intends to conduct a Project Development and Environment (PD&E) Study to evaluate the needs, costs, and effects of extending Whiting Street and Washington Street and reconfiguring the on-ramps of the Selmon Expressway at Jefferson Street and off-ramps at Florida Avenue and Channelside Drive. The study will consider extensions of Whiting Street and Washington Street to North Meridian Avenue and include improvements and re-alignment of the existing segment of Whiting Street from Jefferson Street to North Brush Street. The extension will provide a direct connection of the Whiting Street corridor to Meridian Avenue which will improve traffic flow and safety for all transportation modes, increase capacity on the adjacent street network, and offer additional connections within the street network.

The study will also evaluate reconfiguring the on-ramps to the Selmon Expressway at Jefferson Street and the off-ramps at Florida Avenue and Channelside Drive. It is anticipated that the Florida Avenue off-ramp will be widened to two lanes, the Channelside Drive off-ramp will be removed and the new Whiting Street off-ramp will extend from the Selmon Expressway near Morgan Street to Nebraska Avenue and intersect with the new Whiting Street alignment to provide a direct connection from the Selmon Expressway to improve safety, traffic circulation and access to Whiting Street and North Meridian Avenue. It is preferred that right of way impacts for this project are minimized.

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

This Exhibit forms an integral part of the agreement between the Tampa Hillsborough Expressway Authority (hereinafter referred to as the **AUTHORITY**) and the **CONSULTANT** relative to the transportation facility described as follows:

AUTHORITY Project Number: HI-0141

DESCRIPTION: Whiting Street from Jefferson Street to North Meridian Avenue
And Washington Street from Nebraska Avenue to North Meridian Avenue
including reconfiguration of Selmon Expressway on-ramps
at Jefferson Street and off-ramps at Florida Avenue and Channelside Drive

PURPOSE: The purpose of this Exhibit is to describe the scope of work and the responsibilities of the **CONSULTANT** and the **AUTHORITY** relating to Preliminary Engineering (Conceptual Design) and Environmental Studies necessary to comply with the Florida Department of Transportation (**FDOT or DEPARTMENT**) procedures and obtain **AUTHORITY** approval of proposed improvements of this transportation facility.

The Project Development Process will follow the **DEPARTMENT's** most recent version of the publication titled *Project Development and Environment Manual (PD&E Manual)* (650-000-001). The Scope of Services portion of this **CONSULTANT** contract will refer to this publication as the *PD&E Manual*. The **CONSULTANT** will complete all tasks identified in this scope of work in accordance with the *FDOT PD&E Manual* unless otherwise stated.

The *PD&E Manual* incorporates all requirements of Federal law, executive orders, and applicable State laws and regulations including Chapter 339.155 of Florida Statutes and Chapter 14 of the Florida Administrative Code (FAC). The **CONSULTANT** will prepare all project documentation in accordance with the *PD&E Manual* and therefore, in compliance with all applicable State and Federal laws, executive orders, and regulations as applicable.

The **CONSULTANT** will perform engineering services required for PD&E studies including consideration of all social, economic, environmental effects, and mitigation as required by the *PD&E Manual* along with the required environmental documents, engineering reports, preliminary plans, public involvement, and 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 which of the items of work will be the responsibility of the **CONSULTANT** or the **AUTHORITY**.

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

STUDY OBJECTIVE

The **CONSULTANT** will study the extension/new alignment of the Whiting Street corridor, extending to North Meridian Avenue, including improvements and realignment of the existing portion of the Whiting Street corridor between Jefferson Street and Brush Street. Additionally, the extension of Washington Street from Nebraska Avenue to North Meridian Avenue. The **CONSULTANT** will also evaluate reconfiguring the on-ramps to the Selmon Expressway at Jefferson Street and the off-ramp at Florida Avenue, removing the off-ramp at Channelside Drive and adding a new off-ramp to Whiting Street. The project is anticipated to use a 30-month schedule and to be completed as a Project Environmental Impact Report (PEIR).

STUDY REQUIREMENTS AND PROVISIONS FOR WORK

Governing Regulations

Services performed by the **CONSULTANT** will comply with all applicable **FDOT** Manuals and Guidelines. **FDOT's** Manuals and Guidelines incorporate, by requirement or reference, all applicable State and Federal regulations. The **CONSULTANT** understands that the American Association of State Highway and Transportation Officials (AASHTO) criteria will apply as incipient policy. The **CONSULTANT** will use the current edition of the following **FDOT** Manuals and Guidelines, as applicable, to perform of this work:

- Florida Statutes
- Florida Administrative Codes
- Applicable Federal Regulations, U.S. Codes and Technical Advisories
- Project Development and Environment Manual (650-000-001)
- Efficient Transportation Decision Making (ETDM) Manual (650-000-002)
- Sociocultural Effects Evaluation Handbook
- Public Involvement Handbook
- Plans Preparation Manual Volume 1 (625-000-007) & Volume 2 (625-000-008)
- FDOT Design Manual
- Interchange Access Request Users Guide
- Standard Plans (625-010-003)
- 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) (625-000-015)
- Guide for the Design of Bicycle Facilities (AASHTO)
- AASHTO Guide for the Development of Pedestrian Facilities
- AASHTO Highway Safety Manual
- Right-of-Way Mapping Handbook (550-030-015)
- Right-of-Way Procedures Manual (575-000-000)
- Location Survey Manual (550-030-101)
- Soils and Foundation Handbook
- EFB User Guide
- Drainage Manual (625-040-002)

- FDOT Drainage Design Guide
- Aerial Survey Standards for Transportation
- Structures Design Guidelines (625-020-154)
- CADD Manual (No. 625-050-001)
- CADD Production Criteria Handbook (CPCH)
- FDOT Quality/Level of Service Standards Handbook Software & Tables
- FDOT Standard K-Factor
- Project Traffic Forecasting Procedure (525-030-120)
- FDOT Highway Landscape Guide
- Basis of Estimates Manual (600-000-002)
- FDOT Traffic Engineering Manual
- FDOT Accessing Transit Design Handbook

Liaison Office

The **AUTHORITY** will designate a Project Manager who will be the representative of the **AUTHORITY** for the Project. Although the **CONSULTANT** will seek and receive advice from various state, regional, and local agencies, the final direction on all matters of this project remain with the **AUTHORITY**'s Project Manager.

Key Personnel

The **CONSULTANT** will use key personnel identified in the proposal to perform and direct the work of this project. Any changes in the indicated personnel will be subject to review and approval by the **AUTHORITY**.

Meetings and Presentations

The **CONSULTANT** will attend a Notice to Proceed Meeting with **AUTHORITY** representatives where the **AUTHORITY** will provide relevant project information and procedures for administering the contract. The **CONSULTANT** and staff will also be available with no more than five business days' notice to attend meetings or make presentations at the request of the **AUTHORITY**. The **AUTHORITY** may hold such meetings and presentations at any hour between 8:00 A.M. and 12:00 midnight on any day of the week. The **AUTHORITY** may call on the **CONSULTANT** to provide maps, press releases, advertisements, audiovisual displays, and similar material for such meetings.

Correspondence

The **CONSULTANT** will provide copies of all written correspondence between the **CONSULTANT** and any party pertaining specifically to this study to the **AUTHORITY** for their records within one week of the receipt of said correspondence.

Submittals

The **CONSULTANT** will provide electronic and hard copies of the required documents as listed below. These are the anticipated printing requirements for the project. The **CONSULTANT** will

use this tabulation for estimating purposes, and the Project Manager will determine the number of copies required prior to each submittal.

<u>Public Involvement:</u>	Copies:
Public Involvement Plan	02
Advance Notification Package	02
Public Hearing Transcript	02
Comments and Coordination Package	02

<u>Engineering Items:</u>	Copies:
Design Traffic Technical Memorandum / Report	03
Draft Preliminary Engineering Report	03
Preliminary Engineering Report (Signed and Sealed)	03
Location Hydraulics Report	02
Drainage/Pond Siting Report	02
Geotechnical Report (if applicable)	03
Conceptual Design Roadway Plan Set	03
Typical Section Package	03
Design Variations and Exceptions Package	03

<u>Environmental Items:</u>	Copies:
Sociocultural Effects Report	03
Cultural Resource Assessment	05
Natural Resource Evaluation (NRE) Memorandum	05
Contamination Screening Evaluation Report	03
Noise Study Report	03
Air Quality Report	03

Upon completion of the study the **CONSULTANT** will deliver to the **AUTHORITY**, in an organized manner, all project files, maps, sketches, worksheets, and other materials used or generated during the study process. The **CONSULTANT** will also submit all documents as PDF files.

Computer Automation

The **CONSULTANT** will develop this project utilizing Computer Aided Drafting and Design (CADD) systems. It is the responsibility of the **CONSULTANT** to meet the requirements in the ***FDOT CADD Manual***. The **CONSULTANT** will submit final documents and files as described therein. The **CONSULTANT** will find additional related information in the ***FDOT Design Manual***.

The **CONSULTANT** will scan all computer disks and drives for viruses prior to submitting files to the **AUTHORITY**. 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 ongoing and/or planned projects that may affect this study. The **CONSULTANT** must coordinate with projects teams for the following projects:

1. #O-00918 - the Twiggs Street Improvements Design-Build Project (add right-turn lane)
2. #O-01018 – South Selmon PD&E (capacity improvements)
3. Water Street development activities

The **CONSULTANT** will 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.

The **CONSULTANT** will include the **AUTHORITY'S** Project Manager in coordination activities.

Optional Services

At the **AUTHORITY'S** option and authorization, the **CONSULTANT** may be required to perform certain unforeseen engineering, environmental, and/or public involvement services not currently covered in the scope of services for the PD&E study. Additionally, the **AUTHORITY** may request the **CONSULTANT** to provide final design and plans preparation services or conceptual design plans for design-build procurement. The **AUTHORITY** may request the **CONSULTANT** to provide expert witness services for right-of-way acquisition. The **AUTHORITY** will negotiate the fee for additional services with the **CONSULTANT** in accordance with the terms detailed in *Method of Compensation*, for a fair, competitive, and reasonable cost, considering the scope and complexity of the project(s). The **AUTHORITY** will execute a supplemental agreement adding the additional services in accordance with paragraph 2.0 of the **AUTHORITY'S** Standard Consultant Agreement.

1.0 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** will coordinate and perform the appropriate level of public involvement for this project as outlined in *Part 1, Chapter 11 of the PD&E Manual* and the *FDOT Public Involvement Handbook*.

The **CONSULTANT** will provide to the **AUTHORITY** drafts of all Public Involvement documents (i.e., newsletters, property owner letters, advertisements, handouts, exhibits, etc.) associated with the tasks outlined below for review and approval at least five business days prior to printing and/or distribution.

1.1 Public Involvement Program

The **CONSULTANT** will prepare, in accordance with *Part 1, Chapter 11 of the PD&E Manual*, a written Public Involvement Program (PIP) outlining each element of the public involvement process. The **CONSULTANT** will update and amend the PIP throughout the project development process. The plan indicates the basic public involvement approach the **CONSULTANT** will use for the project. The PIP will generally list the contact persons, media officials/agencies, and the means the **CONSULTANT** will use to involve them in the process. The PIP will also outline if bilingual materials and speakers are necessary for this project.

1.2 Public Involvement Data Collection

The **CONSULTANT** will be responsible for collecting public involvement data and preparing mailing lists early in the PD&E study. The mailing list should include:

- Affected or possibly affected parties
- Elected and appointed officials in the area (City, County, State) and community leaders
- Possible permit and review agencies
- Media (for press releases, advertisements, or any concerns)
- Persons or institutions expressing an interest in the project

Collection of public input occurs throughout the life of the project and requires maintaining files, newspaper clippings, letters, and direct contacts before, during, and after any of the public meetings. In addition to collecting public input data, the **CONSULTANT** will assist the **AUTHORITY** to prepare responses to public inquiries resulting from the public involvement process.

1.3 Notice of Intent

Not applicable.

1.4 Advance Notification

At the beginning of the project the **CONSULTANT** will prepare the Advance Notification and transmittal letter pursuant to *Part 1, Chapter 3 of the PD&E Manual*, as required.

1.5 Scheduled Public Meetings

The **CONSULTANT** will provide all support necessary for the **AUTHORITY** to hold or participate in various public meetings which may include, but not be limited to, the following:

- Alternatives Public Meeting
- Public Hearing

For any type of meeting the **CONSULTANT** will prepare and/or provide the following as necessary:

- Letters to public officials and agencies. The **AUTHORITY** will prepare the letters, insert them in envelopes, and address the envelopes. The **AUTHORITY** will pay for first class postage.
- Letters to property owners. 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 **AUTHORITY** will prepare the letters, insert them in envelopes, and address the envelopes. The **AUTHORITY** will pay for first class postage.
- Scripts for presentations and agendas.
- Handout materials.
- Graphics for presentations.
- Videos and renderings.
- Meeting equipment and setup and take down.
- The **CONSULTANT** will prepare legal and/or display advertisements. The **AUTHORITY** will pay the cost of publishing.
- The **AUTHORITY** will provide hosting services to conduct virtual meeting capabilities for small group meetings, the alternatives public meeting, and the public hearing, in addition to meeting site requirements.
- Letters for notification of elected and appointed officials and interested parties. The **AUTHORITY** will prepare the letters, insert them in envelopes, and address the envelopes. The **AUTHORITY** will pay for first class postage.
- News releases. The **CONSULTANT** will provide draft news release content to the **AUTHORITY** three to five days prior to meeting for review. The **AUTHORITY** will handle distribution to news media.
- Meeting notes. The **CONSULTANT** will provide summary notes of public and agency meetings to the **AUTHORITY** no later than five business days after each meeting.
- Briefing and debriefing of **AUTHORITY** staff regarding all public meetings related to this project.

The **CONSULTANT** will assist the **AUTHORITY** in the identification of potential meeting sites. The **AUTHORITY** will pay all costs for meeting site rental and insurance.

The **CONSULTANT** will attend the meetings with an appropriate number of personnel to assist the **AUTHORITY's** Project Manager.

It is estimated will be two public meetings for this project; one public alternatives meeting and one public hearing.

Alternatives Public Meeting/Workshop

The purpose of the Alternatives Public Meeting/Workshop is to present the public with the results of the study to date and obtain comments on design alternatives. There is a possibility that the citizens may suggest additional alternatives. It is anticipated there will be one workshop held for this project.

The **AUTHORITY** will advertise and conduct this workshop as an informational meeting. The **CONSULTANT** participation may be required for any portion of the presentation. The **CONSULTANT** will attend the workshop and prepare all necessary displays, maps, scripts, etc. The **AUTHORITY** will review and authorize all presentations (script and graphics), media releases, legal display advertisements, and general (mass) property owner letters.

A black-and-white, quarter-page legal advertisement announcing the meeting will be prepared and submitted to the **AUTHORITY** for review and approval. The **CONSULTANT** will have the advertisement published in the area newspaper(s) with the largest daily circulation. The **AUTHORITY** will make notification to elected and appointed officials by letter on the **AUTHORITY**'s stationery 14 days before the workshop.

The **CONSULTANT** will write a letter on the **AUTHORITY**'s stationery announcing the workshop to all property owners whose property lies within 300 feet, in whole or in part, of the centerline of any design alternative, 10 days prior to the workshop. The **CONSULTANT** will prepare and submit news releases for publication during the week of the workshop.

The **CONSULTANT** will develop the workshop format for approval by the **AUTHORITY**. The **CONSULTANT** will prepare displays or wall graphics for use during the workshop. These include typical sections, aerials, renderings, charts and graphs, as needed. The **CONSULTANT** will write and use a PowerPoint presentation and script in association with the graphics used in the PowerPoint presentation produced by the **CONSULTANT**. The **CONSULTANT** will prepare a project brochure for distribution at the workshop.

The **CONSULTANT** will handle meeting equipment setup and take down by staff members familiar with audiovisual equipment and the services available at the workshop site. The **CONSULTANT** will brief staff, who will be on hand during the workshop, before the workshop to make sure they are up to date on the project and understand the study well enough to discuss and answer questions from the public. Conducting the workshop will take knowledgeable staff and will require enough staff members to handle the crowd anticipated for the workshop. The **CONSULTANT** will have staff available for some time before and after the set hours of the workshop to maintain public contact or for media interviews, etc. All audiovisual equipment costs and facility rental costs are the responsibility of the **AUTHORITY**.

Identification of issues brought up at the workshop is an integral part of the Workshop Debriefing Process, which all **CONSULTANT** staff members taking part in the workshop process will attend. The **CONSULTANT** will identify issues from the workshop and determine their significance. The **CONSULTANT** will determine if the issues are valid enough for further consideration or if they have elements which may require further consideration. Addressing the issues and responding to them is also an integral part of the workshop process. The **CONSULTANT** will be responsible for managing and preparing draft responses to comments at the workshop for the **AUTHORITY**'s review and approval.

1.6 Other Unscheduled Public and Agency Meetings

In addition to scheduled public meetings, the **CONSULTANT** may be required to participate in other meetings with the public, elected officials, special interest groups, homeowner's associations, or public agencies. The **CONSULTANT**'s participation during the meeting will

include, but not be limited to, technical participation, note taking, and summarizing the meeting in a memo for the file. It is estimated there will be up to 30 meetings during the study.

1.7 Public Hearing

The **CONSULTANT** will provide all support services listed in Sections 1.2 and 1.5 above and the following:

- Letters to public officials and agencies. After review by the **AUTHORITY**, the **CONSULTANT AUTHORITY** will prepare the letters, insert them in envelopes, and address the envelopes. The **CONSULTANT AUTHORITY** will pay for first class postage. At the **AUTHORITY**'s discretion, the **CONSULTANT** will e-mail letters in lieu of or in addition to those sent by U.S. Mail.
- Letters to property owners. The **CONSULTANT** will provide a list of names and addresses of the property owners from county tax rolls in a format specified by the **AUTHORITY**. The **CONSULTANT AUTHORITY** will prepare the letters, insert them in envelopes, and address the envelopes. The **CONSULTANT AUTHORITY** will pay for first class postage.
- The **CONSULTANT** will prepare and submit a black-and-white, quarter-page legal advertisement announcing any meeting to the **AUTHORITY** for review and approval. The **CONSULTANT AUTHORITY** will have the advertisement published in the area newspaper(s) with the largest daily circulation and must advertise the public hearing twice in a local, general circulation newspaper. The first notice will appear at least 15 days, but no more than 30 days, prior to the hearing date. The second advertisement will appear seven to 12 days prior to the hearing date.

Additional Items

- All elements of the multi-media presentation will include videos
- Graphics
- Displays of plans and reports for public display
- Brochures and handouts
- Public advertisements
- Court Reporter(s)
- Briefing and debriefing of **AUTHORITY** staff

The **CONSULTANT** will procure a verbatim transcript of the public hearing. The **CONSULTANT** will combine the transcript with any other comments received by the **AUTHORITY** as part of the public hearing record, affidavits of publication of legal ads, and provide copies of the transcript for the **AUTHORITY**'s use. The **CONSULTANT** will also prepare a summary of the public hearing to be included in the Comments and Coordination Package. The Public Hearing Transcript will be attached.

1.8 Location and Design Concept Acceptance

Not applicable.

1.9 Special Public Involvement Requirements

Identify and Inspect Public Meeting Sites

The **CONSULTANT** will assist the **AUTHORITY** in identifying and inspecting prospective sites for public meetings for suitability. The **CONSULTANT** will consider location, seating capacity, sound system, lighting, display space, and any other physical characteristics which would influence the viability of the site, including compatibility with the terms of the Americans with Disabilities Act of 1990. The **CONSULTANT AUTHORITY** will make all arrangements for use of the meeting facility for the Public Information Workshop(s) and Public Hearing including payment of any rental fees, if applicable.

Correspondence

Within three days of the receipt or mailing of all written correspondence between the **CONSULTANT** and any party pertaining to this project, the **CONSULTANT** will provide copies to the **AUTHORITY** for their records. The **CONSULTANT** will assist the **AUTHORITY** in managing and preparing responses to public inquiries that were a result of the public involvement process.

Newsletters

The **CONSULTANT** will prepare newsletters/e-newsletters at various key points during the project. The **CONSULTANT AUTHORITY will work with the AUTHORITY to** mail/email the newsletters to elected officials, property owners, businesses, and interested persons included on the mailing list compiled by the **CONSULTANT**. The **AUTHORITY** will review the mailing list prior to mailing. A maximum of three newsletters are anticipated.

Public Involvement Summary Report (PISR)

The **CONSULTANT** will prepare a Comments and Coordination Package, which will contain, at a minimum, all documentation of the public participation process accomplished throughout the project period. This package will summarize and respond to the comments received from Public Involvement, Advance Notification, coordination with local officials and agencies, public meetings, etc., as part of *Part 1, Chapter 11 of the PD&E Manual*. The Comments and Coordination Package will be submitted with and summarized in the PEIR.

Project Web Site

The **CONSULTANT** will coordinate with the **AUTHORITY's** web developer to create project web pages within the existing **AUTHORITY** website. The **AUTHORITY** expects this project to take approximately 30 months. The web pages will allow for input via email links and provide meeting information and report summaries for viewing and downloading. Limited graphics will be available due to the size and downloading time for many graphical applications. The **CONSULTANT** will coordinate with the **AUTHORITY's** web developer to provide content to update the web pages monthly.

The web site will contain a minimum of six pages:

- *Facts page (home page)* - The facts page will be a brief synopsis of the project and pictures of the project location. Additionally, key information will be posted on this page, such as, but not limited to, the **AUTHORITY**, start date, estimated completion date, estimated project cost, length and limits of the project, the **AUTHORITY's** Project Manager, the **CONSULTANT's** Project Manager, Project Map, etc.
- *Project Overview page* - The Project Overview page will contain an overview of the project with more detail than the facts page, a Consistency with Transportation Plan Goals and Objectives description, and the need and/or purpose for the project.
- *Project Development & Environmental (PD&E) definition page* - A link to the PD&E definition page will appear wherever the acronym PD&E appears on any of the subsequent pages. It will give a brief overview of the PD&E process.
- *Public involvement page* - The public involvement page will contain a general overview of proposed meetings. This will include Public Information Meetings, Public Workshops, Public Hearing, and any other meetings the **AUTHORITY** would like displayed on the site. The page will also contain an area where viewers may enter their name and address (both are to be mandatory inputs) to be added to the mailing database. The **CONSULTANT's AUTHORITY** Project Manager name and contact information will be listed with his/her **CONSULTANT's AUTHORITY** mailing, e-mail address, telephone number and fax number. **A copy will be sent to the AUTHORITY.**
- *Project schedule page* – The project schedule will contain a brief generalization of the milestones for this project. The **CONSULTANT** will take project milestones, as approved by the **AUTHORITY**, and place them on this page. The **CONSULTANT** will list milestones by seasons of the year rather than by actual dates. The **CONSULTANT** will reflect shifts in the schedule on this page as they occur.
- *Photograph page* – The photograph page will include a selection of photographs obtained from the project area with a short accompanying description of the location, direction, and other important details contained within the photo. The photograph page can be in the form of an index, slideshow, or map with hyperlinked photograph locations. **The CONSULTANT will provide photographs.**

Videos, Renderings

The **CONSULTANT** will prepare PowerPoint presentations, videos, and renderings for public meetings as needed. See Section 1.5 and 1.7 for presentation requirements related to the Public workshop and hearing.

The **CONSULTANT** will produce up to six photo renderings depicting the existing and proposed conditions at locations along the corridor to be determined by the **AUTHORITY**. The **CONSULTANT** will obtain or provide current photographs of the existing conditions, and upon approval from the **AUTHORITY**, create a 3D model of the preferred alternative to incorporate to show the proposed improvements. The 3D model should be of enough detail and accuracy that the viewer will see a realistic depiction of the project.

The **CONSULTANT** will produce one 3D animation for the length of the project corridor. This animation will visualize the preferred alternative for purposes of public display and presentation at the alternatives public workshop and public hearing. The final project deliverables will include a master DVD suitable for duplication and an internet ready video file suitable for posting on the project website. The animation will be of enough detail and accuracy, so the viewer can see a realistic depiction of the project from multiple viewpoints. The **CONSULTANT** will photograph the existing structures and landmarks along the project corridor to provide backgrounds for the animations. Updated aerial imagery will be obtained. Survey data will be used to determine building heights.

1.10 Quality Control

The **CONSULTANT** will be responsible for insuring that all work products conform to the **AUTHORITY**'s standards and criteria. This will be accomplished through an internal quality control process performed by the **CONSULTANT**. This quality control process will ensure that objective and qualified individuals who were not directly responsible for performing the initial work achieve quality through checking, reviewing, and surveillance of work activities.

Prior to submittal of the first invoice, the **CONSULTANT** will submit to the **AUTHORITY**'s Project Manager for approval the proposed method or process of providing quality control for all work products. The Quality Control Plan will identify the reviewed products, the personnel who perform the reviews and the method of documentation. The **CONSULTANT** will be responsible for inclusion of the Quality Assurance Checklist indicating the **CONSULTANT**'s quality control process was completed. The **CONSULTANT** will review all reports prepared by sub-consultants.

The **CONSULTANT** will include a QA/QC sheet in the front of all documents showing that the documents went through an internal review prior to submittal to the **AUTHORITY**.

2.0 ENGINEERING ANALYSIS AND REPORTS

The **CONSULTANT** will coordinate and perform the appropriate level of engineering analysis for this project as outlined in *Part 2, Chapter 3 of the PD&E Manual* and the following sections.

Upon notice to proceed, the **CONSULTANT** will begin preliminary assessments of the study corridor from an engineering standpoint. This activity consists of collecting various information and materials relative to the performance of engineering analysis within the study area. The information should include all data necessary to perform adequate evaluation of the location and design of a transportation facility. Utilizing the data collected, the **CONSULTANT** will perform the engineering analysis necessary to complete the project development process. The **CONSULTANT** will continue the engineering analysis throughout the duration of the project with consideration to the results of the environmental impacts analysis.

After selection of viable corridor(s), the **CONSULTANT** will develop and analyze alternate conceptual design alternatives. The development of the design alternatives will consider Context Sensitive Solutions. The **CONSULTANT** will develop and evaluate all viable alternatives to address the project needs. The **AUTHORITY** will then determine which viable alternative(s) to further evaluate through the public involvement process and environmental analysis. The **AUTHORITY** understands that the selection of the No-Build alternative is still a possibility.

2.1 Field Review

The **CONSULTANT** will conduct field work to collect data.

2.2 Survey

Aerial Photography

The use of Aerial Photography as a basis for plotting various data is 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 obtain and utilize the *most recent Hillsborough County* aerials from the Hillsborough County Property Appraiser's Office. Aerial photography will be prepared for the following uses at the noted scales:

Overall Project Location Map	1" = 100'
Drainage Map	1" = 100'
Concept Plans - Selmon Mainline & Ramps	1" = 50'
Concept Plans - Whiting & Washington Street	1" = 20'

Survey Coordination

Not applicable

2.3 Geotechnical

Soils

The **CONSULTANT** will review the United States Department of Agriculture, Geological Survey, Natural Resource Conservation Service (formerly Soil Conservation Service) Maps/GIS and summarize the findings.

Geotechnical Coordination

The **CONSULTANT** will coordinate with the **AUTHORITY's** General Engineering Consultant (GEC) geotechnical staff regarding project requirements, review of geotechnical data, and scheduling.

2.4 Traffic

Traffic Data

The **CONSULTANT** will obtain the available initial traffic data from the **AUTHORITY**, FDOT, City of Tampa and Hillsborough County. Such data may include:

- Current corridor traffic counts
- Historic traffic counts with K, D, and T factors
- Heavy vehicle traffic data (trucks (medium and heavy) and buses)

The **AUTHORITY** will furnish ramp and mainline counts at toll gantry collection sites. The **CONSULTANT** will coordinate with other agencies and if necessary will collect non-toll ramp and mainline roadway segment counts from other agencies based on availability.

The **CONSULTANT** will also perform vehicle turning movement counts (TMCs), if data is not already available, at the following study area intersections:

- Whiting Street/Jefferson Street
- Whiting Street/Nebraska Avenue
- Whiting Street/N Brush Street
- Jefferson Street/Selmon Expressway on-ramps
- Jefferson Street/Brorein Street
- Nebraska Ave/Brorein Street
- N Meridian Avenue/S Beneficial Drive/Channelside Drive
- Florida/Channelside Drive
- Florida/Morgan Street
- Brorein Street/Morgan Street
- Selmon off-ramp to Florida Avenue and Channelside Drive

The bi-directional 72-hour volume approach counts will be taken for each approach. Turn movement counts will be conducted for three hours in the AM peak period and three hours in the PM peak period on a day while the volume counts are taken.

- Traffic count locations will be submitted graphically to the **AUTHORITY** and approved prior to the counts being performed.
- Counts will only be done Monday, Tuesday, Wednesday, and Thursday. No counts will be allowed Friday. Counts taken on Monday will be separated from the data collected to properly analyze additional traffic attributed to Courthouse activities (jury selection) and special trip generators which occur on Mondays.
- All counts used in this study will be less than one year old.
- The **CONSULTANT** will obtain signal timings for all signalized intersections
- The **CONSULTANT** will obtain /collect Existing Roadway Characteristics Inventory including number of lanes, turning lane storage lengths, speed limits, lane width, presence of lighting, and sidewalks

- The **CONSULTANT** will collect operational data including travel time runs, queue lengths and average travel speed data
- The **CONSULTANT** will process collected data and prepare summaries

Transportation Methodology Statement

The **CONSULTANT** will develop a proposed traffic methodology statement prepared in accordance with the FDOT’s Project Traffic Forecasting Procedure (#525-030-120) for the **AUTHORITY**’s approval. The traffic methodology will include description of proposed data collection, analysis procedures and techniques, formats for documentation and reporting analysis results. The traffic analysis will also consider impacts due to railroad operations for existing, no-build and build scenarios during peak hour analysis. The traffic methodology statement will address all traffic/transportation related concepts within this Scope of Services in summary detail for presentation, submittal, and approval by the **AUTHORITY**.

Travel Demand Forecasting

The **AUTHORITY** will provide the **CONSULTANT** with an updated version of the Tampa Bay Regional Planning Model (TBRPM) that has been developed specifically for the **AUTHORITY**. The updated TBRPM will contain a 2015 Base Year as well as a 2030 Interim and 2040 Forecast Year model set. The 2015 TBRPM will be validated within the study limits, therefore no further updates will be necessary to the base and future year TBRPM model sets.

The **CONSULTANT** will conduct a cursory review of the 2015 base year TBRPM model to confirm that the model is replicating existing travel patterns in the study area of influence for the base year at a reasonable and acceptable level. In addition, a cursory review of the 2030 and 2040 interim and no-build model runs will be conducted to confirm the reasonableness of future traffic projections in the study area.

Future Traffic Forecasts

Based on the 2015, 2030 and 2040 model runs, the **CONSULTANT** will develop traffic forecasts for 2026, 2036, and 2046 alternative years for the No-Build alternative and Build alternatives.

Existing Traffic Volumes

Any daily counts collected or received will be converted to “normalized” average annual daily traffic (AADT) volumes by use of appropriate peak season factors. All traffic counts will be adjusted to reflect the existing conditions. Adjustments will be determined based on an analysis of historic traffic count data for the corridor. Information will be presented both in tabular and graphic formats. The **CONSULTANT** should develop all forecasts and verify all traffic volumes for reasonableness of results prior to finalizing the existing AADT and Directional Design Hourly Volumes (DDHVs).

The **CONSULTANT** will perform a check of all traffic count data collected for this project. This check will include, but not be limited to:

- Consistency of volume flows between count locations (no major drops or additions of traffic between count locations)

- Verify the counts are in line with the historical counts due to construction activity, if not in line with the historical counts, need to coordinate with the **AUTHORITY** to establish baseline conditions.

Existing Traffic Operations Analysis

Based on the data collection efforts, the **CONSULTANT** will develop traffic factors to use for the analysis and to develop DDHV. Peak hour factors (PHF) for the existing conditions analysis will be based on an average overall factor from the traffic count data collection. Future year peak hour factors may be modified based on guidelines as found in the Highway Capacity Manual (HCM) and other technical resources to reflect anticipated conditions.

The **CONSULTANT** will develop traffic characteristics (K, D, and T factors) in accordance with the *FDOT's Project Traffic Forecasting Handbook* (2014). A standard K factor may be approved for use in this project under direction of the **AUTHORITY**. The D factors will be developed based on the traffic count data collected. The **AUTHORITY** will accept rational adjustments to overall K and D factors for uniformity (adjusted values must maintain the minimum acceptable values as defined in the *Project Traffic Forecasting Handbook*). Traffic factors and characteristics will be summarized and provided in the report along with supporting documentation of adjustments.

Truck percentages and vehicle composition for daily and design hour volumes will be obtained from the **FDOT On-line** traffic count stations and compared to the counts collected for this study.

The **AUTHORITY** will provide the **CONSULTANT** with the VISSIM microsimulation model for the study area. The **CONSULTANT** will use provided VISSIM model to identify any changes be based on existing as built plans, aerial photography, photographs, signal timing parameters and existing traffic volumes and operational characteristics. Once the existing conditions simulation models are constructed, they will be calibrated to reasonably match the traffic operations observed in the field. The objective of model calibration is to obtain the best match possible between model performance and field measurements of performance. The existing conditions VISSIM traffic simulation models will be calibrated to existing three-hour AM and PM peak periods. Default traffic factors in the modeling software will be adjusted to obtain similar results to those conditions observed in the field to a reasonable degree of accuracy. This will be accomplished using methods and guidance from FDOT's Traffic Analysis Handbook and FHWA's Traffic Analysis Toolbox Volume III. The calibration effort will focus on the VISSIM model realistically reflecting the existing conditions (travel speed/travel time, delay and queues). The calibration parameters will be applied to the future conditions models.

Design Traffic

The **CONSULTANT** is responsible for developing the traffic projections for all study area roadways and intersections. The design traffic forecasts will be developed as described in Travel Demand Forecasting Task. The design traffic will be developed for analysis years 2026, 2036, and 2046 through the interpolation and extrapolation. Initially, the DDHVs will be developed for the No-Build Alternative. Once the Build Alternatives are identified, the DDHVs for the Build Alternatives will be developed.

The **CONSULTANT** will develop a future volume database for 2026, 2036 and 2046 No-Build and Build Alternatives. In addition, the **CONSULTANT** will use these volumes to summarize demand/LOS C for future noise modeling.

Future Traffic Operations Analysis

Based on the future year traffic forecasts for with and without the proposed improvement alternative scenarios, the **CONSULTANT** will analyze design hour and daily traffic conditions using the same applicable procedures used to determine existing levels of service. The Consultant will perform operational analyses Build scenarios for 2026, 2036 and 2046.

The **CONSULTANT** will note all roadway links and/or approaches/movements that do not operate in an acceptable manner. Information will be summarized in the report in graphic and tabular format.

Following, the **CONSULTANT** will identify and evaluate up to two proposed improvement alternatives necessary to maximize capacity, safety and to improve the operational performance within the study corridors to bring up to level or service standards.

The **CONSULTANT** will summarize the future year's operational analyses for AM and PM peak period conditions. Each of the future year analysis for 2026, 2036 and 2046 will include queue, travel time/speed, delay, as well as network-wide delay, travel time, and speed. Information will be summarized in the report in graphic and tabular format.

VISSIM Microsimulation Analysis

The following tasks are necessary to perform a traffic operational analysis of the Study Area using advanced microsimulation traffic models created by PTV's VISSIM software.

No-Build Conditions VISSIM Modeling & Analysis (2026, 2036, 2046 AM/PM)

VISSIM models will be developed with future 2026, 2036, 2046 AM and PM traffic conditions for the No-Build scenario. Each of the VISSIM traffic simulation models will be run for a minimum of three hours (not including network loading time) with multiple runs having different random number seeds due to the stochastic nature of traffic simulation models. A statistical test will be performed to determine the adequate number of simulation runs. The output from these model runs will then be summarized and averaged in tabular format. Measures of Effectiveness (MOEs) will include queues, delay for the intersections and network-wide output included total delay, total travel time, average speed, etc.

Build Conditions VISSIM Modeling & Analysis (2026, 2036, 2046 AM/PM)

VISSIM models will be developed with future 2026, 2036, 2046 AM and PM traffic conditions for the Build alternatives. Each of the VISSIM traffic simulation models will be run for a minimum of three hours (not including network loading time) with multiple runs having different random number seeds due to the stochastic nature of traffic simulation models. A statistical test will be performed to determine the adequate number of simulation runs. The output from these model runs will then be summarized and averaged in tabular format. MOEs will include queues, delay for the intersections and network-wide output included total delay, total travel time, average speed, etc.

Project Traffic Analysis Report (PTAR)

The **CONSULTANT** will prepare a Project Traffic Analysis Report (PTAR). The PTAR will document all data collection efforts, travel demand modeling and development of future traffic volumes and traffic operational analysis of the existing conditions, no-build conditions, and build alternatives. The design traffic will be prepared in accordance with the Project Traffic Forecasting Procedure (#525-030-120). The results of the operational analysis conducted for all viable alternatives will be documented and compared within the PTAR. The PTAR will include recommendations for the phased implementation of the improvement alternative(s) identified in his study.

2.5 Safety

Crash Data

The **CONSULTANT** will obtain available data from the **AUTHORITY's** database and local sources for various highway segments required. The **CONSULTANT** will obtain data for the previous five years. The data collected will include the number and type of crashes, crash locations, number of fatalities and injuries, and estimates of property damage and economic loss.

Safety Analysis

Based on information obtained from information gathered and presented in the purpose and need statement of the ETDM Programming Screening Summary Report, the **CONSULTANT** will identify project needs associated with the safety of existing facility by performing a Quantitative Safety Analysis in accordance with *Part 2, Chapter 2 of the PD&E Manual*.

2.6 Utilities & Railroads

Data Collection

The **CONSULTANT** will obtain information in accordance with *Part 2, Chapter 21 of the PD&E Manual*.

Analysis and Report

Based on coordination with the utility companies along the project the **CONSULTANT** will prepare a Utility Assessment Package as described in *Part 2, Chapter 21 of the PD&E Manual*. The **CONSULTANT** will also address impacts to existing and proposed railroads and document coordination as described in *Part 2, Chapter 21 of the PD&E Manual*.

2.7 Needs

Transportation Plans

Not applicable.

Planning Consistency Form

The **CONSULTANT** will prepare the Planning Consistency Form as described in *Part 2, Chapter 1 of the PD&E Manual*.

Analysis of Existing Conditions

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

Purpose and Need Statement

The **CONSULTANT** will update and verify the purpose and need for the project from the Programming Screen Summary Report as outlined in *Part 2, Chapter 1 of the PD&E Manual*.

2.8 Corridor Analysis

Not applicable.

2.9 Roadway Concepts

Existing Location Characteristics

The **CONSULTANT** will collect the existing location/roadway characteristics in accordance with *Part 2, Chapter 3 of the PD&E Manual*.

Typical Section Analysis

The **CONSULTANT** will develop all appropriate typical section alternatives for the project. These will include the **AUTHORITY**'s standard typical sections, and any typical sections that may result in minimizing right-of-way and incorporating context sensitive solutions.

Design Alternatives

The objective of the conceptual design and preliminary engineering analysis is to develop viable Design Alternatives based on standard engineering practice, which provides an appropriate intersection of design with social, economic and environmental impacts involved. If such a design is determined by the **CONSULTANT** to not be feasible, the **CONSULTANT** will recommend to the **AUTHORITY** the most feasible Design Alternative for the proposed facility.

The **CONSULTANT** will identify, develop, and analyze feasible Design Alternatives as outlined in *Part 2, Chapter 3 of the PD&E Manual*. The **CONSULTANT** will coordinate with the **AUTHORITY** on potential interchange needs at the ramp terminals prior to initiating development of any interchange improvements that may be required to address 2026, 2036 and 2046 level of service deficiencies. The purpose of this early coordination is to determine the feasibility of

concepts that address level of service needs and minimize environmental impacts. For each Design Alternative, the **CONSULTANT** will determine (as necessary):

- Horizontal and vertical alignment
- Typical sections
- Preliminary right-of-way costs
- Preliminary drainage to the extent of identifying required outfalls
- Existing and proposed utility location to the extent they affect the decision process
- Soils data
- Acreage involved
- Preliminary structure concepts and locations
- Location of detention/retention basins as may be required
- Other such design features may be pertinent.

The **CONSULTANT** will develop at least two roadway alternatives, including structural design, constructability and maintenance of traffic. These alternatives shall incorporate the previous analysis performed by THEA in coordination with proposed Water Street Tampa developments.

Access Management

The **CONSULTANT** will 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** will determine the proper access classification and standard to apply to the project.

The **CONSULTANT** will 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.

Identify Construction Segments

Not applicable.

2.10 Structures

Existing Structure Characteristics

The **CONSULTANT** will collect the existing structure characteristics in accordance with **Part 2, Chapter 3 of the PD&E Manual**.

Structures Typical Section Analysis

The **CONSULTANT** will develop all appropriate structural typical section 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, environmental impacts and incorporating context sensitive solutions.

Structure Design Alternatives

The **CONSULTANT** will develop a **minimum of two** alternatives. The **CONSULTANT** will follow *Part 2, Chapter 3 of the PD&E Manual* for the development, analysis, coordination, and reporting required for bridge development.

2.11 Drainage

Drainage and Floodplain Analyses

The **CONSULTANT** will perform preliminary drainage design 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.

Location Hydraulics Report

The **CONSULTANT** will prepare a Location Hydraulics Report for the project in accordance with *Part 2, Chapter 3 of the PD&E Manual*.

2.12 Concept Plans

Base Map

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

The **CONSULTANT** will plot, delineate, and label pertinent cultural, natural, and geopolitical features bordering the existing alignment on 1" =100', 1" =50' and 1" =20' aerial photography for subsequent use in the evaluation and development of the Conceptual Design Plans. The Corridor Base Map(s) must include, at a minimum:

- Number of lanes, signals, crosswalks, cross drains, existing intersections and drainage easements
- Street names and highway numbers
- All pertinent cultural and natural features and land use information
- Locate north arrow, scale, and aerial flight date at upper-mid portion of the plan sheets
- Existing and proposed rights of way and platted property lines
- All public and private development, as well as archeological or historic sites
- Significant features which could be impacted by the project, especially wetlands and endangered species habitat, floodplains and flood prone areas
- Hazardous material and petroleum use sites
- Establish logical termini considering directness, length and service
- Railroad right-of-way and utility easements
- All land use information (names of establishments, etc.); current zoning, future land use (per Comprehensive Plan) for vacant properties

- New data as it becomes available to keep the Corridor Base Map(s) up to date

Alternative Concept Plans

The **CONSULTANT** will prepare preliminary alternative concept plans. At a minimum, the concept plans should include existing and proposed right-of-way, elevations and structural features for the Design Alternatives.

Preferred Alternative

The **CONSULTANT** will finalize concept plans for the preferred alternative based on a review and analysis of all engineering, environmental and public involvement issues related to the project, including refinements from the public hearing.

2.13 Typical Section Package

The **CONSULTANT** will prepare the Typical Section Package in accordance with the **FDOT Design Manual** (excluding pavement design). The **CONSULTANT** will provide an approved typical section package to the **AUTHORITY** 45 days prior to the public hearing.

2.14 Design Exceptions and Variations

Identify Design Exceptions and Variations

The **CONSULTANT** will identify exceptions and variations for approval in accordance with the **FDOT Design Manual**.

Prepare Design Exception and Variation Package(s)

The **CONSULTANT** will prepare exception and variations package(s) for approval in accordance with the **FDOT Design Manual**. The **CONSULTANT** will provide an approved Design Exception and Variation Package to the **AUTHORITY** 45 days prior to the public hearing.

2.15 Multi-modal Accommodations

The **CONSULTANT** will coordinate with transit and local government officials to determine which multi-modal accommodations to study and/or evaluate as part of the project alternatives. This task only includes existing and planned multi-modal facilities.

2.16 Park-and-Ride Lots

Not applicable.

2.17 Maintenance of Traffic Analysis

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

2.18 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** will present their recommendations to the **AUTHORITY** for consideration.

2.19 Selection of Preferred Alternative(s)

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

2.20 Value Engineering

Not applicable.

2.21 Risk Management

The **CONSULTANT** will define level of Risk Management performed based on the **DEPARTMENT's Risk Management Guidelines**. If required, this will be an Optional Service.

2.22 Construction Cost Estimates

The **CONSULTANT** will develop construction cost estimates and updates for design alternatives using the FDOT's long-range estimating (LRE) program and preparing an engineer's estimate using preliminary quantity calculations and current area average units' costs.

2.23 Right-of-way Cost Estimates

The **CONSULTANT** will prepare maps of the project area showing all related right-of-way and affected parcels on all alternatives to be included in the project matrix. The **CONSULTANT** will be required to prepare right-of-way estimates.

2.24 Preliminary Engineering Report

The **CONSULTANT** will prepare a Preliminary Engineering Report (PER) in accordance with *Part 2, Chapter 3 in the PD&E Manual*. The **CONSULTANT** will provide the PER to the **AUTHORITY** 45 days prior to the public hearing.

2.25 Engineering Services (As Applicable)

Capacity Improvements at Intersections

The **CONSULTANT** will propose appropriate intersection control based on the results of project traffic analysis to establish an overall intersection/interchange footprint at the following intersections:

- Whiting Street/N Meridian Avenue
- Whiting Street/Nebraska Avenue (new off-ramp configuration)
- Whiting Street/N Brush Street
- Washington Street/North Meridian Avenue
- Washington Street/Nebraska Avenue
- Jefferson Street and Selmon Expressway on-ramps (new configuration)
- Florida Avenue and Selmon Expressway off ramps (new configuration)

The **CONSULTANT** will develop intersection concepts/layouts based on the results of traffic operational analysis. The layouts will include turn lanes, auxiliary lanes, storage lengths and other geometric details along with associated improvements to the connecting roadways.

The **CONSULTANT** will examine the geometric feasibility of implementing capacity improvements for intersection traffic control at locations identified in the operational and safety analysis.

The **CONSULTANT** will develop up to three intersection improvement concepts. Each concept should incorporate the associated scenario(s) for roadway enhancements and improvements to the connecting streets. The **CONSULTANT** will use these concepts to screen different combinations of intersection location, size and/or approach alignments to review how different options might affect adjacent properties. Within the immediate intersection vicinity, the **CONSULTANT** should flag potential impacts and conflicts with adjacent property access, structures, utilities or right-of-way for each option developed. The **CONSULTANT** will meet with the City of Tampa and **AUTHORITY** staff to discuss options developed.

To verify reasonableness of the preferred intersection improvement concept, the **CONSULTANT** will conduct performance checks using the following minimum considerations:

- Check fastest vehicle paths to verify that the roundabout concept adequately controls vehicle speeds for each turning movement.
- Check design vehicle accommodation using AutoTurn or equivalent for the various turning movements at the intersection (right-, through-, and left-turns). Commonly a WB-62FL tractor-trailer is the design vehicle along the state routes, but alternative design vehicles may apply.
- Review multimodal needs to verify that splitter islands provide adequate width for pedestrian refuge and crosswalk locations are appropriate. Sidewalk facilities should also be included in the concepts to understand the full right-of-way needs for all modes.

The **CONSULTANT** will also prepare a constructability review associated with each concept. This will briefly describe the possible staging for construction (e.g. maintenance of traffic, off-site detour, etc.) of the conceptual design, including a detailed analysis of bridge demolition, widening and new construction.

2.26 Quality Control

The **CONSULTANT** will follow the Quality Control Plan as described in Section 1.10. The **CONSULTANT** will include a QA/QC sheet in the front of all documents showing that the documents went through an internal review prior to submittal to the **AUTHORITY**.

3.0 ENVIRONMENTAL ANALYSIS AND REPORTS

The **CONSULTANT** will coordinate and perform the appropriate level of environmental analysis to prepare a Type II Categorical Exclusion (Type II CE) for this project as outlined in the ***PD&E Manual*** and the following references. The **CONSULTANT** will utilize the Environmental Screening Tool (EST), or other appropriate database, and the Programming Screen Summary Report that is developed by the EST. Database information will be compatible with base maps used for public presentations, corridor maps, and alternative plans.

The level of effort for the following work activities will be commensurate with the level of impact identified in the final Programming Screen Summary Report. If the Summary Degree of Effect from the Final Programming Screen Summary Report is "No Involvement" or "None" for an activity, the activity will be marked N/A in the Scope of Services.

Sociocultural Resources

The **CONSULTANT** will collect data regarding the following sociocultural issues as needed:

3.1 Land Use Changes

Document as needed:

- Planning Consistency
- Land Use Patterns

3.2 Social and Economic

Document as needed:

- Community Cohesion
- Community Services
- Title VI
- Demographics
- Community Goals and Quality of Life
- Safety and Emergency Response

3.3 Economic

Document as needed:

- Commerce
- Tax Base

3.4 Mobility

Document as needed:

- Accessibility
- Connections to other transportation modes

The **CONSULTANT** will collect, analyze and summarize pertinent data in the appropriate section of the Environmental Document. The **CONSULTANT** will display pertinent data on the base map as applicable. The **CONSULTANT** will analyze these issues in accordance with *Part 2, Chapter 4 of the PD&E Manual* and the Sociocultural Effects Evaluation Handbook (available at <http://www.dot.state.fl.us/emo>).

3.5 Aesthetics

Document as needed.

3.6 Relocation Potential

The **CONSULTANT** will collect the data and perform the analysis necessary to complete a Conceptual Stage Relocation “A” Plan for the proposed design alternatives as described in *Part 2, Chapter 4 of the PD&E Manual* and the *FDOT Right-of-Way Manual*.

Cultural Resources

3.7 Archaeological and Historic Resources

The **CONSULTANT** will implement a Cultural Resources study analyzing the impacts to all cultural resources by all proposed alternatives including viable ponds, as described in *Part 2, Chapter 8 of the PD&E Manual*. All work will be conducted by a professional qualified under the provisions of 36 CFR 61 and be done in compliance with the National Historic Preservation Act of 1966 (Public Law 89-665, as amended) and the implementing regulations (36 CFR 800) as well as with the provisions contained in Chapter 267, Florida Statutes.

This task includes identifying and analyzing impacts to archaeological sites and historic resources within the project Area of Potential Effects (APE) including documentation and coordination with appropriate agencies as per *Part 2, Chapter 8 of the PD&E Manual* and the **DEPARTMENT’S Cultural Resource Management Handbook**. In addition, attendance at public meetings may be required. The **CONSULTANT** will also review and address any resources listed in the Environmental Screening Tool (EST) by the State Historic Preservation Office (SHPO) ETAT member.

Research Design Methodology

The **CONSULTANT** will prepare a Research Design and Survey Methodology for the project. The **CONSULTANT** will submit the Research Design and Survey Methodology to the **AUTHORITY** for approval prior to the initiation of fieldwork. The **CONSULTANT** will identify and map out the zones of probability for the project study area and identify any previously recorded resources. The Area of Potential Effect (APE) will be determined by the **AUTHORITY**.

Cultural Resources Assessment Survey (CRAS)

Field Work – The **CONSULTANT** will identify any archaeological sites within the project area, both previously recorded and potentially eligible, and excavate the appropriate number of test pits. The **CONSULTANT** will identify any existing historic resources within the project area, both previously recorded and potentially eligible. The **CONSULTANT** will also locate, identify, and

bound any additional cultural resources included on the Florida Master Site File (FMSF) and all structures older than 45 to 50 years (depending upon the length of time anticipated before construction). The **CONSULTANT** will collect enough data to document each site's significance in terms of eligibility for listing on the National Register of Historic Places (NRHP).

Documentation – The CRAS will be prepared with appropriate documentation detailing the results of the survey and the final assessments of resource significance, and including a FMSF form for all identified resources. The Research Design Methodology and the Pond Site Technical Memo (if required) will be included in the CRAS appendix.

Pond Site Technical Memorandum

If required, the **CONSULTANT** will identify archaeological probability and potential NRHP eligible resources for pond sites for the preferred project alternative. The **CONSULTANT** will document the results of this work in a technical memorandum, which will be included as an appendix to the CRAS.

Determination of Eligibility (DOE)

If required, the **CONSULTANT** will prepare a DOE for each resource determined to be significant. The DOE package will include an NRHP registration form, and the DOE's will be included as a CRAS appendix.

Case Study Report

If required, a Section 106 Case Study Report documenting the application of the Criteria of Effect will be prepared.

Memorandum of Agreement (MOA)

If required, the **CONSULTANT** will assist the **AUTHORITY** with the preparation of a Section 106 MOA.

SHPO Consultation Meetings

If required, the **CONSULTANT** will assist the **AUTHORITY** with coordination of a SHPO consultation meeting.

Native American Coordination

If it is determined that the proposed improvements would impact cultural or archaeological resources that are of cultural or religious importance to Native American Tribes, the **CONSULTANT** will assist the **AUTHORITY** to inform the appropriate entities correctly.

Cultural Resource Committee Meetings

If required, the **CONSULTANT** will assist the **AUTHORITY** with any meetings with the Cultural Resource Committee.

3.8 Recreational Areas

The **CONSULTANT** will inventory all recreational properties potentially affected by any proposed design alternatives. The **CONSULTANT** will coordinate with the public entity of jurisdiction should impacts to public recreation areas occur. There will be one inventory prepared that will address all potential parks and recreational properties within the project area. Cultural resources will be addressed separately.

Natural Environment

3.9 Wetlands

In accordance with *Part 2, Chapter 9 of the PD&E Manual*. This includes a Conceptual Mitigation Plan, if applicable. The level of effort for this task will be commensurate with the level of impact from the proposed improvements.

The **CONSULTANT** will survey and analyze the project corridor for the presence of wetlands and surface waters within the project corridor. The **CONSULTANT** will coordinate with the appropriate Federal, state, and local agencies as to specific permits required, significance of impacts, required mitigation, and any specific concerns about the project or its impacts.

The **CONSULTANT** will attend any coordination meetings with the regulatory agencies regarding these project issues as necessary.

Natural Resource Evaluation (NRE) Memorandum

As applicable, the **CONSULTANT** will conduct and prepare an NRE Evaluation Memorandum that summarizes the effects the project will have on wetlands and/or surface waters in accordance with *Part 2, Chapter 9 of the PD&E Manual*. The Wetlands and Surface Waters section of the NRE Memorandum will include analysis of the wetlands and/or surface waters within the project corridor, a wetland and/or surface water impact assessment, alternatives analysis, avoidance and minimization, conceptual mitigation, agency coordination, and commitments and recommendations. The **AUTHORITY** will complete the commitments and recommendations before construction begins.

Pond Siting Analysis

The **CONSULTANT** will collect the necessary data to completely analyze the impacts on wetlands and/or surface waters by all viable proposed storm water management alternatives and their respective in-fall and outfall locations, as described in *Part 2, Chapter 9 of the PD&E Manual*. The **CONSULTANT** will determine the potential for involvement with wetlands and/or surface waters and include this analysis in the Preliminary Pond Siting Report.

3.10 Aquatic Preserves and Outstanding Florida Waters

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

3.11 Water Quality

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

3.12 Wild and Scenic Rivers

In accordance with *Part 2, Chapter 12 of the PD&E Manual*.

3.13 Coastal Barrier Islands

Not applicable.

3.14 Floodplains

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

3.15 Wildlife and Habitat

In accordance with *Part 2, Chapter 16 of the PD&E Manual*. The level of effort for this task will be commensurate with the level of impact from the proposed improvements.

The **CONSULTANT** will survey and analyze the project corridor for the presence of federally or state designated threatened or endangered species. The **CONSULTANT** will coordinate with appropriate Federal, State, and local agencies as to specific permits required, significance of impacts, required mitigation and any specific concerns about the project or its impacts.

The **CONSULTANT** will attend any coordination meetings with the regulatory agencies regarding these project issues as necessary.

Mitigation Plan

If required, the **CONSULTANT** will prepare conceptual mitigation alternatives for listed species impacts. This effort will consist of the identification of alternative possibilities only. This task will be included in the NRE Technical Memorandum.

3.16 Farmlands

In accordance with *Part 2, Chapter 6 of the PD&E Manual*.

3.17 Essential Fish Habitat

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

Physical Effects

3.18 Noise

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

3.19 Air Quality

In accordance with *Part 2, Chapter 19 of the PD&E Manual*.

3.20 Contamination

The **CONSULTANT** will conduct a comprehensive assessment of contamination involvement within the project corridor and potential pond sites to avoid serious project impacts and delays. As part of the assessment the **CONSULTANT** will perform a regulatory database search. The **CONSULTANT** will not rely solely on the results of this database search since it is only one of many tools that should be used in evaluating the potential contamination impacts of the project. The **CONSULTANT** will perform the necessary analysis to complete the Contamination Screening Evaluation for all viable alternatives and complete the Contamination Screening Evaluation Report (CSER) as described in *Part 2, Chapter 20 of the PD&E Manual*.

The **CONSULTANT** will take color photographs of all suspect sites and color reproduce them into the CSER and identify the street address of each site.

The **CONSULTANT** will conduct a diligent search for monitoring wells that may be impacted during construction and mark their location on maps and appropriate plan sheets.

The **AUTHORITY** will schedule meetings with the FDOT District Contamination Impact Coordinator prior to performing the contamination screening investigation and any Level II investigation. The purpose of these meetings is to provide information to the **AUTHORITY** regarding the sampling plan and locations.

3.21 Construction Impact Analysis

The **CONSULTANT** will document the potential construction impacts of the project.

3.22 Identify Permit Conditions

The **CONSULTANT** will identify permit conditions and type of permits required during the project. This task includes the review of maps and data to determine permit related information for the project. The intent of this task is to identify all needed permits and any special issues or conditions to consider during permit acquisition or design.

Environmental Reports

The Environmental Documents prepared by the **CONSULTANT** will comply with the procedures listed in *Part 1 of the PD&E Manual* 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 **AUTHORITY** prior to producing final reports and documents.

3.23 Class of Action Determination

Not applicable.

3.24 Categorical Exclusion Type II

Prepare a Type II Categorical Exclusion in accordance with ~~Part 1, Chapter 2 of the PD&E.~~

Not applicable.

3.25 State Environmental Impact Report

Not applicable.

3.26 Environmental Assessment

Not Applicable.

3.27 Finding of No Significant Impact

Not applicable.

3.28 Draft Environmental Impact Statement

Not applicable.

3.29 Final Environmental Impact Statement

Not applicable.

3.30 Quality Control

The **CONSULTANT** will follow the Quality Control Plan as described in Section 1.10. The **CONSULTANT** will include a QA/QC sheet in the front of all documents showing that the documents went through an internal review prior to submittal to the **AUTHORITY**.

4.0 MISCELLANEOUS SERVICES

4.1 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. The **CONSULTANT** will deliver progress reports to the **AUTHORITY** in a format as prescribed by the **AUTHORITY** and no less than 10 days prior to submission of the corresponding invoice. The **AUTHORITY** Project Manager will compare the reported percent complete against actual work accomplished to ensure the work is of enough quality and quantity.

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

4.2 Project Management Meetings and Coordination

The **CONSULTANT** will meet with the **AUTHORITY** as needed throughout the life of the project. The **AUTHORITY** anticipates **eighteen (18)** meetings. These meetings will include progress and miscellaneous review and other coordination activities with the **AUTHORITY**.

4.3 Additional Services

The following services are examples of tasks that may be considered optional services. If any of these services will be included in the project, the project manager will need to coordinate with the responsible office for the appropriate scope language.

Engineering

The **AUTHORITY** may require the **CONSULTANT** to perform certain unforeseen and/or additional engineering services not currently covered under the scope of services but are necessary for the successful completion of the PD&E study. Some examples of these types of additional services (but not all) are below. Other tasks not specifically mentioned below may also be required:

- *Typical Section Analysis* – The **CONSULTANT** may be required to prepare typical section alternatives that go beyond the number or scale identified in this Scope of Services.
- *Roadway Design Alternatives* – The **CONSULTANT** may be required to develop and evaluate additional alignment or interchanges alternatives.
- *Alternative Concept Plans* – The **CONSULTANT** may be required to develop additional concept plans for additional alignment alternatives.
- *Risk Management* – The **CONSULTANT** may need to provide Risk Management services once defined by the **AUTHORITY**.
- *Pavement Type Selection Report* – The **CONSULTANT** may be required to prepare a Pavement Type Selection Report instead of a Pavement Type Selection Memo.

Environmental

The **AUTHORITY** may require the **CONSULTANT** to perform certain unforeseen and/or additional environmental services not currently covered under the scope of services but are necessary for the successful completion of the PD&E study. Some examples of these types of additional services (but not all) are below. Other tasks not specifically mentioned below may also be required:

- *Conceptual Stage Relocation Plan* – If relocations are required, the **CONSULTANT** will prepare a Conceptual Stage Relocation Plan.
- *Archaeological and Historical Resources* – If the project is determined to have an adverse effect on a Section 106 resource, the **CONSULTANT** may be required to prepare a Section 106 Memorandum of Agreement.
- *Section 4(f) Applicability and Evaluation* – The **CONSULTANT** will prepare a Section 4(f) Determination of Applicability, as well as prepare and coordinate a Section 4(f) Evaluation, if required.
- *Additional Coordination with FHWA* – If a Section 4(f) Evaluation is required, the **CONSULTANT** may be required to participate in other meetings with the FHWA.

Design-Related activities

The **AUTHORITY** may require the **CONSULTANT** to perform certain unforeseen and/or additional design-related services not currently covered under the scope of services but are necessary for the successful completion of the PD&E study. Some examples of these types of additional services (but not all) are below. Other tasks not specifically mentioned below may also be required:

- Need to develop more detail to identify impacts including right-of-way.
- Special project feature(s) (bridge structures, roadway, drainage, geotechnical, etc.) that require engineering analysis beyond the PD&E Study level of detail.
- Permitting is included during the PD&E Study on all or portions of the project.
- Preparation of scope and staff hours for the additional services will involve reference to the Standard Scope of Services, Staff Hour Estimation Forms, and Staff Hour Estimation Basis for Highway and Bridge/Structures Design.
- Permitting services may include consideration of the following design activities: Roadway Analysis, Roadway Plans, Drainage Analysis, and Environmental Permits, Survey, Photogrammetry, Mapping and Geotechnical.

5.0 METHOD OF COMPENSATION

Payment for the work accomplished will be in accordance with the Method of Compensation section of this contract. Invoices will be submitted to the **AUTHORITY**'s Project Manager. The **AUTHORITY**'s Project Manager and the **CONSULTANT** will 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 **AUTHORITY**.

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 AUTHORITY

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

- Project data and plans relevant to project area that are currently on file.
- All available information in the possession of the **AUTHORITY** 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 **AUTHORITY** 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 all environmental and engineering documents including the Permit Coordination Package.
- Coordinate with the State Historic Preservation Officer.
- Existing **AUTHORITY** right-of-way maps.
- The **AUTHORITY** will provide available **FDOT** crash data.