



*Florida Department of Transportation  
District Florida's Turnpike Enterprise*

**DESIGN-BUILD  
REQUEST FOR PROPOSAL  
for  
I-75 at Florida's Turnpike – Wildwood Interchange  
Modification Northern Terminus (MP 309),  
Sumter County**

**Financial Projects Number(s): 406110-1-52-01/406110-2-52-01**

**Federal Aid Project Number: N/A**

**Contract Number: E8N75**

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**ATTACHMENTS**

The Attachments listed below are hereby incorporated into and made a part of this Request for

Proposal (RFP) as though fully set forth herein.

- Attachment No. 1 Bid Blank (375-020-17)**
- Attachment No. 2 Design Build Proposal of Proposer (375-020-12)**
- Attachment No. 3 Bid Price Proposal Summary (700-010-65)**
- Attachment No. 4 Bid or Proposal Bond (375-020-34)**
- Attachment No. 5 DBE Forms (275-030-11)**
- Attachment No. 6 Design-Build Contract (375-020-13)**
- Attachment No. 7 Design-Build Contract Bond (375-020-14)**
- Attachment No. 8 Contract Affidavit (375-020-30)**
- Attachment No. 9 Division I Design-Build Specifications**
- Attachment No. 10 Project Advertisement**
- Attachment No. 11 Florida's Turnpike Enterprise Field Operations Guide**
- Attachment No. 12 Joint Application for Environmental Resource Permit / Authorization to Use State-Owned Submerged Lands / Federal Dredge Permit (SWFWMD Permit #TO BE COMPLETED WHEN OBTAINED, USACE Permit #TO BE COMPLETED WHEN OBTAINED)**
- Attachment No. 13 Project Control Network Sheet**
- Attachment No. 14 Hazardous Materials Report**
- Attachment No. 15 Pavement Design Guidelines**
- Attachment No. 16 Approved Design Variations**
  - Border Width
  - Vertical Alignment
- Attachment No. 17 Value Added Specifications**
  - DEV475 – Value Added Bridge Components
  - DEV725 – Value Added Highway Lighting System
- Attachment No. 18 FTE Landscape Brand Guidelines**
- Attachment No. 19 Lane Closure Analysis**
- Attachment No. 20 Additional Governing Regulations**
- Attachment No. 21 Existing Load Ratings**
  - Bridge Culverts 180043, 180044, 180049, 180062 and 180063
  - Bridges 180068 and 180069
- Attachment No. 22 Special Provisions**
  - Contractor Quality Control General Requirements (SP1050813DB)
  - Structures Foundations (SP4550000DB)
  - Engineer's Field Office (SP1090000)

## REFERENCE DOCUMENTS

The following documents are being provided with this RFP. Except as specifically set forth in the body of this RFP, these documents are being provided for reference and general information only. They are not being incorporated into and are not being made part of the RFP, the contract documents or any other

document that is connected or related to this Project except as otherwise specifically stated herein. No information contained in these documents shall be construed as a representation of any field condition or any statement of facts upon which the Design-Build Firm can rely upon in performance of this contract. All information contained in these reference documents must be verified by a proper factual investigation. The bidder agrees that by accepting copies of the documents, any and all claims for damages, time or any other impacts based on the documents are expressly waived.

<b>Reference No. 1</b>	<b>Conceptual Roadway Plans</b>
<b>Reference No. 2</b>	<b>Conceptual Traffic Control Plots</b>
<b>Reference No. 3</b>	<b>Conceptual Signing Plan</b>
<b>Reference No. 4</b>	<b>Conceptual Landscaping Opportunity Plan</b>
<b>Reference No. 5</b>	<b>Bridge Concept Reports</b> <ul style="list-style-type: none"><li>• Ramp A-2 over NB SR 91</li><li>• Ramp B over SB I-75</li><li>• Leg B over NB I-75</li></ul>
<b>Reference No. 6</b>	<b>Final Approved Typical Section Package</b>
<b>Reference No. 7</b>	<b>Conceptual Lighting Analysis Design Report</b>
<b>Reference No. 8</b>	<b>Conceptual ITS Plots</b>
<b>Reference No. 9</b>	<b>Base Clearance Calculations</b>
<b>Reference No. 10</b>	<b>Geotechnical Data Reports</b>
<b>Reference No. 11</b>	<b>Utility Coordination Documentation</b>
<b>Reference No. 12</b>	<b>Existing Record Plans</b> <ul style="list-style-type: none"><li>• 18130-3402 – I-75 over SR 44/Structures Plans</li><li>• 18130-3425 – SR 93 &amp; 44</li><li>• 97180-0143 – I-75</li><li>• 242626-3 – SR 93 / Phase A</li><li>• 242796-1 – SR 91 MP 238.000 to MP 308.476/Signing &amp; Marking Plans</li><li>• 243150-1 – SR 91/Compression Seal Details</li><li>• 243178-1 – SR 91 MP 304.700 to MP 308.840/Milling &amp; Resurfacing</li><li>• 243179-1 – SR 91 MP 297.823 to MP 303.751/Milling &amp; Resurfacing</li><li>• 406120-3 – SR 91 Sunnav Phase IV Segment II ITS</li><li>• 411638-1 – SR 91/US 301 Modifications</li><li>• 416584-1 – SR 91/Median Guardrail Project</li><li>• 416939-1 – SR 93/Milling &amp; Resurfacing</li><li>• 419325-1 – SR 91/Canal Protection</li><li>• 419572-1/419572 – SR 91/Milling &amp; Resurfacing</li><li>• Existing Structure Inspections</li></ul>
<b>Reference No. 13</b>	<b>Equivalent Single Axle Loading (ESAL) Memo</b>
<b>Reference No. 14</b>	<b>Existing Drainage Structure Inventory</b>
<b>Reference No. 15</b>	<b>Pavement Survey and Evaluation Report</b>
<b>Reference No. 16</b>	<b>Sample Inventory for Welding Inspection</b>
<b>Reference No. 17</b>	<b>Resilient Modulus Memo</b>
<b>Reference No. 18</b>	<b>Approved Environmental and PD&amp;E Documents</b>
<b>Reference No. 19</b>	<b>Cost Risk Analysis Report</b>
<b>Reference No. 20</b>	<b>Existing Conditions Report</b>
<b>Reference No. 21</b>	<b>CADD Files – 406110-1</b>
<b>Reference No. 22</b>	<b>Right of Way Maps</b>

## **I. Introduction.**

Florida's Turnpike Enterprise (FTE), a District of the Florida Department of Transportation (Department) has issued this Request for Proposal (RFP) to solicit competitive bids and proposals from Proposers for improving traffic flow between I-75 (SR 93), Florida's Turnpike (SR 91) and SR 44 through widening and reconfiguring the I-75/Florida's Turnpike interchange. Improvements include the construction of braided ramps to and from SR 44 to eliminate weaving, widening of I-75 and the construction of auxiliary lanes on northbound I-75 north of SR 44. The project begins just south of the I-75/Florida's Turnpike interchange (MP 20.814) and terminates north of the SR 44 northbound entrance ramp (MP 24.052). For the purposes of this document, Florida's Turnpike Enterprise (FTE), Department and District are the same entity unless otherwise noted. The Design-Build Firm shall include a Landscape Architect duly authorized to practice Landscape Architecture in the State of Florida consistent with State Statute 481 part II. The Design-Build Firm's Landscape Architect (DBLA) shall review and identify future unencumbered landscape areas for this Project. This Project shall reserve landscape opportunities and implement the FDOT Highway Beautification Policy. Landscape construction will be performed by others and not included with this Project. Areas shall be identified in the Design-Build Firm's Proposal Plans as "future landscape areas to be constructed by others". Coordination will be required by the Design-Build Firm and the District Landscape Architect. Coordination between Design-Build Firm's Landscape Architect, the District Landscape Architect and Engineer will be required during the Design-Build plans development process to ensure landscape opportunities are accommodated within the project limits. The DBLA shall be included in the project kick-off meeting and subsequent progress meetings.

Any changes to requirements of the RFP by a Design-Build Firm must be approved by the Department through the Alternative Technical Concept (ATC) Proposal process, as described herein, prior to the information cut-off date. For this Project, the Department considers the following to be requirements of the Project that are not be changed by the Design-Build Firms:

1. Removal of Existing Bridge #180026
2. Accommodation for a future 12' travel lane, 12' paved shoulder and a shoulder concrete barrier wall on the Turnpike under Ramp A-2 bridge as shown in the Approved Typical Section Package (See Reference Documents).
3. Accommodation for a future 12' travel lane, a 15' travel lane, 3 – 12' paved shoulders, a 4' buffer, a median concrete barrier wall and a concrete shoulder barrier wall on I-75 northbound under Leg B bridge as shown in the Approved Typical Section Package (See Reference Documents).
4. The design speed of Leg B shall be a minimum of 60 mph.
5. The design speed of Ramps A, A-2, B and B-2 shall be a minimum of 50 mph.

### **Description of Work**

The Department has established the following project requirements (presented in order of precedence):

1. Meet all project commitments.
2. Add capacity and operations to the corridor within the project limits.
3. Minimize the inconvenience to the travelling public.
4. It is the intent to always preserve existing vegetation including trees and palms that do not conflict with proposed improvements. Tree and palm protection shall comply with FDOT Standard Index 544. Within the Project limits and within the Project right of way, it will be the responsibility of the Design-Build Firm to identify and remove all Category 1 invasive exotics as defined by the Florida Exotic Pest Plant Council ([www.fleppc.org](http://www.fleppc.org)) and as identified in the Landscape Opportunity Plan.

The Department has prepared Concept Plans of the proposed I-75 and Turnpike Interchange at Wildwood improvements and are provided in the References of this RFP. The proposed modifications include but are

not limited to the following:

1. Widen Northbound and Southbound I-75 to accommodate an additional lane of travel and increase capacity from MP 20.814 to MP 24.052.
2. Provide a right exit ramp to southbound Turnpike from SR 44.
3. Separate northbound I-75 exit traffic to SR 44 from northbound Turnpike mainline traffic.
4. Construct a bridge over northbound I-75 for southbound Turnpike traffic that will accommodate the proposed I-75 future typical section as shown in the approved Typical Section Package.
5. Modify bridges 180068 and 180069 over SR 44 to accommodate 4 – 12' northbound travel lanes and 2 – 10' shoulders and remove existing longitudinal joint.
6. Lengthen the acceleration length for the northbound entrance ramp from SR 44.
7. SR 44 traffic to southbound I-75 shall not be permitted to enter I-75 until a point south of the physical gore to southbound SR 91.
8. Ramp A and Ramp A-2 traffic shall not be allowed to enter I-75 or SR 91 mainline.
9. Extend any existing box culverts that are affected by construction.
10. Mill and resurface the existing lanes of northbound I-75 from MP 20.814 to MP 24.052 and northbound and southbound Turnpike from MP 9.909 to MP 10.670. Mill and resurface the existing lanes of southbound I-75 from MP 20.814 to MP 22.606.
11. Install appropriate signs and sign structures as shown in the Conceptual Signing Plan (See Reference Documents).
12. Remove and replace any existing ITS fiber and corresponding buried electric and equipment affected by construction.
13. Construct stormwater management elements in compliance with SWFWMD permit.
14. Preserve effective, adequate and reasonable locations within the Project limits and existing right-of-way for future landscaping. See Landscape Opportunity Plan in Reference Documents for locations.
15. It will be the responsibility of the Design-Build Firm to remove all Category 1 invasive exotics as defined by the Florida Exotic Pest Plant Council ([www.fleppc.org](http://www.fleppc.org)) and as identified in the Landscape Concept Design, within the Project limits and within the Project right of way.

## **A. Design-Build Responsibility**

The Design-Build Firm shall be responsible for survey, geotechnical investigation, design, preparation of all documentation related to the acquisition of all permits not acquired by the Department, preparation of any and all information required to modify permits acquired by the Department if necessary, maintenance of traffic, demolition, and construction on or before the Project completion date indicated in the Proposal. The Design-Build Firm shall coordinate all utility relocations.

The Design-Build Firm shall be responsible for compliance with Design and Construction Criteria (Section VI) which sets forth requirements regarding survey, design, construction, and maintenance of traffic during construction, requirements relative to Project management, scheduling, and coordination with other agencies and entities such as state and local government, utilities and the public.

The Design-Build Firm shall be responsible for adhering to the approved Environmental Document of the PD&E Study.

The Design-Build Firm is responsible for coordinating with the District Environmental Office any engineering information related to Environmental Reevaluations. The Design-Build Firm will not be compensated for any additional costs or time associated with Reevaluation(s) resulting from proposed design changes.

The Design-Build Firm may propose changes which differ from the approved Interchange Proposal Report (if applicable) and/or the Project Development & Environment (PD&E) Study. Proposed changes must be coordinated through the Department. If changes are proposed to the configuration, the Design-Build Firm shall be responsible for preparing the necessary analyses and documentation required to satisfy requirements to obtain approval of the Department and , if applicable, FHWA. The Design-Build Firm shall provide the required documentation for review and processing. Approved revisions to the configuration may also be required to be included in the Reevaluation of the National Environmental Policy Act (NEPA) document or State Environmental Impact Report (SEIR) Reevaluations, per Section O (Environmental Services/Permits/Mitigation) of the RFP. The Design-Build Firm will not be compensated for any additional costs or time resulting from proposed changes.

The Design-Build Firm shall examine boring data, where available, and make their own interpretation of the subsoil investigations and other preliminary data, and shall base their bid on their own opinion of the conditions likely to be encountered. The submission of a proposal is prima facie evidence that the Design-Build Firm has made an examination as described in this provision.

The Design-Build Firm shall demonstrate good Project management practices while working on this Project. These include communication with the Department and others as necessary, management of time and resources, and documentation.

## B. Department Responsibility

The Department will provide contract administration, management services, construction engineering inspection services, environmental oversight, and quality acceptance reviews of all work associated with the development and preparation of the contract plans, permits, , and construction of the improvements. The Department will provide Project specific information and/or functions as outlined in this document.

In accordance with 23 CFR 636.109 of the FHWA, in a Federal Aid project, the Department shall have oversight, review, and approval authority of the permitting process.

The Department will determine the environmental impacts and coordinate with the appropriate agencies during the preparation of NEPA or SEIR Reevaluations. For federal projects, the Department will coordinate and process Reevaluations with FHWA.

## II. Schedule of Events.

Below is the current schedule of the events that will take place in the procurement process. The Department reserves the right to make changes or alterations to the schedule as the Department determines is in the best interests of the public. Proposers will be notified sufficiently in advance of any changes or alterations in the schedule. Unless otherwise notified in writing by the Department, the dates indicated below for submission of items or for other actions on the part of a Proposer shall constitute absolute deadlines for those activities and failure to fully comply by the time stated shall cause a Proposer to be disqualified. District Office is Florida's Turnpike Headquarters (Building 5315) at Turkey Lake Service Plaza at Milepost 263 of Florida's Turnpike in Ocoee, FL. All meetings will be held at this location unless otherwise indicated below.

Date	Event
6/23/14	Advertisement
7/14/14	Expanded Letters of Interest for Phase I of the procurement process due in the District Office by 5:00pm local time
8/13/14	Proposal Evaluators submit Expanded Letter of Interest Scores to Contracting Unit 5:00pm local time
8/21/14	Public Meeting of Selection Committee to review and confirm Expanded Letter of Interest scores 3:00pm local time
8/21/14	Notification to Responsive Design-Build Firms of the Expanded Letter of Interest scores 5:00pm local time
8/25/14	Deadline for all responsive Design-Build firms to affirmatively declare intent to continue to Phase II of the procurement process 5:00pm local time
8/26/14	Shortlist Posting 2:00pm local time
9/2/14	Final RFP provided to Design-Build firms providing Affirmative Declaration of Intent to continue to Phase II of the procurement process
9/5/14	Mandatory Pre-proposal meeting at 10:00 am local time in the District Office. <b>All Utility Agency/Owners that the Department contemplates an adjustment, protection, or relocation is possible are to be invited to the mandatory Pre-Proposal meeting.</b>
9/8/14	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 1
9/11/14	Deadline for Design-Build Firm to submit preliminary list of Alternative Technical Concepts prior to One-on-One Alternative Technical Concept

	Discussion Meeting No. 1
9/17/14 9/19/14	One-on-One Alternative Technical Concept Discussion Meeting No. 1. 90 Minutes will be allotted for this Meeting.
9/23/14	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 2
9/29/14	Deadline for Design-Build Firm to submit preliminary list of One-on-One Alternative Technical Concepts prior to Alternative Technical Concept Discussion Meeting No. 2
10/10/14	One-on-One Alternative Technical Concept Discussion Meeting No. 2. 90 Minutes will be allotted for this Meeting.
10/23/14	Deadline for submittal of Alternative Technical Concept Proposals 5:00pm local time.
10/23/14	Final deadline for submission of requests for Design Exceptions or Design Variations
11/20/14	Deadline for submittal of questions, for which a response is assured, prior to the submission of the Technical Proposal. All questions shall be submitted to the Pre-Bid Q&A website.
12/2/14	Deadline for the Department to post responses to the Pre-Bid Q&A website for questions submitted by the Design-Build Firms prior to the submittal of the Technical Proposal.
12/9/14	Technical Proposals due in District Office by 5:00p.m. local time
12/10/14	Deadline for Design-Build Firm to “opt out” of Technical Proposal Page Turn meeting.
12/17/14	Technical Proposal Page Turn Meeting. Times will be assigned during the Pre-Proposal Meeting. 30 Minutes will be allotted for this Meeting.
1/27/15	Question and Answer Session. Times will be assigned during the pre-proposal meeting. One hour will be allotted for questions and responses.
2/3/15	Deadline for submittal of Written Clarification letter following Question and Answer Session 5:00pm local time
2/9/15	Deadline for submittal of questions, for which a response is assured, prior to the submission of the Price Proposal. All questions shall be submitted to the Pre-Bid Q&A website.
2/16/15	Deadline for the Department to post responses to the Pre-Bid Q&A website for questions submitted by the Design-Build Firms prior to the submittal of the Price Proposal.
2/19/15	Price Proposals due in District Office by 5:00pm local time.
2/19/15	Public announcing of Technical Scores and opening of Price Proposals at 2:30pm local time in the District Office.
2/26/15	Public Meeting of Selection Committee to determine intended Award
2/26/15	Posting of the Department’s intended decision to Award
3/4/15	Anticipated Award Date
3/18/15	Anticipated Execution Date

### III. Threshold Requirements.

#### A. Qualifications

Proposers are required to be pre-qualified in all work types required for the Project. The technical qualification requirements of Florida Administrative Code (F.A.C.) Chapter 14-75 and all qualification

requirements of F.A.C. Chapter 14-22, based on the applicable category of the Project, must be satisfied.

### **B. Joint Venture Firm**

Two or more firms submitting as a Joint Venture must meet the Joint Venture requirements of Section 14-22.007, Florida Administrative Code. Parties to a Joint Venture must submit a Declaration of Joint Venture and Power of Attorney Form No. 375-020-18, prior to the deadline for receipt of Letters of Interest.

If the Proposer is a Joint Venture, the individual empowered by a properly executed Declaration of Joint Venture and Power of Attorney Form shall execute the proposal. The proposal shall clearly identify who will be responsible for the engineering, quality control, and geotechnical and construction portions of the Work.

### **C. Price Proposal Guarantee**

A Price Proposal guaranty in an amount of not less than five percent (5%) of the total bid amount shall accompany each Proposer's Price Proposal. The Price Proposal guaranty may, at the discretion of the Proposer, be in the form of a cashier's check, bank money order, bank draft of any national or state bank, certified check, or surety bond, payable to the Department. The surety on any bid bond shall be a company recognized to execute bid bonds for contracts of the State of Florida. The Price Proposal guaranty shall stand for the Proposer's obligation to timely and properly execute the contract and supply all other submittals due therewith. The amount of the Price Proposal guaranty shall be a liquidated sum, which shall be due in full in the event of default, regardless of the actual damages suffered. The Price Proposal guaranty of all Proposers' shall be released pursuant to 3-4 of the Division I Design-Build Specifications.

### **D. Pre-Proposal Meeting**

Attendance at the pre-proposal meeting is mandatory. Any affirmatively declared proposer failing to attend will be deemed non-responsive and automatically disqualified from further consideration. The purpose of this meeting is to provide a forum for the Department to discuss with all concerned parties the proposed Project, the design and construction criteria, Critical Path Method (CPM) schedule, and method of compensation, instructions for submitting proposals, design exceptions/variations, and other relevant issues. In the event that any discussions at the pre-proposal meeting require, in the Department's opinion, official additions, deletions, or clarifications of the Request for Proposal, the Design and Construction Criteria, or any other document, the Department will issue a written addendum to this Request for Proposals as the Department determines is appropriate. No oral representations or discussions, which take place at the pre-proposal meeting, will be binding on the Department. FHWA will be invited on oversight Projects, in order to discuss the Project in detail and to clarify any concerns. Proposers shall direct all questions to the Departments Question and Answer website:

<https://www3b.dot.state.fl.us/BidQuestionsAndAnswers/Proposal.aspx/SearchProposal>

### **E. Technical Proposal Page-Turn Meeting**

The Department will meet with each Proposer, formally for thirty (30) minutes, for a page-turn meeting. FHWA will be invited on FA Oversight Projects. The purpose of the page-turn meeting is for the Design-Build Firm to guide the Technical Review Committee through the Technical Proposal, highlighting sections within the Technical Proposal that the Design-Build Firm wishes to emphasize. The page-turn meeting will occur between the date the Technical Proposal is due and the Question and Answer session occurs, per the Schedule of Events section of this RFP. The Department will terminate the page-turn meeting promptly at the end of the allotted time. The Department will audiotape record or videotape all or part of the

page-turn meeting. All audiotape recordings or videotape recordings will become part of the Contract Documents. The page-turn meeting will not constitute discussions or negotiations. The Design-Build Firm will not be permitted to ask questions of the Technical Review Committee during the page-turn meeting. An unmodified aerial or map of the project limits provided by the Design-Build Firm is acceptable for reference during the page-turn meeting. The unmodified aerial or map may not be left with the Department upon conclusion of the page turn meeting. Use of other visual aids, electronic presentations, handouts, etc., during the page turn meeting is expressly prohibited. Upon conclusion of the thirty (30) minutes, the Technical Review Committee is allowed five (5) minutes to ask questions pertaining to information highlighted by Design-Build Firm. Participation in the page-turn meeting by the Design-Build Firm shall be limited to five (5) representatives from the Design-Build Firm. Design-Build Firms desiring to opt out of the page-turn meeting may do so by submitting a request to the Department.

#### **F. Question and Answer Session**

The Department may meet with each Proposer, formally, for a Question and Answer session. FHWA shall be invited on FA Oversight Projects. The purpose of the Q & A session is for the Technical Review Committee to seek clarification and ask questions, as it relates to the Technical Proposal, of the Proposer. The Department may terminate the Q & A session promptly at the end of the allotted time. The Department shall audiotape record or videotape all or part of the Q & A session. All audiotape recordings or videotape recordings will become part of the Contract Documents. The Q & A session will not constitute “discussions” or negotiations. Proposers will not be permitted to ask questions of the Department except to ask the meaning of a clarification question posed by the Department. No supplemental materials, handouts, etc. will be allowed to be presented in the Q & A session. No additional time will be allowed to research answers.

Within one (1) week of the Q & A session, the Design-Build Firm shall submit to the Department a written clarification letter summarizing the answers provided during the Q & A session. The Design-Build Firm shall not include information in the clarification letter which was not discussed during the Q&A session. In the event the Design-Build Firm includes additional information in the clarification letter which was not discussed during the Q&A session and is not otherwise included in the Technical Proposal, such additional information will not be considered by the Department during the evaluation of the Technical Proposal.

The Department will provide some (not necessarily all) proposed questions to each Design-Build Firm as it relates to their technical proposal approximately 24 hours before the scheduled Q & A session.

#### **G. Protest Rights**

Any person who is adversely affected by the specifications contained in this Request for Proposal must file a notice of intent to protest in writing within seventy-two hours of the posting of this Request for Proposals. Pursuant to Sections 120.57(3) and 337.11, Florida Statutes, and Rule Chapter 28-110, Florida Administrative Code, any person adversely affected by the agency decision or intended decision shall file with the agency both a notice of protest in writing and bond within 72 hours after the posting of the notice of decision or intended decision, or posting of the solicitation with respect to a protest of the terms, conditions, and specifications contained in a solicitation and will file a formal written protest within ten days after the filing of the notice of protest. The formal written protest shall be filed within ten days after the date of the notice of protest if filed. The person filing the Protest must send the notice of intent and the formal written protest to:

Clerk of Agency Proceedings  
Department of Transportation

605 Suwannee Street, MS 58  
Tallahassee, Florida 32399-0458

Failure to file a notice of protest or formal written protest within the time prescribed in section 120.57(3), Florida Statutes, or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under Chapter 120 Florida Statutes.

## **H. Non-Responsive Proposals**

Proposals found to be non-responsive shall not be considered. Proposals may be rejected if found to be in nonconformance with the requirements and instructions herein contained. A proposal may be found to be non-responsive by reasons, including, but not limited to, failure to utilize or complete prescribed forms, conditional proposals, incomplete proposals, indefinite or ambiguous proposals, failure to meet deadlines and improper and/or undated signatures.

Other conditions which may cause rejection of proposals include evidence of collusion among Proposers, obvious lack of experience or expertise to perform the required work, submission of more than one proposal for the same work from an individual, firm, joint venture, or corporation under the same or a different name (also included for Design-Build Projects are those proposals wherein the same Engineer is identified in more than one proposal), failure to perform or meet financial obligations on previous contracts, employment of unauthorized aliens in violation of Section 274A (e) of the Immigration and Nationalization Act, or in the event an individual, firm, partnership, or corporation is on the United States Comptroller General's List of Ineligible Design-Build Firms for Federally Financed or Assisted Projects.

The Department will not give consideration to tentative or qualified commitments in the proposals. For example, the Department will not give consideration to phrases as “we may” or “we are considering” in the evaluation process for the reason that they do not indicate a firm commitment.

Proposals will also be rejected if not delivered or received on or before the date and time specified as the due date for submission.

If this maximum bid price is exceeded, the Design-Build Firm's price proposal shall be found non-responsive and the firm will not be considered for Final Selection.

## **I. Waiver of Irregularities**

The Department may waive minor informalities or irregularities in proposals received where such is merely a matter of form and not substance, and the correction or waiver of which is not prejudicial to other Proposers. Minor irregularities are defined as those that will not have an adverse effect on the Department's interest and will not affect the price of the Proposals by giving a Proposer an advantage or benefit not enjoyed by other Proposers.

1. Any design submittals that are part of a proposal shall be deemed preliminary only.
2. Preliminary design submittals may vary from the requirements of the Design and Construction Criteria. The Department, at their discretion, may elect to consider those variations in awarding points to the proposal rather than rejecting the entire proposal.
3. In no event will any such elections by the Department be deemed to be a waiving of the Design and Construction Criteria.

4. The Proposer who is selected for the Project will be required to fully comply with the Design and Construction Criteria for the price bid, regardless that the proposal may have been based on a variation from the Design and Construction Criteria.
5. Proposers shall identify separately all innovative aspects as such in the Technical Proposal. An innovative aspect does not include revisions to specifications or established Department policies. Innovation should be limited to Design-Build Firm's means and methods, roadway alignments, approach to Project, use of new products, new uses for established products, etc.
6. The Proposer shall obtain any necessary permits or permit modifications not already provided.
7. Those changes to the Design Concept may be considered together with innovative construction techniques, as well as other areas, as the basis for grading the Technical Proposals in the area of innovative measures.

#### **J. Modification or Withdrawal of Technical Proposal**

Proposers may modify or withdraw previously submitted Technical Proposals at any time prior to the Technical Proposal due date. Requests for modification or withdrawal of a submitted Technical Proposal shall be in writing and shall be signed in the same manner as the Technical Proposal. Upon receipt and acceptance of such a request, the entire Technical Proposal will be returned to the Proposer and not considered unless resubmitted by the due date and time. Proposers may also send a change in sealed envelope to be opened at the same time as the Technical Proposal provided the change is submitted prior to the Technical Proposal due date.

#### **K. Department's Responsibilities**

This Request for Proposal does not commit the Department to make studies or designs for the preparation of any proposal, nor to procure or contract for any articles or services.

The Department does not guarantee the details pertaining to borings, as shown on any documents supplied by the Department, to be more than a general indication of the materials likely to be found adjacent to holes bored at the site of the work, approximately at the locations indicated.

#### **L. Design-Build Contract**

The Department will enter into a Lump Sum contract with the successful Design-Build Firm. In accordance with Section V, the Design-Build Firm will provide a schedule of values to the Department for their approval. The total of the Schedule of Values will be the lump sum contract amount.

The terms and conditions of this contract are fixed price and fixed time. The Design-Build Firm's submitted bid (time and cost) is to be a lump sum bid for completing the scope of work detailed in the Request for Proposal.

### **IV. Disadvantaged Business Enterprise (DBE) Program.**

#### **A. DBE Availability Goal Percentage:**

The Department of Transportation has an overall eight and six tenths percent (8.6%) race-neutral DBE goal. This means that the State's goal is to spend at least 8.6% of the highway dollars with Certified DBE's as prime Design-Build Firms or as subcontractors. Race-neutral means that the Department believes that the 8.6% overall goal can be achieved through the normal competitive procurement process. The Department has reviewed this Project and assigned a DBE availability goal shown in the Project Advertisement and on the bid blank/contract front page under "% DBE Availability Goal". The Department has determined that this DBE percentage can realistically be achieved on this Project based on the number of DBE's associated with the different types of work that will be required.

Under 49 Code of Federal Regulations Part 26, if the 8.6% goal is not achieved, the Department may be required to return to a race-conscious program where goals are imposed on individual contracts. The Department encourages all of our Design-Build Firms to actively pursue obtaining bids and quotes from Certified DBE's.

The Department is reporting to the Federal Highway Administration the planned commitments to use DBE's. This information is being collected through the Department's Equal Opportunity Compliance (EOC) system.

#### **B. DBE Supportive Services Providers:**

The Department has contracted with a consultant, referred to as DBE Supportive Services Provider, to provide managerial and technical assistance to DBE's. This consultant is also required to work with prime Design-Build Firms, who have been awarded contracts, to assist in identifying DBE's that are available to participate on the Project. The successful Design-Build Firm should meet with the DBE Supportive Services Provider to discuss the DBE's that are available to work on this Project. The current Provider for the State of Florida is serviced by Blackmon Roberts Group and can be reached at (863) 802-1280 in Lakeland or (305) 777-0231 in Coral Gables.

#### **C. Bidders Opportunity List:**

The Federal DBE Program requires States to maintain a database of all Firms that are participating, or attempting to participate, on DOT-assisted contracts. The list must include all Firms that bid on prime contracts or bid or quote subcontracts on DOT-assisted Projects, including both DBE's and Non-DBE's.

A Bid Opportunity List should be submitted through the Equal Opportunity Compliance system which is available at the [Equal Opportunity Office Website](#). This information should be returned to the Equal Opportunity Office within three days of submission.

#### **V. Project Requirements and Provisions for Work.**

##### **A. Governing Regulations:**

The services performed by the Design-Build Firm shall be in compliance with all applicable Manuals and Guidelines including the Department, FHWA, AASHTO, and additional requirements specified in this document. Except to the extent inconsistent with the specific provisions in this document, the current edition, including updates, of the following Manuals and Guidelines shall be used in the performance of this work. Current edition is defined as the edition in place and adopted by the Department at the date of advertisement of this contract with the exception of the Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications, Manual on Uniform Traffic Control Devices (MUTCD), Design Standards and Revised Index Drawings. The Design-Build Firm shall use the edition of the Standard Specifications for Road and Bridge Construction (Divisions II &

III), Special Provisions and Supplemental Specifications, Design Standards and Revised Index Drawings in effect at the time the bid price proposals are due in the District Office. The Design-Build Firm shall use the 2009 edition of the MUTCD (as amended in 2012). It shall be the Design-Build Firm's responsibility to acquire and utilize the necessary manuals and guidelines that apply to the work required to complete this Project. The services will include preparation of all documents necessary to complete the Project as described in Section I of this document.

1. Florida Department of Transportation Roadway Plans Preparation Manuals (PPM)  
<http://www.dot.state.fl.us/rddesign/PPMManual/PPM.shtm>
2. Florida Department of Transportation Design Standards  
<http://www.dot.state.fl.us/rddesign/DesignStandards/Standards.shtm>
3. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications  
<http://www.dot.state.fl.us/specificationsoffice/Default.shtm>
4. Florida Department of Transportation Surveying Procedure  
<http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/550030101.pdf>
5. Florida Department of Transportation EFB User Handbook (Electronic Field Book)  
[http://www.dot.state.fl.us/surveyingandmapping/doc\\_pubs.shtm](http://www.dot.state.fl.us/surveyingandmapping/doc_pubs.shtm)
6. Florida Department of Transportation Drainage Manual  
<http://www.dot.state.fl.us/rddesign/Drainage/ManualsandHandbooks.shtm>
7. Florida Department of Transportation Soils and Foundations Handbook  
<http://www.dot.state.fl.us/structures/Manuals/SFH.pdf>
8. Florida Department of Transportation Structures Manual  
<http://www.dot.state.fl.us/structures/StructuresManual/CurrentRelease/StructuresManual.shtm>
9. Florida Department of Transportation Current Structures Design Bulletins  
<http://www.dot.state.fl.us/structures/Memos/currentbulletins.shtm>
10. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Manual  
<http://www.dot.state.fl.us/ecso/downloads/publications/Manual/default.shtm>
11. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Production Criteria Handbook  
<http://www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandBook/>
12. Florida Department of Transportation Production Criteria Handbook CADD Structures Standards  
<http://www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandBook/>
13. Instructions for Design Standards  
<http://www.dot.state.fl.us/structures/IDS/IDSportal.pdf>
14. AASHTO – A Policy on Geometric Design of Highways and Streets  
[https://bookstore.transportation.org/collection\\_detail.aspx?ID=110](https://bookstore.transportation.org/collection_detail.aspx?ID=110)

15. MUTCD - 2009  
<http://mutcd.fhwa.dot.gov/>
16. Safe Mobility For Life Program Policy Statement  
<http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/000750001.pdf>
17. Traffic Engineering and Operations Safe Mobility for Life Program  
<http://www.dot.state.fl.us/trafficoperations/Operations/SafetyisGolden.shtm>
18. Florida Department of Transportation American with Disabilities Act (ADA) Compliance – Facilities Access for Persons with Disabilities Procedure  
<http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/625020015.pdf>
19. Florida Department of Transportation Florida Sampling and Testing Methods  
<http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/publications/fstm/disclaimer.shtm>
20. Florida Department of Transportation Flexible Pavement Coring and Evaluation Procedure  
<http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/publications/materialsmanual/documents/v1-section32-clean.pdf>
21. Florida Department of Transportation Design Bulletins and Update Memos  
<http://www.dot.state.fl.us/rddesign/Bulletin/Default.shtm>
22. Florida Department of Transportation Utility Accommodation Manual  
<http://www.dot.state.fl.us/specificationsoffice/utilities/UAM.shtm>
23. AASHTO LRFD Bridge Design Specifications  
[https://bookstore.transportation.org/category\\_item.aspx?id=BR](https://bookstore.transportation.org/category_item.aspx?id=BR)
24. Florida Department of Transportation Flexible Pavement Design Manual  
<http://www.dot.state.fl.us/rddesign/PM/publicationS.shtm>
25. Florida Department of Transportation Rigid Pavement Design Manual  
<http://www.dot.state.fl.us/rddesign/PM/publicationS.shtm>
26. Florida Department of Transportation Pavement Type Selection Manual  
<http://www.dot.state.fl.us/rddesign/PM/publicationS.shtm>
27. Florida Department of Transportation Right of Way Manual  
<http://www.dot.state.fl.us/rightofway/Documents.shtm>
28. Florida Department of Transportation Traffic Engineering Manual  
<http://www.dot.state.fl.us/TrafficOperations//Operations/Studies/TEM/TEM.shtm>
29. Florida Department of Transportation Intelligent Transportation System Guide Book  
[http://www.dot.state.fl.us/TrafficOperations/Doc\\_Library/Doc\\_Library.shtm](http://www.dot.state.fl.us/TrafficOperations/Doc_Library/Doc_Library.shtm)
30. Federal Highway Administration Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Plans and Specifications  
<http://www.fhwa.dot.gov/engineering/geotech/pubs/reviewguide/checklist.cfm>
31. AASHTO Guide for the Development of Bicycle Facilities  
[https://bookstore.transportation.org/collection\\_detail.aspx?ID=116](https://bookstore.transportation.org/collection_detail.aspx?ID=116)
32. Federal Highway Administration Hydraulic Engineering Circular Number 18 (HEC 18).  
[http://www.fhwa.dot.gov/engineering/hydraulics/library\\_arc.cfm?pub\\_number=17](http://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=17)

33. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways  
<http://www.dot.state.fl.us/rddesign/FloridaGreenbook/FGB.shtm>
34. Florida Department of Transportation Project Development and Environment Manual, Parts 1 and 2  
<http://www.dot.state.fl.us/emo/pubs/pdeman/pdeman1.shtm>
35. Florida Department of Transportation Driveway Information Guide  
<http://www.dot.state.fl.us/planning/systems/sm/accman/pdfs/driveway2008.pdf>
36. AASHTO Highway Safety Manual  
<http://www.highwaysafetymanual.org/Pages/default.aspx>
37. Florida Statutes  
<http://www.leg.state.fl.us/Statutes/index.cfm?Mode=View%20Statutes&Submenu=1&Tab=statutes&CFID=14677574&CFTOKEN=80981948>

## **B. Innovative Aspects:**

All innovative aspects shall be identified separately as such in the Technical Proposal.

An innovative aspect does not include revisions to specifications, standards or established Department policies. Innovation should be limited to Design-Build Firm's means and methods, roadway alignments, approach to Project, etc.

### **1. Alternative Technical Concept (ATC) Proposals**

The ATC process allows innovation, flexibility, time and cost savings on the design and construction of Design-Build Projects while providing the best value for the public. Any deviation from the RFP that the Design-Build Firms seeks to obtain approval prior to Technical Proposal submission is, by definition, an ATC. The proposed ATC shall provide an approach that is equal to or better than the requirements of the RFP, as determined by the Department. ATC Proposals which reduce scope, quality, performance, or reliability should not be proposed. A proposed concept does not meet the definition of an ATC if the concept is contemplated by the RFP.

The Department will keep all ATC submissions confidential prior to the Final Selection of the Proposer to the fullest extent allowed by law, with few exceptions. Although the Department will issue an addendum for all ATC Proposals contained in the list below, the Department will endeavor to maintain confidentiality of the Design-Build Firms specific ATC proposal. Prior to approving ATC's which would result in the issuance of an Addendum as a result of the item being listed below, the Design-Build Firm will be given the option to withdraw previously submitted ATC proposals. Any approved ATC Proposal related to following requirements described by this RFP shall result in the issuance of an Addendum to the RFP:

- None

The following requirements described by this RFP may be modified by the Design-Build Firm provided they are presented in the One-on-One ATC discussion meeting and submitted to the Department for review and approval through the ATC process described herein. The Department may deem a Proposal Non-Responsive should the Design-Build Firm include but fail to present and obtain Department approval of the

proposed alternates through the ATC process. Department approval of an ATC proposal that is related to the items listed below will NOT result in the issuance of an Addendum to the RFP.

1. Alternate Interchange Geometric Layouts
2. Alternate Horizontal Alignments
3. Alternate Vertical Alignments

## **2. One-on-One ATC Proposal Discussion Meetings**

One-on-One ATC discussion meetings may be held in order for the Design-Build Firm to describe proposed changes to supplied basic configurations, Project scope, design criteria, and/or construction criteria. Each Design-Build Firm with proposed changes may request a One-on-One ATC discussion meeting to describe the proposed changes. The Design-Build Firm shall provide, by the deadline shown in the Schedule of Events of this RFP, a preliminary list of ATC proposals to be reviewed and discussed during the One-on-One ATC discussion meetings. This list may not be inclusive of all ATC's to be discussed but it should be sufficiently comprehensive to allow the Department to identify appropriate personnel to participate in the One-on-One ATC discussion meetings. The purpose of the One-on-One ATC discussion meeting is to discuss the ATC proposals, answer questions that the Department may have related to the ATC proposal, review other relevant information and when possible establish whether the proposal meets the definition of an ATC thereby requiring the submittal of a formal ATC submittal. The meeting should be between representatives of the Design-Build Firm and/or the Design-Build Engineer of Record and District/Central Office staff as needed to provide feedback on the ATC proposal. Immediately prior to the conclusion of the One-on-One ATC discussion meeting, the Department will advise the Design-Build Firm as to the following related to the ATC proposals which were discussed:

- The Proposal meets the criteria established herein as a qualifying ATC Proposal; therefore an ATC Proposal submission IS required, or
- The Proposal does not meet the criteria established herein as a qualifying ATC proposal since the Proposal is already allowed or contemplated by the original RFP; therefore an ATC Proposal submission is NOT required.

## **3. Submittal of ATC Proposals**

All ATC submittals must be in writing and may be submitted at any time following the Shortlist Posting but shall be submitted prior to the deadline shown in the Schedule of Events of this RFP.

All ATC submittals are required to be on roll plots no larger than 36" or plan sheets and shall be sequentially numbered and include the following information and discussions:

- a) Description: A description and conceptual drawings of the configuration of the ATC or other appropriate descriptive information, including, if appropriate, product details and a traffic operational analysis;
- b) Usage: The locations where and an explanation of how the ATC would be used on the Project;
- c) Deviations: References to requirements of the RFP which are inconsistent with the proposed ATC, an explanation of the nature of the deviations from the requirements and a request for

approval of such deviations along with suggested changes to the requirements of the RFP which would allow the alternative proposal;

- d) Analysis: An analysis justifying use of the ATC and why the deviation, if any, from the requirements of the RFP should be allowed;
- e) Impacts: A preliminary analysis of potential impacts on vehicular traffic (both during and after construction), environmental impacts, community impacts, safety, and life-cycle Project and infrastructure costs, including impacts on the cost of repair, maintenance, and operation;
- f) Risks: A description of added risks to the Department or third parties associated with implementation of the ATC;
- g) Quality: A description of how the ATC is equal or better in quality and performance than the requirements of the RFP;
- h) Operations: Any changes in operation requirements associated with the ATC, including ease of operations;
- i) Maintenance: Any changes in maintenance requirements associated with the ATC, including ease of maintenance;
- j) Anticipated Life: Any changes in the anticipated life of the item comprising the ATC;

#### **4. Review and Approval of ATC Submittals**

After receipt of the ATC submittal, the District Design Engineer (DDE), or designee, will communicate with the appropriate staff (i.e. District Structures Engineer, District Construction Engineer, District Maintenance Engineer, State Structures Engineer, State Roadway Design Engineer, FHWA, as applicable) as necessary, and respond to the Design-Build Firm in writing as to whether the ATC is acceptable, not acceptable, or requires additional information within 14 calendar days of receipt of the ATC submittal. If the DDE, or designee, determines that more information is required for the review of an ATC, questions should be prepared by the DDE, or designee, to request and receive responses from the Design-Build Firm. The review should be completed within 14 calendar days of the receipt of the ATC submittal. If the review will require additional time, the Design-Build Firm should be notified in advance with an estimated timeframe for completion.

Approved Design Exceptions or Design Variations required as part of an approved ATC submittal will result in the issuance of an addendum to the RFP notifying all Shortlisted Design-Build Firms of the approved Design Exception(s) or Design Variation(s). Such a change will be approved by FHWA, as applicable. Prior to approving ATC's which would result in the issuance of an Addendum as a result of a Design Exception and/or Design Variation, the Design-Build Firm will be given the option to withdraw previously submitted ATC proposals.

The Department reserves the right to disclose to all Design-Build Firms, via an Addendum to the RFP, any errors of the RFP that are identified during the One-on-One ATC meetings, except to the extent that the Department determines, in its sole discretion, such disclosure would reveal confidential or proprietary information of the ATC.

ATC's are accepted by the Department at the Department's discretion and the Department reserves the right to reject any ATC submitted. The Department reserves the right to issue an Addendum to the RFP based upon a previously denied ATC Proposal, without regard to the confidentiality of the denied ATC Proposal.

The Project file will clearly document all communications with any Design-Build Firm.

## **5. Incorporation of Approved ATC's into the Technical Proposal**

The Design-Build Firm will have the option to include any Department Approved ATC's in the Technical Proposal. The Proposal Price should reflect any incorporated ATC's. All approved ATC's that are incorporated into the Technical Proposal must be clearly identified in the Technical Proposal Plans and/or Roll Plots. The Technical Proposal shall also include a listing of the incorporated, approved ATCs.

By submitting a Proposal, the Design-Build Firm agrees, if it is not selected, to disclosure of its work product to the successful Design-Build Firm, only after receipt of the designated stipend (if applicable) or after award of the contract whichever occurs first.

### **C. Geotechnical Services:**

#### **1. General Conditions:**

The Design-Build Firm shall be responsible for identifying and performing any geotechnical investigation, analysis and design of foundations, foundation construction, foundation load and integrity testing, and inspection dictated by the Project needs in accordance with Department guidelines, procedures and specifications. All geotechnical work necessary shall be performed in accordance with the Governing Regulations. The Design-Build Firm shall be solely responsible for all geotechnical aspects of the Project.

### **D. Department Commitments:**

The Design-Build Firm will be responsible for adhering to the project commitments identified below:

- Any PD&E Commitments

### **E. Environmental Permits:**

#### **1. Storm Water and Surface Water:**

Plans shall be prepared in accordance with Chapters 373 and 403 (F.S.) and Chapters 40 and 62 (F.A.C.).

#### **2. Permits:**

The Department will obtain a Southwest Florida Water Management District (SWFWMD) Environmental Resource Permit (ERP) and US Army Corps of Engineers (USACE) permits for improvements included in the Concept Plans (see Reference Documents) for treatment and attenuation requirements.

Impacts due to ITS relocation is not included in the permit and the proposed concept plans (reference documents) do not introduce additional impacts.

Impacts due to dewatering are not included in the permit. The Design-Build Firm should recognize the Project constraints and limited areas available for dewatering.

The Design-Build Firm shall be responsible for modifying the issued permits as necessary to accurately depict the final design. The Design-Build Firm shall be responsible for any necessary permit time extensions or re-permitting in order to keep the environmental permits valid throughout the construction period. The Design-Build Firm shall provide the Department with draft copies of any and all permit applications, including responses to agency Requests for Additional Information, requests to modify the permits and/or requests for permit time extensions, for review and approval by the Department prior to submittal to the agencies.

All applicable data shall be prepared in accordance with Chapter 373 and 403, Florida Statutes, Chapters 40 and 62, Florida Administrative Code; Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, 23 CFR 771, 23 CFR 636, and parts 114 and 115, Title 33, Code of Federal Regulations. In addition to these Federal and State permitting requirements, any dredge and fill permitting required by local agencies shall be prepared in accordance with their specific regulations. Preparation of all documentation related to the acquisition of all applicable permits will be the responsibility of the Design-Build Firm. Preparation of complete permit packages will be the responsibility of the Design-Build Firm. The Design-Build Firm is responsible for the accuracy of all information included in permit application packages. As the permittee, the Department is responsible for reviewing, approving, and signing, the permit application package including all permit modifications, or subsequent permit applications. This applies whether the project is Federal or state funded. Once the Department has approved the permit application, the Design-Build Firm is responsible for submitting the permit application to the environmental permitting agency. A copy of any and all correspondence with any of the environmental permitting agencies shall be sent to the District Environmental Permits Office. If any agency rejects or denies the permit application, it is the Design-Build Firm's responsibility to make whatever changes necessary to ensure the permit application is approved. The Design-Build Firm shall be responsible for any necessary permit extensions or re-permitting in order to keep the environmental permits valid throughout the construction period. The Design-Build Firm shall provide the Department with draft copies of any and all permit applications, including responses to agency Requests for Additional Information, requests to modify the permits and/or requests for permit extensions, for review and approval by the Department prior to submittal to the agencies.

The Design-Build Firm will be required to pay all permit fees. Any fines levied by permitting agencies shall be the responsibility of the Design-Build Firm. The Design-Build Firm shall be responsible for complying with all permit conditions.

Wetland mitigation is required in the issued permits, which are based on the Concept Plans, and will be the responsibility of the Department. If any permit applications completed by the Design-Build Firm propose to increase the amount of wetland impact that requires mitigation, the Design-Build Firm shall be responsible for providing to the Department an update on the amount and type of wetland impacts as soon as the impacts are anticipated (including temporary impacts and/or any anticipated impacts due to construction staging or construction methods). The Department will direct the use of a mitigation site, private mitigation bank or the use of the water management district per 373.4137 F.S. The mitigation costs of any additional impacts proposed by the Design-Build Firm shall be the responsibility of the Design-Build Firm. If the Department directs use of a private mitigation bank, the Design-Build Firm shall pay the appropriate fee directly to the bank. If the Department directs use of 373.4137, F.S., the Design-Build Firm shall provide appropriate funds to the Department at the time of permit issuance and the Department will then transfer the mitigation funds to the SWFWMD.

The Design-Build Firm shall be solely responsible for all costs associated with these permitting activities and shall include all necessary permitting activities in their schedule.

However, notwithstanding anything above to the contrary, upon the Design-Build Firm's preliminary request for extension of Contract Time, pursuant to 8-7.3, being made directly to the District Construction Engineer, the Department reserves unto the District Construction Engineer, in their sole and absolute discretion, according to the parameters set forth below, the authority to make a determination to grant a non-compensable time extension for any impacts beyond the reasonable control of the Design-Build Firm in securing permits. Furthermore, as to any such impact, no modification provision will be considered by the District Construction Engineer unless the Design-Build Firm clearly establishes that it has continuously from the beginning of the Project aggressively, efficiently and effectively pursued the securing of the permits including the utilization of any and all reasonably available means and methods to overcome all impacts. There shall be no right of any kind on behalf of the Design-Build Firm to challenge or otherwise seek review or appeal in any forum of any determination made by the District Construction Engineer under this provision.

**F. Railroad Coordination: Not applicable to this Project.**

**G. Survey:**

The Design-Build Firm shall perform all surveying and mapping services necessary to complete the Project. Survey services must also comply with all pertinent Florida Statutes and applicable rules in the Florida Administrative Code. All field survey data will be furnished to the District Surveyor in a Department approved digital format, readily available for input and use in CADD Design files. All surveying and mapping work must be accomplished in accordance with the Department's Surveying Procedure, Topic Nos. 550-030-101; Right-of-Way Mapping Procedure, Topic No. 550-030-015; Aerial Surveying Standards for Transportation Projects Procedure, Topic No. 550-020-002. This work must comply with the Minimum Technical Standards for Professional Surveyors and Mappers, Chapter 5J-17, F.A.C., pursuant to Section 472.027, F.S. This survey also must comply with Chapter 177, F.S.

The Design-Build Firm will be required to utilize the same horizontal and vertical control as provided with the Project Network Control Sheets (CTLS). See Attachment No. 13.  
For Subsurface Utility Exploration (SUE) requirements, see Section VI.E.

**H. Verification of Existing Conditions:**

The Design-Build Firm shall be responsible for verification of existing conditions, including research of all existing Department records and other information.

By execution of the contract, the Design-Build Firm specifically acknowledges and agrees that the Design-Build Firm is contracting and being compensated for performing adequate investigations of existing site conditions sufficient to support the design developed by the Design-Build Firm and that any information is being provided merely to assist the Design-Build Firm in completing adequate site investigations. Notwithstanding any other provision in the contract documents to the contrary, no additional compensation will be paid in the event of any inaccuracies in the preliminary information.

## I. Submittals:

### 1. Plans:

Plans must meet the minimum contents of a particular phase submittal prior to submission for review. The particular phase of each submittal shall be clearly indicated on the cover sheet. Component submittals must be accompanied by sufficient information for adjoining components or areas of work to allow for proper evaluation of the component under review. Prior to providing the Department with any submittals, the Design-Build Firm is required to perform a quality check of the submittal. If the submittal is incomplete or contains substantial errors, then the Department will reject the submittal.

A Google Earth ready KMZ file will be developed and submitted for all plan or roll plot submittals to the Department. The file will have both existing and proposed information for each discipline.

The Design-Build Firm should note that to the maximum extent possible the project documentation that is to be submitted for phase reviews should be directly created/printed electronically to an Adobe PDF format from the software that is used to produce the plan sheet(s), calculation sheet(s), report(s), etc. Creating the project documentation electronically rather than simply scanning the documents from a hard copy will greatly aid in the reviews of project submittals.

Submittals for Category I and II bridges are limited to the following component submittals: foundation, substructure, and superstructure. Bridge component submittals must be accompanied by all supplemental information required for a complete review. Submittals for individual component elements (i.e. Pier 2, Abutment 1, Span 4, etc.) and incomplete submittals will not be accepted.

Category I and II bridge component submittals shall contain the following:

1. Plan sheets for the component under review developed to the specified level of detail (i.e. 90% plans, Final plans, etc.),
2. A complete set of the most developed plan sheets for all other major elements of the bridge. These sheets shall be marked "For Information Only" on the index sheet. In no case shall a plan sheet be less than 30% complete.
3. Design documentation including a complete set of calculations, geotechnical reports, pertinent correspondence, etc. in support of the 90% and final component submittals.
4. For Category II bridges component submittals shall also include independent peer review documentation.

The Design-Build Firm shall provide copies of required review documents as listed below.

#### **90% Component Plans**

##### **Hard Copy**

1 set of each plan component set in 11x17 plan sheets

##### **Electronic**

1 PDF of each plan component set

1 PDF of the Landscape Opportunity Plan

1 PDF of Settlement and Vibration Monitoring Plan (SVMP) for Department acceptance and update throughout the construction period

1 PDF of all design calculations and documentation

- 1 PDF of Draft Technical Special Provisions
- 1 PDF of signed and sealed Final Geotechnical Report
- 1 PDF Independent Peer Reviewer's comments and comment responses

### **Final Component Plans**

#### **Hard Copy**

- 1 set of each plan component set in 11x17 plan sheets

#### **Electronic**

- 1 PDF of each plan component set
- 1 PDF of the Landscape Opportunity Plan
- 1 PDF of Final Settlement and Vibration Monitoring Plan (SVMP)
- 1 PDF of all design calculations and documentation
- 1 PDF of Draft Specifications Package
- 1 PDF of Final Technical Special Provisions
- 1 PDF of Independent Peer Reviewer's signed and sealed cover letter that all comments have been addressed and resolved.

#### **Construction Set:**

##### **Electronic**

- 1 PDF of each signed and sealed component plan set
- 1PDF of all signed and sealed design calculations and documentation
- 1PDF of signed and sealed Specifications Package
- 1 PDF of signed and sealed Technical Special Provisions

The intended construction set of signed and sealed plans, with all comments resolved, will be delivered to the Department's Design Project Manager a minimum of 5 calendar days, excluding Department observed holidays and weekends, prior to construction of that component. The Department's Design Project Manager will make the construction plan set available to the Department reviewers to resolve any previous comments. Once all comments have been satisfactorily resolved as determined by the Department, the Department's Project Manager will initial, date and stamp each submittal as "Released for Construction". Only signed and sealed plans which are stamped "Released for Construction" by the Department's Project Manager are valid and all work that the Design-Build Firm performs in advance of the Department's release of Plans will be at the Design-Build Firm's risk. To work at risk, the Design-Build Firm must submit signed and sealed plans and can begin working prior to the Department's Project Manager providing stamped "Release for Construction" plans. The Design-Build Firm shall notify the Department five (5) days prior to starting work at risk. All work that the Design-Build Firm performs in advance of the Department's release of Plans will be at the Design-Build Firm's risk.

#### **As-Built Set:**

The Design-Build Firm's Professional Engineer in responsible charge of the Project's design shall professionally endorse (sign, seal, and certify) the As-built Plans, the special provisions and all reference and support documents. The professional endorsement shall be performed in accordance with the

## Department Plans Preparation Manual.

The Design-Build Firm shall complete the As-Built Plans as the Project is being constructed. All changes made subsequent to the “Released for Construction” Plans shall be signed/sealed by the EOR. The -As-Built Plans shall reflect all changes initiated by the Design-Build Firm or the Department in the form of revisions. The record set shall be submitted prior to Project completion for Department review and acceptance as a condition precedent to the Departments issuance of Final Acceptance.

The –Department shall review, certify, and accept the As-Built Plans prior to issuing Final Acceptance of the project in order to complete the As-Built Plans.

The Department shall certify the As-Built Plans per Chapter 5.12 of the Construction Project Administration Manual (TOPIC No. 700-000-000).

The Design-Build Firm shall furnish to the Department, upon Project completion, the following:

- 1 set of 11” X 17” signed and sealed plans
- 1 set of the Landscape Opportunity Plans
- 1 signed and sealed copy of the Bridge Load Rating based on as-built conditions
- 1 set of final documentation (if different from final component submittal)
- 2 (two) Final Project CD’s

## **2. Milestones:**

Component submittals, in addition to the plan submittals listed in the previous section will be required. In addition to various submittals mentioned throughout this document the following milestone submittals will be required.

1. Plans review prior to submittal for environmental permits (if required):
  - a. 2 sets 11” x 17” Project Plans
  - b. 2 copies of final Geotechnical Report
  - c. 2 sets of Roadway and Drainage documentation
  - d. 2 copies of Technical Special Provisions
  - e. 2 CD/DVD with PDF files of all documents listed above
2. Permit documentation and submittal (if required):
  - a. The specific number of copies required for each of the various agencies
  - b. 2 copies for the Department
  - c. Where permits require the signature by the owner, the Department will provide said signature
  - d. Other submittals identified by the Proposers in their Technical Proposal

## **J. Contract Duration:**

The Design-Build Firm shall establish the Contract Duration for the subject Project. In no event shall the Contract Duration exceed 1115 calendar days. The Proposed Contract Duration shall be submitted with the Bid Price Proposal.

## **K. Project Schedule:**

The Design-Build Firm shall submit a Schedule, in accordance with Subarticle 8-3.2 (Design-Build Division I Specifications). The Design-Build Firm's Schedule shall allow for up to fifteen (15) calendar days (excluding weekends and Department observed Holidays) review time for the Department's review of all submittals with the exception of Category II structures submittals. The review of Category II structures submittals requires Central Office involvement and the Schedule shall allow for up to twenty (20) calendar days (excluding weekends and Department observed Holidays) for these reviews. For preliminary phase/90% Design and Final Phase/100% Design submittals, comments and responses shall be exchanged using the FTE's Electronic Review Comment (ERC) System.

The Department will perform the review of Foundation Construction submittals in accordance with Section 455. The following Special Events have been identified in accordance with Specification 8-6.4:

- Working day before Martin Luther King Jr. Day
- Working day before President's Day
- Before/After Independence Day July 3 and July 5
- Friday before Easter
- Friday before Memorial Day
- Wednesday before Thanksgiving

The minimum number of activities included in the Schedule shall be those listed in the Schedule of Values and those listed below:

- Anticipated Award Date
- Design Submittals
- Shop Drawing Submittals, Completion and Approval Dates
- Design Survey
- Submittal Reviews by the Department and FHWA
- Design Review / Acceptance Milestones
- Materials Quality Tracking
- Geotechnical Investigation
- Utility Coordination
- Comment Resolution Meetings following Department Review of Submittals
- Start of Construction
- ITS Relocation and Testing
- Construction Milestones
- Clearing and Grubbing
- Construction Mobilization
- Embankment/Excavation
- Environmental Permit Acquisition
- Foundation Design
- Foundation Construction
- Substructure Design
- Substructure Construction
- Superstructure Design
- Superstructure Construction

- Walls Design
- Walls Construction
- Miscellaneous Structures Design
- Miscellaneous Structures Construction
- Roadway Design
- Roadway Construction
- Drainage Design
- Signing and Pavement Marking Design
- Signing and Pavement Marking Construction
- Signalization and Intelligent Transportation System Design
- Signalization and Intelligent Transportation System Construction
- Lighting Design
- Lighting Construction
- Landscape Opportunity Plan
- Maintenance of Traffic Design
- Permit Submittals
- Maintenance of Traffic Set-Up (per duration)
- Erosion Control
- Holidays and Special Events (shown as non-work days)
- Additional Construction Milestones as determined by the Design-Build Firm
- Final Completion Date for All Work

The Design-Build Firm shall build appropriate time into the schedule for processing and approval of shop drawings through ProjectSolve prior to beginning construction.

**L. Key Personnel/Staffing:**

The Design-Build Firm's work shall be performed and directed by key personnel identified in the expanded letter of interest and/or technical proposal by the Design-Build Firm. Any changes in the indicated personnel shall be subject to review and approval by the Department's Project Manager. The Design-Build Firm shall have available a professional staff that meets the minimum training and experience set forth in Florida Statute Chapter 455.

**M. Meetings and Progress Reporting:**

The Design-Build Firm shall anticipate periodic meetings with Department personnel and other agencies as required for resolution of design and/or construction issues. These meetings may include:

- Department technical issue resolution
- Permit agency coordination
- Local government agency coordination
- Scoping Meetings
- System Integration Meetings
- Adjacent Project Coordination Meetings
- Partnering Meetings
- DRB Meetings
- Public Involvement

- Comment Resolution Meetings
- Pavement Design Meeting
- MOT Workshop
- Structures Meeting
- Landscape Coordination Meeting

During design, the Design-Build Firm shall meet with the Department's Project Manager on a monthly basis and provide a one month look ahead of the activities to be completed during the upcoming month.

During construction, the Design-Build Firm shall meet with the Department's Project Manager on a weekly basis and provide a one-week look ahead for activities to be performed during the coming week.

The Design-Build Firm shall meet with the Department's Project Manager at least thirty (30) calendar days before beginning system integration activities. The purpose of these meetings shall be to verify the Design-Build Firm's ITS and signalization integration plans by reviewing site survey information, proposed splicing diagrams, IP addressing schemes, troubleshooting issues, and other design issues. In addition, at these meetings the Design-Build Firm shall identify any concerns regarding the Integration and provide detailed information on how such concerns will be addressed and/or minimized.

The Design-Build Firm shall provide all documentation required to support system integration meetings, including detailed functional narrative text, system and subsystem drawings and schematics. Also included shall be the documentation to demonstrate all elements of the proposed design which includes, but is not limited to: technical, functional, and operational requirements; ITS/communications; equipment; termination/patch panels; performance criteria; and details relating to interfaces to other ITS subsystems.

System Integration Meetings will be held on mutually agreeable dates.

All action items resulting from the System Integration Meeting shall be satisfactorily addressed by the Design-Build Firm and reviewed and approved by the Department.

The Design-Build Firm shall, on a monthly basis, provide written progress reports that describe the items of concern and the work performed on each task

## **N. Public Involvement:**

### **1. General:**

Public involvement is an important aspect of the Project. Public involvement includes communicating to all interested persons, groups, and government organizations information regarding the development of the Project. The District Public Involvement Office (PIO) will carry out an exhaustive Public Involvement Campaign and a marketing effort. The Design-Build Firm will continue to be part of the Public Involvement effort but on a limited basis as described below.

### **2. Public Meetings:**

The Design-Build Firm shall provide all support necessary for the PIC to hold various public meetings, which may include:

- Kick-off or introductory meeting

- Metropolitan Planning Organization (MPO) Citizens Advisory Committee Meetings
- MPO Transportation Technical Committee Meetings
- MPO Meetings
- Public Information Meetings
- Elected and appointed officials
- Special interest groups (private groups, homeowners associations, environmental groups, minority groups and individuals)

The Design-Build Firm shall include attendance at two meetings per month for the term of the contract to support the public involvement program.

For any of the above type meetings the Design-Build Firm shall provide all technical assistance, data and information necessary for the District PIO to produce display boards, printed material, video graphics, computerized graphics, etc., and information necessary for the day-to-day exchange of information with the public, all agencies and elected officials in order to keep them informed as to the progress and impacts that the proposed Project will create. This includes workshops, information meetings, and public hearings.

The Design-Build Firm shall, on an as-needed basis, attend the meetings with an appropriate number of personnel to assist the Department's Project Representative/District PIO. The Design-Build Firm shall forward all requests for group meetings to the District PIO. The Design-Build Firm shall inform the District PIO of any meetings with individuals that occur without prior notice.

### **3. Public Workshops, Information Meetings:**

**The Design-Build Firm shall provide all** the support services listed in No. 2 above.

All legal/display ads announcing workshops, information meetings, and public meetings will be prepared and paid for by the District PIO.

The Department will be responsible for the legal/display advertisements for design concept acceptance. The PIC will be responsible for preparing and mailing (includes postage) for all letters announcing workshops and information meetings.

### **4. Public Involvement Data:**

The Design-Build Firm is responsible for the following:

- Coordinating with the District PIO.
- Identifying possible permit and review agencies and providing names and contact information for these agencies to the District PIO.
- Providing required expertise (staff members) to assist the District PIO on an as-needed basis.
- Preparing color graphic renderings and/or computer generated graphics to depict the proposed improvements for coordination with the Department, local governments, the Urban Design Guidelines Committee, and other agencies.

The collection of public input occurs throughout the life of the Project and requires maintaining files, newspaper clippings, letters, and especially direct contacts before, during and after any of the public meetings. Articles such as those mentioned shall be provided to the District PIO for their use and records.

In addition to collecting public input data, the Design-Build Firm may be asked by the District PIO to prepare responses to any public inquiries as a result of the public involvement process. The Department shall review all responses prior to mailing.

**O. Quality Management Plan (QMP):**

**1. Design:**

The Design-Build Firm shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications, geotechnical and other services furnished by the Design-Build Firm under this contract.

The Design-Build Firm shall provide a Design Quality Management Plan, which describes the Quality Control (QC) procedures to be utilized to verify, independently check, and review all design drawings, specifications, and other documentation prepared as a part of the contract. In addition the QMP shall establish a Quality Assurance (QA) program to confirm that the Quality Control procedures are followed. The Design-Build Firm shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. The QMP may be one utilized by the Design-Build Firm, as part of their normal operation or it may be one specifically designed for this Project. The Design-Build Firm shall submit a QMP within fifteen (15) working days following issuance of the written Notice to Proceed. A marked up set of prints from the Quality Control review will be sent in with each review submittal. The responsible Professional Engineers or Professional Surveyor that performed the Quality Control review, as well as the QA manager will sign a statement certifying that the review was conducted.

The Design-Build Firm shall, without additional compensation, correct all errors or deficiencies in the surveys, designs, drawings, specifications and/or other services.

No fabrication, casting, or construction will occur until all related design review and shop drawing review comments are resolved.

**2. Construction:**

The Design-Build Firm shall be responsible for developing and maintaining a Construction Quality Control Plan in accordance with Section 105 of Standard Specifications which describes their Quality Control procedures to verify, check, and maintain control of key construction processes and materials.

The sampling, testing and reporting of all materials used shall be in compliance with the Sampling, Testing and Reporting Guide (STRG) provided by the Department. The Design-Build Firm will use the Department's database(s) to allow audits of materials used to assure compliance with the STRG. The Department has listed the most commonly used materials and details in the Department's database. When materials being used are not in the Department's database list, the Design-Build Firm shall use appropriate material details from the STRG to report sampling and testing. Refer to the "Access Instruction for LIMS" for more information on how to gain access to the Department's databases: <http://www.dot.state.fl.us/statematerialsoffice/quality/programs/qualitycontrol/contractor.shtm>

Prepare and submit to the Engineer a Job Guide Schedule (JGS) using the Laboratory Information Management System (LIMS) in accordance with Section 105 of Standard Specifications.

The Department shall maintain its rights to inspect construction activities and request any documentation

from the Design-Build Firm to ensure quality products and services are being provided in accordance with the Department's Materials Acceptance Program.

**P. Liaison Office:**

The Department and the Design-Build Firm will designate a Liaison Office and a Project Manager who shall be the representative of their respective organizations for the Project.

**Q. Engineers Field Office:**

The Design-Build Firm will provide an Engineers Field Office in accordance with Special Provision 109.

The minimum size shall be 1,500 square feet.

**R. Schedule of Values:**

The Design-Build Firm will be responsible for invoicing the Department based on current invoicing policy and procedure. Invoicing will be based on the completion or percentage of completion of major, well-defined tasks as defined in the schedule of values. Final payment will be made upon final acceptance by the Department of the Design-Build Project. Tracking DBE participation will be required under normal procedures according to the CPAM. The Design-Build Firm must submit the schedule of values to the Department for approval. No invoices shall be submitted prior to Department approval of the schedule of values.

Upon receipt of the invoice, the Department's Project Manager will make judgment on whether or not work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

**S. Computer Automation:**

The Project shall be developed utilizing computer automation systems in order to facilitate the development of the contract plans. Various software and operating systems were developed to aid in assuring quality and conformance with Department policies and procedures. The Department supports MicroStation and GEOPAK as its standard graphics and roadway design platform as well as Autodesk<sup>TM</sup>'s AutoCAD Civil 3D as an alternate platform. Seed Files, Cell Libraries, User Commands, MDL Applications and related programs developed for roadway design and drafting are available in the FDOT CADD Software Suite. Furnish record documents for all building related components of the project in AutoCad format. It is the responsibility of the Design-Build Firm to obtain and utilize current Department releases of all CADD applications.

The Design-Build Firm's role and responsibilities are defined in the Department's CADD Manual. The Design-Build Firm will be required to submit final documents and files which shall include complete CADD design and coordinate geometry files.

As part of the As-Built Set deliverables, field conditions shall be incorporated into MicroStation and/or AutoCAD design files. Use the cloud revision utility as well as an "AB" revision triangle to denote field conditions on plan sheets. The Department's Design Project Manager will require fifteen (15) calendar days, excluding Department observed holidays and weekends, to review As-Built Set CADD design deliverables before accepting.

**T. Construction Engineering and Inspection:**

The Department is responsible for providing Construction Engineering and Inspection (CEI) and Quality Assurance Engineering.

The Design-Build Firm is subject to the Department's Independent Assurance (IA) Procedures.

**U. Testing:**

The Department or its representative will perform verification and resolution sampling and testing activities at both on site, as well as, off site locations such as pre-stress plants, batch plants, structural steel and weld, fabrication plants, etc. in accordance with the latest Specifications.

**V. Value Added:**

The Design-Build Firm may provide Value Added Project Features, in accordance with Article 5-14 of the Design-Build Specifications for the following features:

- Roadway features
- Roadway drainage systems,
- Approach slabs
- Superstructure
- Substructure
- Concrete defects
- Structural steel defects
- Post-tensioning systems
- And any other products or features the Design-Build Firm desires.

The Design-Build Firm shall develop the Value Added criteria, measurable standards, and remedial work plans in the Design-Build Firm's technical proposal.

**W. Adjoining Construction Projects:**

The Design-Build Firm shall be responsible for coordinating construction activities with other construction projects that are impacted by or impact this Project. This includes Projects under the jurisdiction of local governments, the Department, or other regional and state agencies.

FPID Number/Project	Project Description	Department	Design	Construction
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Number		Contact	Status	Status
242626-3	I-75 Widening from S. of CR 470 to N. of the Turnpike	Taleb Shams	In-Progress	September 2014
428213-1	I-75 Sumter Marion County ITS Phase I	Edward L. Grant	In-Progress	FY 2015

**X. Design Issue Escalation:**

The Department has established the issue escalation process for design questions and conflict resolution that the Design-Build Firm shall follow unless revised by the Partnering agreement. All issues are to be directed to the Department Project Manager. If the issue cannot be resolved at this level the Department Project Manager shall forward the issue to the next level in the process. The escalation process begins with the District Design Engineer, followed by the Director of Transportation Operations, and finally to the District Secretary. Each level shall have a maximum of three (3) calendar days (excluding weekends and Department observed holidays), to answer, resolve or address the issue. The three (3) calendar day (excluding weekends and Department observed holidays) period is a response time and does not infer resolution. Questions may be expressed verbally and followed up in writing. The Department Project Manager will respond in a timely manner but not to exceed three (3) calendar days (excluding weekends and Department observed holidays). The Design-Build Firm shall provide any available supporting documentation.

The Design-Build Firm shall provide a similar issue escalation process for their organization with personnel of similar levels of responsibility.

The District Secretary will have the final authority on design decisions.

**Y. Construction Clarification, Conflict Resolution, and Issue Escalation:**

In the event that construction problems occur, the resolution of those problems will be processed in one of the following two ways unless revised by a Partnering agreement:

- If the resolution does not change the original intent of the technical proposal/RFP, then the Design-Build Firm Engineer of Record (EOR) will be responsible for developing the design solution to the construction problem and the Resident Engineer will be responsible for review and response within ten (10) calendar days (excluding weekends and Department observed holidays). The Resident Engineer will either concur with the proposed solution or, if the Resident Engineer has concerns, the issue will be escalated as described in the process below.
- If the resolution does alter the original intent of the technical proposal/RFP then the EOR will develop the proposed solution, copy in the Resident Engineer, and send it to the District Construction Office for review and response through the Department Project Manager. The District Construction Office will respond to the proposed solution within ten (10) calendar days (excluding weekends and Department observed holidays). The District Construction Office will either concur with the proposed solution or, if the Resident Engineer has concerns, the issue will be escalated as described in the process below. Changes to the original

intent of the technical proposal/RFP will require a contract change order and FHWA approval.

- The Department has established the issue escalation process for construction questions and conflict resolution that the Design-Build Firm shall follow unless revised by the Partnering agreement. All issues are to be directed to the Department Project Manager. If the issue cannot be resolved at this level the Department Project Manager shall forward the issue to the next level in the process. The escalation process begins with the District Construction Engineer, followed by the Director of Transportation Operations, and finally to the District Secretary. Each level shall have a maximum of three (3) calendar days (excluding weekends and Department observed holidays) to answer, resolve or address the issue. The three (3) calendar day (excluding weekends and Department observed holidays) period is a response time and does not infer resolution. Questions may be expressed verbally and followed up in writing. The Department Project Manager will respond in a timely manner but not to exceed three (3) calendar days (excluding weekends and Department observed holidays). The Design-Build Firm shall provide any available supporting documentation.

The Design-Build Firm shall provide a similar issue escalation process for their organization with personnel of similar levels of responsibility.

Should an impasse develop, the Dispute Review Board shall assist in the resolution of disputes and claims arising out of the work on the Contract.

## **VI. Design and Construction Criteria.**

### **A. General:**

The Design-Build Firm shall be responsible for: detailed plan checking as outlined in the Plans Preparation Manual (PPM) and TPPPH; as described in the RFP. This includes a checklist of the items listed in the PPM for each completed phase submittal. Bridge submittals may be broken into foundation, substructure, superstructure, approach spans and main channel spans. Roadway submittals may be broken down into grading, drainage, walls, ITS, signing & pavement marking, signalization, lighting and final geometry components. The component design must be in conformity with the Design and Construction Criteria requirements, approved preliminary layout and concept as provided in the Technical Proposal.

Before construction activities can begin for a specific component, signed and sealed design plans and calculations supporting the design for that component must be reviewed by the Department. Component submittals shall be complete submittals along with all the supporting information necessary for review. The work must represent logical work activities and must show impacts on subsequent work on this Project. Any modification to the component construction due to subsequent design changes as the result of design development is solely the Design-Build Firm's risk. Upon review by the Department, the plans will be stamped "Released for Construction" and initialed and dated by the Project Manager. Any construction initiated by the Design-Build Firm prior to receiving signed and sealed plans stamped "Released for Construction" shall be at the sole risk of the Design-Build Firm.

Prior to submittal to the Department, all Category II bridge plans shall have a peer review analysis by an independent engineering firm not involved with the production of the design or plans, prequalified in

accordance with Chapter 14-75. The peer review shall consist of an independent design check, a check of the plans, and a verification that the design is in accordance with AASHTO, FDOT and FTE criteria. The independent peer review engineer's comments and comment responses shall be included in the 90% plans submittal. At the final plans submittal, the independent peer review engineer shall sign and seal a cover letter certifying the final design and stating that all comments have been addressed and resolved.

All design and construction work completed under the Contract shall be in accordance with the United States Standard Measures.

### **B. Vibration and Settlement Monitoring:**

The Design-Build Firm shall be responsible for the identification of and coordination with vibration sensitive sites impacted by the Work for the duration of the construction period.

The Design-Build Firm is responsible for evaluating the need for, design of, and the provision of any necessary precautionary features to protect existing structures from damage, including, at a minimum, selecting construction methods and procedures that will prevent damage. The Design-Build Firm shall submit for Department acceptance a Settlement and Vibration Monitoring Plan (SVMP) as part of the 90% plans submittal and update the SVMP throughout the Construction Period. The Design-Build Firm is responsible for establishing maximum settlement and vibration thresholds equivalent to or lower than the Department Specification requirements for all construction activities, including vibratory compaction operations.

Submittals for Settlement and Vibration Monitoring Plan (SVMP) shall include the following as a minimum:

- Identify any existing structures that will be monitored for vibrations during the construction period.
- Establish the maximum vibration levels. The maximum vibration levels stated in specific existing structures shall not be exceeded.
- Identify any existing structures that will be monitored for settlement during the construction period.
- Establish the maximum settlement levels for the existing structures that must not be exceeded. The maximum settlement level stated shall not be exceeded.
- Identify any existing structures that require pre-construction and post-construction surveys.

The Department will perform the review of Vibration and Settlement submittals in accordance with Department Specifications.

### **C. Right-of-Way:**

In addition to the above-stated requirements, it is the Department's intent that all Project construction activities be conducted within the existing right-of-way. The Design-Build Firm may submit a Technical Proposal that requires the acquisition of additional right-of-way. Any Technical Proposal that requires the acquisition of additional right-of-way shall not extend the contract duration as set forth in the existing RFP under any circumstances. The Department will have sole authority to determine whether the acquisition of

additional right-of-way on the Project is in the Department's best interest, and the Department reserves the right to reject the acquisition of additional right-of-way.

If a Design-Build Firm intends to submit a Technical Proposal that requires the acquisition of additional right-of-way, the Design-Build Firm shall discuss such a proposal with the Department as part of the Question & Answer process or as part of the Alternative Technical Concept process, as applicable. If a Design-Build Firm submits a Technical Proposal that requires the acquisition of additional right-of-way and the Design-Build Firm fails to discuss such a proposal with the Department as part of the Question & Answer process or as part of the Alternative Technical Concept process, then the Department will not consider such aspects of the Proposal during the Evaluation process.

If the Design-Build Firm's Technical Proposal requires additional right-of-way, the additional right-of-way will be required to be directly acquired by the Department. The Design-Build Firm shall submit, along with the Technical Proposal, certified sketches and legal descriptions including area in square feet of any proposed additional right-of-way parcels. On a State-funded project, the additional right-of-way will be acquired by the Department in accordance with all applicable state laws. On a Federally-funded project, the additional right-of-way will be acquired by the Department in accordance with all applicable federal laws, specifically including, but not limited to, the Uniform Relocation Assistance and Real Property Acquisition Policies for Federal and Federally Assisted Programs (42 USC Chapter 61) and its implementing regulations. All costs concerning the acquisition of additional right-of-way shall be borne solely by the Design-Build Firm. The Department will have sole discretion with respect to the entire acquisition process of the additional right-of-way. If the Design-Build Firm's Technical Proposal requires additional right-of-way, the acquisition of any such right-of-way shall be at no cost to the Department, and all costs associated with securing and making ready for use such right-of-way for the Project shall be borne solely by the Design-Build Firm as a part of the Design-Build Firm's Lump Sum Price Bid. The Department will not advance any funds for any such right-of-way acquisition and the Design-Build Firm shall bear all risk of delays in the acquisition of the additional right-of-way, regardless of cause or source.

The Department will provide to the successful Design-Build Firm an estimate of all costs related to the acquisition and use of the additional right-of-way for the Project. At the time the Design-Build Firm returns the executed contract to the Department, the Design-Build Firm shall provide the Department funds equal to the amount of the Department's estimate, along with a Letter of Credit approved by the Department in an amount equal to 100% of the Department's estimate. If additional funds beyond the Department's estimate are anticipated, the Design-Build Firm shall be solely responsible for all such costs and provide the same to the Department upon ten (10) days written notice from the Department. The Letter of Credit is for the purpose of securing the obligations of the Design-Build Firm with respect to the acquisition and use of the additional right-of-way. The Letter of Credit will be released upon the Department's determination that all costs related to the acquisition of and making ready for use the additional right-of-way have been satisfied.

Any remaining funds provided will be returned to the Design-Build Firm. Any additional right-of-way must be acquired prior to the commencement of any construction on the Project. The Design-Build Firm waives any and all rights or claims for information, compensation, or reimbursement of expenses with respect to the Design-Build Firm's payment to the Department for costs associated with the acquisition of the additional right-of-way. The additional right-of-way shall not be used for any construction activity or other purpose until the Department has issued an applicable parcel clear letter or a right-of-way Certification for Construction.

If the Department's attempt to acquire the additional right-of-way is unsuccessful, then the Design-Build

Firm shall provide a design for the Project within existing right-of-way and be required to complete the Project solely for the Lump Sum Price Bid, with no further monetary or time adjustments arising therefrom. Under no circumstances will the Department be liable for any increase in either time or money impacts the Design-Build Firm suffers due to the Design-Build Firm's proposed acquisition of additional right-of-way, whether or not the acquisition is successful.

#### **D. Geotechnical Services:**

The Department has provided the data obtained from Design Build Data Collection Reports. The Design-Build Firm shall be responsible for a complete geotechnical investigation and for the complete design and construction of the project.

Artesian conditions with approximate head elevation of +46 ft NAVD88 were encountered at one boring location during the geotechnical investigation. The Design-Build Firm shall be aware that the US Geological Survey map "Potentiometric Surface of the Upper Floridan Aquifer, West-Central Florida, September 2010" shows the potentiometric surface of the Floridan Aquifer to be approximately +47 feet NGVD29 in the vicinity of the Project. Additionally, the U.S. Geological Survey Wildwood, Florida Quadrangle Map indicates the presence of springs in the vicinity of the Project. Since ground surface elevations in the area range between +44 and +50 ft NAVD88 and springs are identified in the Project vicinity, artesian conditions may be encountered during construction and the Design-Build Firm shall anticipate and be ready to handle artesian flows.

The Design Build Firm shall be aware that ground subsidence, ground loss and drilling fluid losses were experienced during the investigation, as described in the data reports. The Design Build Firm shall be ready to handle ground subsidence and sinkhole development during construction of the improvements. The Contractor shall be responsible for developing and adopting design measures and construction means and methods that will minimize occurrences of ground subsidence and shall be responsible for remediation.

#### **Driven Pile Foundations for Bridges and Major Structures**

The Design-Build Firm shall determine whether the resistance factors used for pile design will be based on static/statnamic load testing. Prepare a Technical Special Provision (TSP) for tests other than the Modified Quick Test, such as Osterberg Cell Load Test or Statnamic Load Test. For Osterberg Cell Load Tests use the same loading and unloading intervals, as well as the same loading times specified for the Modified Quick Test. Comply with the instrumentation requirements of 455-2.4. Before the resistance factors from any type of static or statnamic load testing may be used for production pile tip elevation determination, a minimum of 2 (two) successful load tests must be performed for each bridge location.

The Design-Build Firm shall be responsible for the following:

1. Selection of pile type and size.
2. Selection of test pile lengths, locations and quantity of test piles.
3. Selection of pile testing methods.
4. Determining the frequency of such testing unless otherwise stated herein.
5. Performance of the selected test pile program, including dynamic load test personnel and equipment. The Department may observe the installation of test piles and all pile testing.
6. Preparing and submitting a Pile Installation Plan for the Department's acceptance. The Pile Installation Plan shall address mitigation of artesian conditions during

- construction.
7. Selection of production pile lengths.
  8. Development of the driving criteria.
  9. Driving piles to the required capacity and minimum penetration depth below any encountered deleterious or soft/compressible material.
  10. Inspecting and Recording the pile driving information.
  11. Submitting Foundation Certification Packages.
  12. Providing safe access, and cooperating with the Department in verification of the piles, both during construction and after submittal of the certification package.

### **Drilled Shaft Foundations for Bridges and Miscellaneous Structures**

The Design-Build Firm shall determine whether the resistance factors used for drilled shaft design will be based on static/statnamic load testing. Prepare a Technical Special Provision (TSP) for tests other than the Modified Quick Test, such as Osterberg Cell Load Test or Statnamic Load Test. For Osterberg Cell Load Tests use the same loading and unloading intervals, as well as the same loading times specified for the Modified Quick Test. Comply with the instrumentation requirements of 455-2.4. Before the resistance factors from any type of static or statnamic load testing may be used for production drilled shaft length determination, a minimum of 2 (two) successful load tests must be performed for each bridge location.

Full length casing shall not be installed or removed using vibratory methods during drilled shaft construction within 50 feet of existing box culverts.

The Design-Build Firm shall be responsible for the following:

1. Evaluating geotechnical conditions to determine the drilled shaft diameter and length and construction methods to be used.
2. Performing the subsurface investigation and drilling pilot holes prior to establishing the drilled shaft tip elevations and socket requirements.
3. Determining the locations of the load test shafts and the types of tests that will be performed.
4. Performing pilot borings for test holes (also known as test shafts or method shafts) and load test shafts and providing the results to the Department at least one (1) working day before beginning construction of these shafts.
5. Preparing and submitting a Drilled Shaft Installation Plan for the Department's acceptance. The Drilled Shaft Installation Plan shall address mitigation of artesian conditions during construction and proposed integrity testing.
6. Constructing the method shaft (test hole) and load test shafts successfully and conducting integrity tests on these shafts.
7. Providing all personnel and equipment to perform a load test program on the load test shafts.
8. Determining the production shaft lengths.
9. Documenting and providing a report that includes all load test shaft data, analysis, and recommendations to the Department.
10. Constructing all drilled shafts to the required tip elevation and socket requirement in accordance with the specifications.
11. Inspecting and documenting the construction of all drilled shafts in accordance with the specifications.
12. Performing Cross-Hole Sonic Logging (CSL) or Thermal Integrity tests on all nonredundant drilled shafts supporting bridges. For redundant drilled shaft bridge

- foundations and drilled shafts for miscellaneous structures, perform CSL or Thermal Integrity testing on any shaft suspected of containing defects.
13. Repairing all detected defects and conducting post repair integrity testing using 3D tomographic imaging and gamma-gamma density logging.
  14. Submitting Foundation Certification Packages in accordance with the specifications.
  15. Providing safe access, and cooperating with the Department in verification of the drilled shafts, both during construction and after submittal of the certification package.

### **Spread Footings Foundations**

Spread footing foundations shall not be used behind MSE walls on this project.

The Design-Build Firm shall be responsible for the following:

1. Evaluating geotechnical conditions and designing the spread footing.
2. Constructing the spread footing to the required footing elevation, at the required soil or rock material, and at the required compaction levels, in accordance with the specifications.
3. Inspecting and documenting the spread footing construction.
4. Submitting Foundation Certification Packages in accordance with the specifications.
5. Providing safe access, and cooperating with the Department in verification of the spread footing, both during construction and after submittal of the certification package.

### **Performance Criteria and Monitoring Requirements for Walls and Approach Slabs**

The Design Build Firm shall provide a design for walls that will not exceed a total settlement of 1 inch over a 30 year period after paving the supported roadway, except within 50 feet of approach slabs where wall settlement shall not exceed a total settlement of ½ inch over a 30 year period after paving. The Design Build Firm shall monitor settlement during wall construction and prior to any paving operations. The Design Build Firm' Geotechnical EOR shall provide a Settlement Monitoring Report for acceptance by the Department prior to paving that demonstrates that the above settlement criteria will not be exceeded. Settlement monitoring locations should be maintained or re-established for post construction monitoring of wall settlement.

#### **E. Utility Coordination:**

The Design-Build Firm shall utilize a single dedicated person responsible for managing all utility coordination. This person shall be contractually referred to as the Utility Coordination Manager and shall be identified in the Design-Build Firm's proposal. The Design-Build Firm shall notify the Department in writing of any change in the identity of the Utility Coordination Manager. The Utility Coordination Manager shall have the following knowledge, skills, and abilities:

1. A minimum of 4 years of experience performing utility coordination in accordance with Department standards, policies, and procedures.
2. Knowledge of the Department plans production process and utility coordination practices,
3. Knowledge of Department agreements, standards, policies, and procedures.

The Design-Build Firm's Utility Coordination Manager shall be responsible for managing all utility coordination, including, but not limited to, the following:

1. Ensuring that all utility coordination and activities are conducted in accordance with the requirements of the Contract Documents.
2. Identifying all existing utilities and coordinating any new installations.
3. Reviewing proposed utility permit application packages and recommending approval/disapproval of each permit application based on the compatibility of the permit as related to the Design-Build firm's plans.
4. Scheduling utility meetings, preparing and distributing minutes of all utility meetings, and ensuring expedient follow-up on all unresolved issues.
5. Distributing all plans, conflict matrices and changes to affected Utility Agency/Owners and making sure this information is properly coordinated.
6. Identifying and coordinating the execution and performance under any agreement that is required for any utility work needed in with the Design-Build Project.
7. Preparing, reviewing, approving, signing, coordinating the implementation of and submitting to the Department for review and acceptance, all relocation agreements and work schedules.
8. Resolving utility conflicts.
9. Obtaining and maintaining all appropriate Sunshine State One Call Tickets.
10. Performing Constructability Reviews of plans prior to construction activities with regard to the installation, removal, temporary removal, de-energizing, deactivation, relocation, or adjustment of utilities.
11. Providing periodic Project updates to the Department Project Manager and District Utility Office as requested.
12. Coordination with the Department on any issues that arise concerning reimbursement of utility work costs.

The following Utility Agency/Owners (UA/O's) have been identified by the Department as having facilities within the Project corridor which Department contemplates an adjustment, protection, or relocation is possible. Also provided below is a determination made by the Department as to the eligibility of reimbursement for each UA/O identified herein along with an identification of whether the UA/O or the Design-Build Firm will be responsible for performing the utility work .

**Table A – Summary of Department Contemplated Adjustment, Protection, or Relocation**

<u>UA/O</u>	<u>Utility Relocation Type</u>	<u>Cost Estimate</u>	<u>Lump Sum Bid</u>
None	None	None	None

**Table B - Summary of UAO having Facilities within the Proposed Project Limits**

<b>UAO</b>	<b>Contact Information</b>	
Bright House Networks, LLC	John Wolski	352-330-2909
CenturyLink	Craig Hager	352-368-8763
City of Wildwood Water and Wastewater Dept	Bruce H. Phillips	352-330-1346
Progress Energy	Sharon Dear	407-942-9421

Level 3 Communications	Richard Simonton	407-754-0106
Sumter Electric Cooperative, Inc.	Alan Kimbley	352-569-9644

**DEVIATION FROM THE CONCEPTUAL UTILITY RELOCATION PLAN:** If the Design-Build Firm chooses to deviate from the conceptual plans and the scope of the impact to a utility depicted in the Reference Documents, and thereby causes a greater impact to a utility, the Design-Build Firm shall be solely responsible for all increased costs incurred by the utility owner associated with the increase in the scope of the impact to a utility from that depicted in the Reference Documents. The Design-Build Firm shall obtain an agreement from the utility owner being impacted which outlines the changes to the scope of the impact to a utility from that depicted in the Reference Documents. The agreement shall also address the Design-Build Firm's obligation to compensate the utility owner for the additional costs above the costs which would have been incurred without the Design Build Firm's increase in the scope of the impact to a utility from that depicted in the Reference Documents. The Design-Build Firm shall also provide a draft utility permit application acceptable to the Department for the placement of the utility owner's facilities based on the final design. The Department shall not compensate or reimburse the Design-Build Firm for any cost created by a change in scope of the impact to a utility from that depicted in the Reference Documents, or be liable for any time delays caused by a change in scope of the impact to a utility from that depicted in the Reference Documents.

All utility agreements, work schedules and plans are to be forwarded to the Department for review by the District Utility Office (DUO) and the Department's Construction Manager. The DUO and Department Construction Manager only review and will not sign work schedules or agreements. Utility permit applications, once reviewed by the DBF and the Department's Construction Manager, are to be forwarded to the District Maintenance office for the permit to be signed and recorded. The DUO and Department's Construction Manager only review and will not sign work schedules or agreements.

### **1. Existing Utilities**

Unless otherwise noted, all costs associated with installation, adjustment, relocation or removal of utilities serving Turnpike facilities, including water, sewer, electric, cable and telecommunications, are the sole responsibility of the Design-Build Firm.

None of the utility components such as poles, wiring, cables, conduits, pipes, duct banks, vaults, manholes, transformers, lift stations, water or sewer pipes, and storm drains shall be abandoned in place, except for empty utility components that are installed under an operational road as defined herein. Utility components that are installed under an operational road shall have the contents removed from them and be grouted and capped at both ends using new materials listed or labeled for this purpose. The abandoned portion of the utility components shall not extend more than 4 feet past the paved edge of the road. An operational road shall be defined as any active travel lane or ramp. Driveways and parking lots shall not be considered active roads.

The Design-Build Firm's EOR shall coordinate directly with the appropriate UA/O's to determine which portions of their utility(ies) laterals located outside of the Department's right-of-way will need to be removed as part of the demolition process.

Continuity and integrity of roadway lighting circuits, fiber optic cabling, and communications cabling must

be maintained at all times. Refer to other sections of this RFP for specific requirements regarding these facilities.

## **2. Procurement of New Electric Services**

For this contract, a Do Not Bid item has been established for electric service to cover actual costs known as Contribution in Aid of Construction (CAIC) associated with the design and installation of the electric service required for proposed Project improvements. The Design-Build Firm's bid price shall include the cost of installing all secondary electric facilities from the transformer and/or electric meter to the facility requiring service, per Duke Energy and Sumter County Electric specifications, and all other electrical work described within the RFP. See Reference Documents for additional information on Duke Energy and Sumter County Electric proposed electric service. The Department has coordinated with Duke Energy and Sumter County Electric to obtain preliminary design and construction cost estimates for electric power necessary for the proposed Project improvements. The provided information, plans and estimates are provided in the Reference Documents of this RFP based on the service point locations shown, and are to be used for reference only. The intent of this coordination is to provide bidders an estimated cost for Duke Energy and Sumter County Electric work effort based on the concept plans provided. It is the responsibility of the Design-Build Firm to coordinate with Duke Energy and Sumter County Electric and complete all work associated with electrical services. All recurring monthly charges from Duke Energy and Sumter County Electric, during the "burn-in" period for all new systems to be constructed (ITS, lighting, signals, etc.) shall be paid by the Design-Build Firm until Final Acceptance by the Department. The electrical utility service requirements are specified within the lighting, signalization and ITS sections of this RFP.

## **3. Utility Location and Surveying**

It is the Design-Build Firm's responsibility for the verification and location of all utility facilities, including any Subsurface Utility Engineering (SUE) work that is required as part of the design process. The Design-Build Firm is responsible for all costs associated with all utility location and surveying including Department owned facilities (i.e. ITS, communication, ITS power, lighting) and designating/locating Department owned facilities for the work of Utility Companies and in support of Utility Company relocation work. Additionally, please note that Department owned facilities are not part of the Sunshine 811 list of utilities.

## **4. Intelligent Transportation System**

Refer to the Section VI.R and VI.S in the RFP entitled Intelligent Transportation System (ITS) Plans.

### **F. Roadway Plans:**

#### **General:**

The Design-Build Firm shall prepare the Roadway Plans Package. This work effort includes the roadway design and drainage analysis needed to prepare a complete set of Roadway Plans, Traffic Control Plans, Environmental Permits and other necessary documents.

#### **Roadway Plans Package:**

The Design-Build Firm shall prepare a comprehensive Roadway Plans Package for review and approval by the Department. This work effort includes the roadway design and drainage analysis needed to prepare a

complete set of Roadway Plans, Traffic Control Plans (TCP), Environmental Permits (if applicable, see Section VI.O), and other necessary documents. Optional Pipe Materials sheets are not required to be included in the Roadway Plans Package.

Plans shall be prepared in accordance with the latest standards listed within this RFP with proper consideration given to: design traffic volumes, design speed, capacity and levels of service, functional classification, adjacent land use, design consistency and driver expectancy, aesthetics, Americans with Disabilities Act (ADA) requirements, the Department's Safe Mobility for Life Program, access management, scope of work, and design criteria.

### **Design Analysis:**

A Typical Section Package and Pavement Design Guidelines were approved by the Department (See Attachments and Reference Documents). The Design-Build Firm shall develop and submit a signed and sealed Typical Section Package (if different than the approved signed and sealed Typical Section Package provided in the References), Pavement Design Package and Drainage Analysis Report for review and concurrence by the Department and FHWA on Federal Aid Oversight Projects.

Any deviation from the Department's design criteria will require a design variation and any deviation from AASHTO will require a design exception. All such design variations and exceptions must be approved through the ATC process.

These packages shall include at a minimum the following:

#### **1. Roadway Design:**

See PPM Volume 2; Chapter 2 for Roadway Design sheets, elements and completion level required for each submittal.

All guardrail ends in the southbound direction, with the exception of bridge anchorages, shall be approach end anchorages in anticipation of contra flow.

Ramps A-2, B and D shall provide parallel type entrance/exit ramps with desirable lengths as shown in the FDOT PPM.

#### **2. Typical Section Package:**

See PPM and TPPP Volume I, Chapter 16 for typical section package submittal requirements.

Miscellaneous asphalt shall be used under all bridges in lieu of sod.

The Design Build Firm shall construct the full typical section of I-75 at the southern limits of the project. In the event the adjacent project (FPID 242626-3) is not complete the Design-Build Firm shall provide interim roadway transitions within the limits of this project to existing I-75 with temporary pavement marking as directed by the Department. In the event the adjacent project is complete prior to this project, the Design Build Firm shall correct any interim roadway transitions within the limits of the adjacent project with milling and resurfacing and pavement markings as directed by the Department.

### **3. Pavement Design Package:**

The Pavement Survey and Evaluation Report (see References) has been provided by the Department and shall be used by the Design-Build Firm in the development of the pavement design. It is the responsibility of the Design-Build Firm to review and evaluate both documents and prepare a Pavement Design Report submittal for review and concurrence by the Department.

The Design-Build Firm is responsible for performing pavement cores as they deem necessary for pavement design. Cores shall go to the bottom of the stabilization layer. Pavement designs shall consider ground water impacts before submitting to the Department for review and consideration. The temporary pavement shall be adequate to support traffic for the duration of use, with no visual signs of raveling or wear. The Design-Build Firm shall be responsible for maintaining temporary pavement.

The use of the Mechanistic-Empirical Pavement Design Guide (MEPDG) for pavement design shall not be allowed, as the Department has not fully accepted this method for use in Florida.

### **4. Design Variations and Exceptions:**

The Department has prepared Design Exceptions and Design Variations, as shown below, based on the Conceptual Roadway Plans (see References). For any additional variations and/or exceptions other than those identified and approved by the Department below, the Design-Build Firm shall identify in writing during the ATC process and provide a written Design Variation for submittal, using standard Department procedures, for approval by the Turnpike Design Engineer. Additional variations and exceptions, beyond those listed below, are at the risk and solely the responsibility of the Design-Build Firm to prepare. The acceptance of any proposed variations and/or exceptions in addition to the following approved variations and exceptions is at the sole discretion of the Department.

Design variations and exceptions for design speed will not be permitted.

#### Approved Design Exceptions and Design Variations:

1. A Design Variation for Vertical Alignment is provided to the Design-Build Firm for specific locations as identified in the Approved Design Variations (see Attachments).
2. A Design Variation for Border Width is provided to the Design-Build Firm for the project limits as identified in the Approved Design Variations (see Attachments). Deviation from the specific locations identified in the design variation to other locations will not require approval during the ATC process provided the Design-Build Firm's concept adheres to the intent of this design variation and the Border Width Criteria established below. As part of the 90% Design Submittal, the Design-Build Firm shall provide an updated design variation for border width with the locations as proposed in their design.
  - a. Border Width Criteria
    - i. The border width accommodates (1) roadside design components such as signing, drainage features, guardrail, fencing and clear zone, (2) the maintenance of the facility and (3) permitted public utilities.
    - ii. Along ramps and mainline lanes where roadside barriers are used and thus clear zone is not applicable, the minimum width from the back of a barrier or retaining wall shall accommodate (1) horizontal stopping sight distance, (2) barrier deflection requirements, and (3) be a minimum 8.7 feet to provide maintenance vehicles sufficient access from public right-of-way.

- iii. Border width shall not be reduced on I-75 south of MP 21.625.
- iv. Any changes to wetland or other environmental impacts through altering the border widths of the project's Conceptual Roadway Plans will be included in the Design-Build Firm's design, permitting and bid.

## **5. Drainage Analysis:**

The Design-Build Firm shall be responsible for designing the drainage and stormwater management systems. All design work shall be in compliance with the Department's Drainage Manual; FTE Drainage Manual Supplement; Florida Administrative Code, chapter 14-86; Federal Aid Policy Guide 23 CFR 650A; and the requirements of the regulatory agencies. This work will include the engineering analysis necessary to design any or all of the following: cross drains, roadway ditches, outfall ditches, storm sewers, retention/detention facilities, interchange drainage and water management, other drainage systems and elements of systems as required for a complete analysis. Underground stormwater management systems, such as exfiltration trenches, French drains and stormwater vaults, shall not be used on this Project. Full coordination with all permitting agencies, the district EMO section and Drainage Design section will be required from the outset. Full documentation of all meetings and decisions are to be submitted to the District Drainage Design section. These activities and submittals should be coordinated through the Department's Project Manager.

The exact number of drainage basins, outfalls and water management facilities (retention/detention areas, floodplain compensation areas, weirs, etc.) will be the Design-Build Firm's responsibility.

The objective is to obtain approved stormwater treatment/attenuation design. This service shall include, but is not limited to the following.

1. Grading of areas where pavement is being removed to provide positive drainage while meeting the safety requirements, water quality treatment and peak discharge attenuation for additional pavement areas, modification of existing storm sewer systems and cross drains – including safety improvements, extensions, removal or replacement, design calculations and permit application documentation, submittal and processing.
2. For new retention ponds that rely on stormwater infiltration through the pond bottom: Initial construction of the stormwater retention pond shall require rough grade by under-excavating the pond bottom by approximately 1 foot. After the drainage area contributing to the stormwater retention pond has been fully stabilized as determined by the Department's CEI, the pond bottom shall be excavated to final design specifications. The excess soil and unsuitable material shall be carefully excavated and removed from the pond so that all accumulated silts, clays and organics and other fine sediment materials are removed from the retention area. The excavated material shall be disposed of beyond the limits of the drainage area of the pond. To avoid compaction, no fill or other construction materials shall be stored and/or placed within the limits of the pond excavation areas. Once the pond has been excavated to final grade, the entire pond bottom shall be deep raked and loosened for optimal infiltration.
3. For existing unmodified or modified retention ponds that rely on stormwater infiltration through the pond bottom: Inflow pipes into the pond shall be temporarily blocked during pipe desilting activities. Silt/Runoff from the pipe desilting shall not enter the pond. The pond bottom shall be cleared of excess soil and unsuitable material so that all accumulated silts, clays and organics and other fine sediment materials are removed from the retention pond. The excavated material shall

be disposed of beyond the limits of the drainage area of the basin. To avoid compaction, no fill or other construction materials shall be stored and/or placed within the limits of the pond excavation areas. Once the pond has been excavated to final grade and the drainage area contributing to the stormwater retention pond has been fully stabilized, as determined by the Department's CEI, the entire pond bottom shall be deep raked and loosened for optimal infiltration. If any, it is the responsibility of the Design-Build Firm to verify the location of underdrain within the stormwater ponds and avoid the areas containing underdrain when removing unsuitable soil materials and deep raking. Any muck that is identified in the stormwater retention pond and replaced with select A-3 sods with less than 5 percent passing through the number 200 sieve. The Design Build Firm shall dispose of the muck beyond the limits of the drainage basin. Existing modified ponds shall be protected to keep the existing pond bottom free from silt resulting from construction activity.

4. Perform design and generate construction plans documenting the permitted systems function to criteria. The permits obtained for this project are in accordance with the Roadway Concept Plans (see Reference Documents). The Design-Build Firm shall include all necessary activities in their schedule and shall bear all risk of delays, regardless of cause or source. The Design-Build Firm shall design appropriate treatment and attenuation in accordance with SWFWMD and Department criteria for each existing basin outfall.
5. The Department has compiled an inventory of all storm sewer and cross drain pipes that need to be evaluated (See Reference Documents). The Design-Build Firm shall verify that these existing cross drains and storm sewers that are to remain have adequate hydraulic capacity and design life. Flood flow requirements will be determined in accordance with the Department's procedures. If any of these existing cross drains or storm sewers are found to be hydraulically inadequate or found to have insufficient design life, they must be replaced or supplemented in accordance with the drainage requirements of this RFP. If any existing cross drains or storm sewers require repairs but otherwise would have sufficient remaining design life, repairs shall be made in accordance with the requirements of this RFP.
6. Bridge Culvert 180062 shall be desilted prior to and at the conclusion of all construction activities.
7. The Design-Build Firm should give consideration to the existing outfall of Pond B (located in the SE quadrant of I-75 and SR 44 in the proposed drainage design. The existing drainage patterns for the outfall ditches shall be maintained.
8. Address the following issues:
  - a. Inverted siphons shall not be used on this project.
  - b. If trapezoidal weirs are utilized a permit modification is required and base clearance must be met.
9. If the number of lanes sloped in one direction does not meet FDOT PPM requirements, a hydroplaning analysis is required using the latest guidance criteria from the Department. A signed and sealed design variation approved by the Department will be required and shall include an analysis of the hydroplaning risk and documentation of the anticipated cost savings from utilizing the proposed typical section.
10. In order to avoid direct discharge into the wetland systems, ditch blocks will be required along the roadside swales at the interchange with I-75 in order to function as swales. The minimum height for these ditch blocks is one foot.

11. No storm sewer pipe exiting a drainage structure shall be constructed with a flow line higher than any storm sewer pipe entering the same structure.
12. All constructed inlets and manholes must have an outlet storm drain pipe.
13. The most downstream pipe of each storm drain system must be constructed with its flow line at the bottom of slope of any pond or ditch.
14. No component of a permanent stormwater system shall be controlled by a pump or any other mechanical means.
15. Positive drainage shall be maintained throughout the Project. Positive drainage also means providing conveyance where construction activities might divert or trap water and compromise safety and efficiency, including locations on offsite properties.
16. All offsite runoff shall be accommodated in accordance with FDOT criteria and all regulatory agency criteria. All historical flow patterns for offsite flows shall be maintained.
17. Stormwater collected by bridge scuppers shall not be permitted to free fall onto travel lanes, bicycle lanes, sidewalks, or waterways below, or other areas that may be susceptible to erosion.
18. Any proposed berm style weirs, trapezoidal or otherwise, must be approved by FDOT subject to Section 5.3.1.1 of the Drainage Manual. If a berm style weir is approved by FDOT, the Design Build Firm shall submit for FDOT approval a structural design to support the loading of maintenance vehicles without failure for the life of the weir and a geotechnical design to prevent seepage through the pond or swale berm that may result in failure of the pond or swale berm. All berm style weirs in pond or swale berms shall be designed and constructed to be traversable.
19. Trench drains shall not be allowed for the final constructed condition. Trench drains shall only be allowed for temporary drainage.
20. Manholes shall not be placed in the travel lanes of the I-75 mainline and ramps.
21. All orifices and v-notches shall be assumed to be frequently clogged for the purposes of establishing the design tailwater for storm sewer systems connected to ponds.

The Design-Build Firm will consider optional culvert materials in accordance with the Department's Drainage Manual Criteria.

Prior to proceeding with the Drainage Design, the DESIGN-BUILD FIRM shall meet with the District Drainage Engineer. The purpose of this meeting is to provide information to the Design-Build Firm that will better coordinate the Preliminary and Final Drainage Design efforts. This meeting is Mandatory and is to occur fifteen (15) calendar days (excluding weekends and Department observed holidays) prior to any submittals containing drainage components.

The Design-Build Firm shall provide the Department's District Drainage Engineer a signed and sealed Drainage Design Report. It shall be As-Built Plans of all drainage computations, both hydrologic and hydraulic. The engineer shall include all necessary support data.

### **G. Geometric:**

The Design-Build Firm shall prepare the geometric design for the Project using the Design Standards that are most appropriate with proper consideration given to the design traffic volumes, adjacent land use, design consistency, aesthetics, ADA requirements, and this document.

The design elements shall include, but not be limited to, the horizontal and vertical alignments, lane widths, shoulder widths, median widths, cross slopes, borders, sight distance, side slopes, front slopes and ditches. The geometric design developed by the Design-Build Firm shall be an engineering solution that is not merely an adherence to the minimum AASHTO and/or Department standards.

### **H. Design Documentation, Calculations, and Computations:**

The Design-Build Firm shall submit to the Department design documentation, notes, calculations, and computations to document the design conclusions reached during the development of the construction plans.

The design notes and computation sheets shall be fully titled, numbered, dated, indexed, and signed by the designer and the checker. Computer output forms and other oversized sheets shall be folded to a standard size 8½" x 11". The data shall be in a hard-back folder for submittal to the Department. At the Project completion, a final set of design notes and computations, signed by the Design-Build Firm, shall be submitted with the As-Builts of plans and tracings.

The design documentation, notes, calculations and computations shall include, but not be limited to the following data:

1. Design Standards used for the Project
2. Geometric design calculations for horizontal alignments
3. Vertical geometry calculations
4. Documentation of decisions reached resulting from meetings, telephone conversations or site visits
5. Field quantities list

### **I. Structure Plans:**

The Design-Build Firm shall prepare a component set of Structures Plans as part of the Plans Package for review and approval by the Department. All plans are to be prepared in accordance with current design standards and practices and shall be accurate, legible, complete, drawn to scale and furnished in reproducible form.

Refer to Section V.I for Structures submittal requirements.

#### **1. Bridge Design Analysis:**

- a. The Design-Build Firm shall submit to the Department final signed and sealed design documentation prepared during the development of the plans.
- b. The Design-Build Firm shall insure that the final geotechnical and hydraulic recommendations and reports required for bridge design are submitted with the 90% bridge plans.

- c. The Design-Build Firm shall "Load Rate" all bridges in accordance with the Department Procedure 850-010-035 and the Structures Manual. The Bridge Load Rating Calculations, the Completed Bridge Load Rating Summary Detail Sheet, and the Load Rating Summary Form shall be submitted to the Department for review with the 90% superstructure submittal. The final Bridge Load Rating Summary Sheet and Load Rating Summary Form shall be submitted to the Department for review with the Final superstructure submittal. A final, signed and sealed Bridge Load Rating, updated for as-built conditions, shall be submitted to the Department for each phase of the bridge construction prior to placing traffic on the completed phase of the bridge. A final, signed and sealed Bridge Load Rating, updated for the as-built conditions as part of the As-Built Plans submittal, shall be submitted to the Department before any traffic is placed on the bridge. The Bridge Load Rating shall be signed and sealed by a Professional Engineer licensed in the State of Florida.
- d. The Design-Build Firm shall evaluate scour on all bridges over water using the procedures described in HEC 18.
- e. The Engineer of Record for bridges shall analyze the effects of the construction related loads on the permanent structure. These effects include but are not limited to: construction equipment loads, change in segment length, change in construction sequence, etc. The Engineer of Record shall review all specialty engineer submittals (camber curves, falseworks systems, etc.) to ensure compliance with the contract plan requirements and intent.

## **2. Inventory for Welding Inspection**

Prepare a List of Components of all steel structures that need welding inspection to be included in the Inventory for Welding Inspection. For example – steel bridges, cantilever sign structures with span lengths greater than 41 ft., span sign structures, gantry structures, bridge mounted sign structures, any structures with field welds, etc.

## **3. Other Structures:**

Design-Build Firm shall be responsible for all coordination issues and other structures that are required to perform the work as identified in this RFP.

## **4. Criteria:**

The Design-Build Firm shall incorporate the following items into the design of this facility:

All plans and designs are to be prepared in accordance with AASHTO LRFD Bridge Design Specifications, Department Standard Specifications, Structures Manual, TPPPH, Plans Preparation Manual, Department Standard Drawings, Supplemental Specifications, Special Provisions, and directions from the State Structures Design Engineer, Temporary Design Bulletins, Structures Design Office and / or District Structures Design Engineer.

### **1. Bridges**

- a. The use of carbon fiber reinforced polymer (CFRP) strengthening is not permitted.

- b. Bridge #180069 and Bridge #180070 exhibited the presence of the following hazardous materials – Asbestos in the black mastic for roadway reflectors. All removal, maintenance, or material disturbing actions should be performed in compliance with federal, state, and local asbestos regulations and requirements prior to the start of planned renovation and/or demolition activities.
- c. GRS walls and abutments are prohibited.
- d. The structure depth of the fascia girders for each bridge shall be held constant, without steps.
- e. All bridge drainage piping shall be hidden from view to the direction of travel for both the superstructure and substructure. Drain piping inside of any steel integral and/or straddle caps is not permitted.
- f. Partial height toe-walls are not permitted. Perched walls may be used where site specific conditions dictate a full height wall with a flat maintenance area at the base. Sufficient documentation shall be required if a full height wall cannot be provided.
- g. The use of uncoated weathering steel will be required for this Project. Integral steel pier caps and/or integral steel straddle pier caps shall be ASTM A709 HPS 50W or HPS 70W.
- h. Use of permanent steel shell for forming and casting will not be allowed for Integral concrete and/or integral concrete straddle pier caps.
- i. Design all piers located within the setback distance for the LRFD equivalent static force as per AASHTO Section 3.6.5
- j. Do not provide both steel and concrete beams on the same bridge. Integral straddle caps may be either steel or concrete.
- k. Modification of Existing I-75 Bridges Over SR44: The existing open joint between Bridge No. 180068 (Center Bridge) and Bridge No. 180069 (Right Bridge, NB I-75) shall be eliminated by removal of the existing deck in the affected bay between the beams. The limits of such removal shall be, at a minimum, from centerline of the beams, and the proposed bridge modifications shall meet applicable requirements of the governing criteria and standards. New median barrier shall be installed on the center bridge in order to accommodate 4 – 12' travel lanes and 2 – 10' shoulders in the northbound direction. See Typical Section Package in the References.
- l. Existing pier foundations for bridge No. 180026 (SB TPK over NB I-75) shall be removed such that no portion of the existing structure foundation remains within 4.5 ft below finish grade.
- m. Any piers with footings under present or future lanes shall be designed for vehicular loading.
- n. The Design-Build Firm shall use the following minimum environmental classifications:

Environmental Classification			
Bridge Name	Superstructure	Substructure	
		Concrete	Steel

SB SR 91 over SB I-75 (Ramp B)	Slightly Aggressive	Moderately Aggressive	Moderately Aggressive
SB SR 91 over NB I-75 (Leg B)	Slightly Aggressive	Slightly Aggressive	Slightly Aggressive
NB I-75 Exit Ramp over NB SR 91 (Ramp A-2)	Slightly Aggressive	Slightly Aggressive	Slightly Aggressive
Bridge Culvert 180043	Slightly Aggressive	Slightly Aggressive	Moderately Aggressive
Bridge Culvert 180062	Slightly Aggressive	Slightly Aggressive	Moderately Aggressive
Bridge Culvert 180044	Slightly Aggressive	Moderately Aggressive	Moderately Aggressive
Bridge Culvert 180049	Slightly Aggressive	Slightly Aggressive	Moderately Aggressive

2. Walls

- a. Critical Temporary Retaining Walls: Whenever the construction of a component (such as a wall, footing, or other such component) requires excavation that may endanger the public or an existing structure the Design-Build Firm must protect the existing facility and the public. If a critical temporary retaining wall is, therefore, required during the construction stage only, it may be removed and reused after completion of the work. Such systems as steel sheet piling, soldier beams and lagging or other similar systems are commonly used. In such cases, the Design-Build Firm is responsible for designing detailing the wall in the set of contract plans. These plans must be signed and sealed by the Structural Engineer in responsible charge of the wall design.
- b. Flowable fill backfill within MSE walls shall not be allowed.

3. Sign Structures

- a. The Design-Build Firm should become familiar with the Conceptual Signing Plan provided in the Reference Documents. The sign structures shall be located to accommodate the signing requirements.
- b. The Design-Build Firm shall be responsible for designing and detailing all sign structures on I-75 and SR 91 as required for the Project. Calculations and plans shall be signed and sealed by the Design-Build Firm's Structural Engineer.
- c. The Design-Build Firm may re-use existing sign structures 18S010 and 18S012 if removed. Sign structure 18S007 shall not be re-used if removed. A structural analysis must be completed, submitted to the Department for review and accepted by the Department's Structural Engineer. Sign panels are not to be re-used.
- d. The Design-Build Firm shall request structure numbers during final design.

4. Surface Finish Aesthetic Treatment Notes

- a. All concrete elements of bridges, except bridge decks, shall be smooth and uncoated. Refer to the requirements for Aesthetic Level 1, PPM Chapter 26 and TPPP Chapter 26.
- b. All retaining walls shall be constructed using Type "B" Ashlar Stone Texture walls in

accordance with Design Standard Index 5200.

- c. Bridge deck in the modified portion of Bridge No. 180068 and 180069 (Refer to section VI.I.4.1.k) shall be grooved to match existing condition.
- d. All permanent sheet pile walls/soldier pile walls/specialty walls shall have a concrete facing, cap, and coping. If steel wales are used, they shall have concrete facing.
- e. Anti-graffiti coating is not required for this Project.

## **J. Specifications:**

Department Specifications may not be modified or revised. The Design-Build Firm shall also include all Technical Special Provisions, which will apply to the work in the proposal. Technical Special Provisions shall be written only for items not addressed by Department Specifications, and shall not be used as a means of changing Department Specifications.

Before construction activities can begin, the Design-Build Firm shall prepare and submit a signed and sealed Construction Specifications Package for the Project, containing all applicable Division II and III Special Provisions and Supplemental Specifications from the Specifications Workbook in effect at the time the Bid Price Proposals were due in the District Office. The Specifications Package shall be prepared, signed and sealed by the Design-Build Firms Engineer of Record who has successfully completed the mandatory Specifications Package Preparations Training. The website for completing the training is at the following URL address:

<http://www2.dot.state.fl.us/SpecificationsEstimates/PackagePreparation/TrainingConsultants.aspx>

Specification Workbooks are posted on the Department's website at the following URL address:

<https://www2.dot.state.fl.us/SpecificationsPackage/Utilities/Membership/login.aspx?ReturnUrl=%2fspecificationspackage%2fDefault.aspx>.

The signed and sealed Specifications Package shall also include individually signed and sealed Technical Special Provisions for any and all work not addressed by Department Specifications. Any Technical Special Provisions included in the signed and sealed Construction Specifications Package which had not been included in the proposal phase, may require a contract cost modification as a condition of approval.

Upon review by the Department, the Construction Specifications Package will be stamped "Released for Construction" and initialed and dated by the reviewer.

Any subsequent modifications to the Construction Specifications Package shall be prepared, signed and sealed as a Supplemental Specifications Package, subject to the same process for submittal, review, and, release for construction, as described above, for the original Construction Specifications Package. Construction work affected by Supplemental Specifications Packages shall not begin until stamped "Released for Construction" Supplemental Specification Package is obtained.

To work at risk, the Design-Build Firm must submit signed and sealed specifications and can begin working prior to the Department's Project Manager providing stamped "Release for Construction" specifications. The Design-Build Firm shall notify the Department five (5) days prior to starting work at risk. All work that the Design-Build Firm performs in advance of the Department's release of Specifications will be at the Design-

Build Firm's risk.

**K. Shop Drawings:**

The Design-Build Firm shall be responsible for the preparation and approval of all Shop Drawings. Shop Drawings shall be in conformance with the Department's Division I Specifications for Design-Build Contractors, TPPP and FDOT Plans Preparation Manual when submitted to the Department and shall bear the stamp and signature of the Design-Build Firm and Specialty Engineer, as appropriate. The Department shall review the Shop Drawing(s) to evaluate compliance with Project requirements and provide any findings to the Design-Build Firm. The Department's procedural review of shop drawings is to assure that the Design-Build Firm's EOR has approved and signed the drawing, the drawing has been independently reviewed and is in general conformance with the plans. The Department's review is not meant to be a complete and detailed review. Upon review of the shop drawing, the Department's Engineer will stamp, initial and date "Released for Construction" or "Released for Construction as noted".

Shop Drawing submittals must be accompanied by sufficient information for adjoining components or areas of work to allow for proper evaluation of the Shop Drawing(s) submitted for review.

**L. Sequence of Construction:**

The Design-Build Firm shall construct the work in a logical manner and with the following objectives as guides:

1. Maintain or improve, to the maximum extent possible, the quality of existing traffic operations, both in terms of flow rate and safety, throughout the duration of the Project.
2. Minimize the number of different Traffic Control Plan (TCP) phases, i.e., number of different diversions and detours for a given traffic movement.
3. Take advantage of newly constructed portions of the permanent facility as soon as possible when it is in the best interest of traffic operations and construction activity.
4. Maintain reasonable direct access to adjacent properties at all times, with the exception in areas of limited access right-of-way where direct access is not permitted.
5. Proper coordination with adjacent construction Projects and maintaining agencies.
6. Perform all installation of new structures and demolition of existing facilities as described in this RFP.

**M. Stormwater Pollution Prevention Plans (SWPPP):**

The Design-Build Firm shall prepare a Storm Water Pollution Prevention Plan (SWPPP) as required by the National Pollution Discharge Elimination System (NPDES). The Design-Build Firm shall refer to the Department's Project Development and Environment Manual and Florida Department of Environmental Protection (FDEP) Rule 62-621.300(4)(a) for information in regard to the SWPPP. The SWPPP and the Design-Build Firm's Certification (FDEP Form 62-621.300(4)(b) **NOTICE OF INTENT (NOI) TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES**) shall be submitted for Department review and approval. Department approval must be obtained prior to beginning construction activities.

The Design-Build Firm shall incorporate the following into the design of this facility:

1. An NPDES permit shall be obtained for construction.

2. There shall be no direct discharge to any surface waters.

## **N. Temporary Traffic Control Plan:**

### **1. Traffic Control Analysis:**

The Design-Build Firm shall design a safe and effective Temporary Traffic Control Plan to move vehicular traffic during all phases of construction. Topics to be addressed shall include, but are not limited to, construction phasing, utility relocation, drainage structures, signalization, ditches, front slopes, back slopes, drop offs within clear zone, temporary lighting, temporary drainage, temporary signing, temporary ITS and traffic monitoring sites. Special consideration shall be given to the drainage system when developing the construction phases. Positive drainage must be maintained at all times.

The Temporary Traffic Control Plan shall address how to assist with maintenance of traffic throughout the duration of the contract.

The Temporary Traffic Control Plan shall be prepared by a certified designer who has completed the Department's training course, and in accordance with the Department's Design Standards and the Roadway Plans Preparation Manual and TPHPH.

This Project is considered a Significant Project which requires a Transportation Management Plan (TMP). The TMP will consist of three components:

- (1) Temporary Traffic Control (TTC) plan component;
- (2) Transportation Operations (TO) component; and
- (3) Public Information (PI) component

Additional information can be found in the PPM, Chapter 10 Volume I.

### **2. Hurricane Readiness Plan:**

Refer to the Florida's Turnpike Enterprise Field Operations Guide (see Attachments) for requirements of the Design-Build Firm as related to the implementation of Hurricane Operations on the FTE System.

### **3. Temporary Traffic Control Plans:**

The Design-Build Firm shall utilize Index Series 600 of the Department's Design Standards where applicable. Should these standards be inadequate, a detailed Temporary Traffic Control Plan shall be developed. The Design-Build Firm shall prepare plan sheets, notes, and details to include the following: typical section sheet(s), general notes and construction sequence sheet(s), typical detail sheet(s), traffic control plan sheet(s).

The Design-Build Firm shall prepare additional plan sheets such as cross sections, profiles, drainage structures, retaining wall details, and sheet piling as necessary for proper construction and implementation of the Temporary Traffic Control Plan.

The Design-Build Firm shall design a safe and effective TCP to ensure that all vehicular traffic can be accommodated through the construction zones, recognizing adjacent work zones, with minimum delay and exposure to unsafe conditions during all phases of construction. The work shall include, but not be limited to, overall phase planning, temporary static signs and portable changeable message signs (PCMS), utility

relocation, temporary lighting, temporary drainage structures, ditches, front slopes, back slopes, drop offs within clear zone, traffic monitoring sites, and provide an open area for the staging of disabled vehicles.

Special consideration shall be given for temporary drainage for each construction phase. Positive drainage must be maintained at all times. Gutter spread calculations at temporary barrier walls and permanent barrier walls shall be performed. Active travel lanes adjacent to temporary and permanent barrier walls shall not have spread that encroaches beyond the temporary pavement stripe.

The Temporary Traffic Control Plan shall include:

- a. Accommodation for traffic impacts associated with local events,
- b. A written plan detailing each activity involved in a lane closure, including back-up plans for activities critical to re-opening the lanes to traffic,
- c. Locations and details for work zone access,
- d. Adjacent project work zone requirements.

The Design-Build Firm shall adhere to the following general requirements:

- a. The Design-Build Firm shall use only paint for temporary pavement markings on asphalt pavement. Low profile reflective pavement markers shall not be allowed.
- b. Throughout the milling operations, the Design-Build Firm shall use a self-contained vacuum type mobile broom for cleanup of milled dust material.
- c. The final pavement lift of any temporary paving operation, including any temporary overbuilding of existing shoulders, shall be constructed with a paving machine to insure adequate rideability.
- d. The Design-Build Firm shall ensure that street name signs are visible in order to facilitate emergency vehicle traffic.
- e. The Design-Build Firm shall provide a dedicated crew for the installation, maintenance and removal of the temporary traffic control devices. This crew shall consist of at least three members of the work force whose sole responsibility is the installation, maintenance and removal of the temporary traffic control devices. This crew shall have immediate access to a work vehicle to aid in these activities.
- f. The Design-Build Firm shall ensure that all logo signs are displayed to the traveling public at all times during the project. The Design-Build Firm shall coordinate any relocation of the signs with Florida Logo, Inc. at 813-686-5261.
- g. The Design-Build Firm shall contact the FTE's Traffic Management Centers (Turkey Lake and Pompano) at least 90 days in advance of any necessary ITIP (Intelligent Transportation Infrastructure Program) removal or relocation within the project limits.
- h. The Design-Build Firm shall notify a property owner 96 hours prior to clearing and grubbing any existing privately constructed sprinkler systems, signs or landscaping within the project limits.
- i. Speed and Law Enforcement Officers are required during all lane closures.

The Design Build Firm shall submit a temporary lighting design which meets the criteria shown in section 7.3.1 of the current edition of the TPPPH. If the criteria cannot be met based on various factors of construction, the contractor shall submit a safe and effective design, using proper engineering judgment to

the Turnpike project manager and Turnpike electrical engineer for review and approval.

Temporary lighting systems are required for all roadways where existing lighting is being replaced or new lighting is being constructed. The contractor shall prepare a specification that completely describes what is to be done during all phases of construction. Detailed information is required on poles, conduit, and/or conductors that would have to be installed. The existing lighting system shall be brought up to current design criteria.

The design of temporary light poles attached to temporary barriers shall conform to governing criteria and regulations.

The temporary lighting design shall include the following:

1. Duration required (phases).
2. A Professional Engineer registered in the state of Florida shall sign and seal the temporary lighting design.
3. The temporary lighting design criteria (average illumination, average to minimum uniformity ratio, maximum to minimum uniformity ratio).
4. Specific code requirements (NEC, NESC etc.).
5. Requirements for a fully functioning system.
6. Temporary lighting system operational before removal of the existing system.
7. Voltage requirements.
8. Circuit/feeder distribution requirements.
9. Maintenance requirements.
10. Service point and distribution equipment requirements.
11. Maximum mounting height requirements.

The temporary lighting system shall be coordinated with all utilities so as not to disrupt any services.

#### **4. Traffic Control Restrictions:**

There will be NO LANE CLOSURES ALLOWED between the hours of 6:00 AM and 9:00 PM Monday through Thursday and from 6:00 AM Friday to 10:00 PM Sunday. A lane may only be closed during active work periods. Rolling barricades (Pacing Operations) will be allowed from 12:30 AM to 4:30 AM Monday through Thursday and the maximum allowed work duration is 20 minutes. Lane closures are restricted to a single lane in one direction at each location. Ramp closures will not be allowed. All lane closures and detours, must be reported to the local emergency agencies, the media and the District PIO at least two weeks in advance of any lane closures or detours. Notification via phone call must be provided to the Turkey Lake Traffic Management Center (407-264-3363) at the beginning and end of each lane closure activity. All lane closure requests must be made through the Turnpike's lane closure notification software (ProjectSolve).

Lane closures or detours on local roads must be coordinated with Sumter County and the City of Wildwood at least two weeks prior to any lane closures or detours. Detour routes shown in the Concept Plans (See References) have already been approved by Sumter County and the City of Wildwood. Any deviation from those routes already approved will have to be approved by Sumter County and the City of Wildwood. Also, the Design-Build Firm shall develop the Project to be able to provide for all lanes of traffic to be open in the event of an emergency.

There are four approved detours for this project:

- 1) Detour for SB I-75 traffic for girder and straddle cap erection for Ramp B bridge and the deck pour of Ramp B. This detour is only allowed between the hours of 12:30 AM and 4:30 AM Monday through Friday;
- 2) Detour for Northbound I-75 traffic for girder and straddle cap erection for Leg B bridge. This detour is only allowed between the hours of 12:30 AM and 4:30 AM Monday through Friday;
- 3) Detour for Northbound Turnpike traffic for girder and straddle cap erection for Ramp A-2 and the deck pour of Ramp A-2. This detour is only allowed between the hours of 12:30 AM and 4:30 AM Monday through Friday;
- 4) Detour for SR 44 to Southbound Turnpike traffic for girder and straddle cap erection for Ramp B bridge. This detour is only allowed between the hours of 12:30 AM and 4:30 AM Monday through Friday;

Overhead bridge work for girder and straddle cap erection may utilize detours and/or pacing operations. The detours for Southbound I-75 and Northbound I-75 shall not occur during the same work period. The detours for SB I-75 and Northbound Turnpike shall not occur during the same work period. The detour for Northbound I-75 and Northbound Turnpike are only allowed during the same work period when installing overhead sign structure trusses north of the gore between the roadways.

NO LANE CLOSURES are allowed on the Project during the times shown below so as to minimize potential impacts to the following events:

- Working day before Martin Luther King Jr. Day
- Working day before President's Day
- Before/After Independence Day July 3 and July 5
- Friday before Easter
- Friday before Memorial Day
- Wednesday before Thanksgiving

**O. Environmental Services/Permits/Mitigation:**

The Design-Build Firm will be responsible for preparing designs and proposing construction methods that are permissible. The Design-Build Firm will be responsible for any required permit fees. All permits required for a particular construction activity will be acquired prior to commencing the particular construction activity. Delays due to incomplete or erroneous permit application packages, agency rejection, agency denials, agency processing time, or any permit violations, except as provided herein, will be the responsibility of the Design-Build Firm, and will not be considered sufficient reason for a time extension or additional compensation. As the permittee, Department is responsible for reviewing, approving, signing, and submitting the permit application package including all permit modifications, or subsequent permit applications.

The Department has conducted an investigation of the Project site and determined that potential gopher tortoise habitats could be impacted by the Project. All coordination by the Design-Build Firm with the Department regarding gopher tortoises will be completed through the District Environmental Management Office. If the Department has determined that suitable gopher tortoise habitat exists in the project area, then the Design-Build Firm shall be responsible for the potential gopher tortoise burrow survey that could be impacted by the Project including any areas to be used for construction staging. The Design-Build Firm shall be responsible for conducting the 100% gopher tortoise burrow survey within 90 days of construction for the purpose of identifying potential gopher tortoise habitats that could be impacted by the Project including any areas to be used for construction staging. The habitat will be systematically surveyed

according to the current Gopher Tortoise Permitting guidelines published by the Florida Fish and Wildlife Conservation Commission (FWC). The Department must verify the completeness and accuracy of the assessment prior to commencement of any permitting or construction activities. Any areas where the Design-Build Firm proposes to protect burrows to remain on-site with “exclusionary fencing” shall be reviewed and approved by the Department. The Design-Build Firm shall submit an “exclusionary fencing” plan for review prior to any “exclusionary fencing” installation. If there are unavoidable impacts to gopher tortoise burrows, the Design-Build Firm shall be responsible for preparing required documentation for the Department to obtain a FWC permit for the relocation of gopher tortoises and commensals from burrows which cannot be avoided. Preparation of complete permit packages will be the responsibility of the Design-Build Firm. As the “permittee”, the Department is responsible for reviewing and approving the permit application package including all permit modifications, or subsequent permit applications. This applies whether the project is Federal or state funded. Once the Department has approved the permit application, the Design-Build Firm is responsible for submitting the permit application to FWC. A copy of the permit and any subsequent reports to FWC must be provided to the District Environmental Management Office or District Environmental Permit Office, as appropriate. If FWC rejects or denies the permit application, it is the Design-Build Firm’s responsibility to make whatever changes necessary to ensure the permit application is approved. Once the permit is obtained, the Design-Build Firm shall notify the Department at least one week prior to the relocation of gopher tortoises. If gopher tortoise relocations are phased throughout the construction, the Design-Build Firm shall notify the Department at least one week prior to each relocation phase. The Department will provide oversight of the relocations and ensure permit compliance. The Design-Build Firm shall be responsible for any necessary permit extensions or re-permitting in order to keep the relocation permit valid throughout the construction period. The Design-Build Firm shall provide the Department with draft copies of requests to modify the permits and/or requests for permit extensions, for review and approval by the Department prior to submittal to the Agencies. The Design-Build Firm shall provide the appropriate reports as required by the permit conditions, including closing out the permit. The Design-Build Firm shall note that permits for gopher tortoise relocation for areas outside of the Department owned right of way (i.e. utility easements; license agreements) cannot be obtained with the Department as the “permittee”, per FWC requirements. Should permits in areas outside of the right of way be required, the Department will still perform the oversight of the process as described above. The Design-Build Firm will be required to pay all permit fees including any and all fees associated with the relocation of gopher tortoises. Any fines levied by permitting agencies shall be the responsibility of the Design-Build Firm.

The following Project specific Environmental Services/Permits have been identified as specific requirements for this project:

1. Cultural Resources
2. Section 4(f) (federal projects only)
3. Wetlands and Mitigation
4. Wildlife and Habitat
5. Contaminated Materials

The Design-Build Firm shall incorporate the following into the design of this facility

1. Wildlife and Habitat Impacts
  - a. Standard protection measures are required for the Eastern Indigo snake and all endangered species.
  - b. Any additional requirements based on final permit conditions (SWFWMD and USACE).
2. Wetland Avoidance and Minimization
  - a. Jurisdictional surface waters within the right-of-way need to be protected from disturbance.

- b. Maintain minimum 15 foot, average 25 foot wetland conservation area setback or address secondary impacts.

**P. Signing and Pavement Marking Plans:**

The Design-Build Firm shall prepare signing and pavement marking plans in accordance with Department criteria. Plans are to be prepared in accordance with the criteria listed in Section V.A of this RFP and shall be accurate, legible, complete in design, drawn to scale indicated in the Department's manuals and furnished in reproducible form.

The Design-Build Firm shall prepare a separate set of Thermoplastic Pavement Marking Plans. These plans shall have a different FPID Number and shall be coordinated with the Department's Project Manager. This set of plans will be used by the Department's Maintenance Group as a separate let project for the installation of Thermoplastic Markings after the Design-Build project is complete and accepted. The thermoplastic plans shall adhere to the standards and specifications that are applicable to the anticipated thermoplastic letting date.

The Design-Build Firm should become familiar with the Conceptual Signing Plan provided in the Reference Documents. The Design-Build Firm is responsible for determining the type of structure to be used for proposed signs (overhead versus ground mounted). The Conceptual Signing Plan (see Reference Documents) were prepared for the Department and shall be referenced as a guide as to where signs are to be placed and as a guide as to the messages to be placed on each sign.

No new overhead signs shall be lit except those meeting the criteria presented in the FDOT Roadway Design Bulletin 13-12. If an existing sign panel on a truss containing more than one sign panel is being replaced, the Design-Build Firm shall either provide lighting for the new panel or remove all existing sign lighting and replace all panels on the truss with Type XI sheeting.

All interchange guide signs (1 mile, ½ mile, and exit signs) on I-75 and SR 91 shall be mounted overhead.

All lane designation signs on exit ramps shall be mounted overhead.

All Route Confirmation Signs shall be replaced.

All vacated call box pads shall be removed.

If the Design-Build Firm chooses to replace existing sign panel(s) on existing overhead sign structures, a structural analysis must be completed and accepted by the Department's Structural Engineer. If a variation or exception is required, reference section VI.F-4 of this document (Design Variations, Exceptions under the Roadway Plans section).

**Q. Lighting Plans:**

A Conceptual Lighting Design Analysis Report (See Reference Documents) has been prepared and is provided for additional information to the Design-Build Firm. The Design-Build Firm shall provide a lighting design analysis according to the FDOT PPM, Volume 1, section 7.3.1 and prepare a component set of Lighting Plans in accordance with all applicable criteria in the governing documents and attachments of this RFP and instructions issued by the Department to the Design-Build Firm. The lighting design technique shall be complete interchange lighting and the minimum limits shall be as follows:

1. Interstate 75 NB: Stations 3088+72.22 to 3173+21.53.
2. Interstate 75 SB: Stations 2170+64.11 to 2086+81.66.
3. Florida's Turnpike NB: Station 8091+82.04 to its termination at Interstate 75 NB.
4. Florida's Turnpike SB: From its commencement as it diverges from Interstate 75 SB to station 5010+99.43.

Services shall include: preparation of the lighting design analysis report, key sheet, general notes, legend, pole data, underdeck luminaire data, sign luminaire data, layout sheets, lighting plans for temporary and permanent facilities, underdeck plans, underdeck sections and details, load center schematic one line diagram, power riser diagram, service point details, panel schedules, grounding details, and miscellaneous details. The Design-Build Firm shall identify all poles affected by the project construction that require extra foundation depth and/or a non-standard design. Plans shall be accurate, legible, complete in design, and drawn to scale.

Roadway lighting shall be connected to alternate circuits to prevent a total blackout of any section of the highway in the event a circuit is out of service.

Directional boring reports and specific information addressing when or if an outer casing is required for the conduits installed under an existing roadway.

The Design-Build Firm shall provide the lighting design prepared in accordance with all applicable criteria in the governing documents and attachments of this RFP and instructions issued by the Department to the Design-Build Firm.

The lighting design analysis report and lighting plans shall be submitted to ensure the proposed lighting design meets all current criteria over the existing and widened portions of the roadway, as well as, for all overhead signs affected by the project construction. In addition, the proposed lighting design (pole layout – locations, roadway characteristics) shall meet all standards and criteria for the application and roadway classification.

1. All proposed lighting equipment and materials shall be new. New high mast lighting will not be allowed. The required roadway luminaire type is the Mongoose style for aesthetic consistency through the system. Reuse of salvaged materials is not allowed. The roadway lighting shall be pole mounted using shoulder, median and/or barrier/wall mounted configurations in order to meet all applicable criteria in the governing documents and attachments of this RFP. Underdeck lighting shall be included at the following 3 overpasses:
  1. Northbound Florida's Turnpike under Ramp A2
  2. Northbound I-75 under southbound Florida's Turnpike
  3. Southbound I-75 and Ramp B2 under Ramp B

The underdeck luminaire used shall be one that is approved by the FDOT. The underdeck lighting design shall meet all applicable criteria in the governing documents and attachments of this RFP.

Field review and document all lighting (poles/luminaires, sign luminaires, etc.), circuiting, load centers, service points, utility transformers, etc., within the scope of work. This includes circuits outside the scope of work that originate or touch this project's scope of work. All existing lighting equipment that does not affect lighting outside the project limits shall be replaced and comply with all applicable criteria in the

governing documents and attachments of this RFP.

The project spans Florida's Turnpike Enterprise and the Florida Department of Transportation jurisdictions. The Florida's Turnpike Enterprise jurisdictional limits are as follows:

1. Northbound Florida's Turnpike from stations 8095+57.72 to 8122+28 (gore with I-75 Northbound)
2. Ramp A from stations 190+00 to 225+00.34 (gore with Ramp A2)
3. Southbound Florida's Turnpike from stations 5050+00 (gore with I-75 Southbound) to 5012+16.27
4. Ramp B from stations 524+95 (gore with B2) to 5039+45 (gore with Southbound Florida's Turnpike)
5. Leg B from stations 5050+60 (gore with I-75 Southbound) to 5039+45 (gore with Ramp B)

All new lighting circuits shall be designed to ensure that the lighting along the FTE roadway is powered from power sources within the FTE jurisdiction and the FDOT roadway lighting shall be powered from power sources within the FDOT jurisdiction. The FDOT portion has existing high mast lighting that will remain. All existing high mast lights shall be reviewed to ensure FDOT clear zone criteria is met. The high mast lights at stations 3174+78.21 and 2226+47.66 shall be shielded in order to meet current clear zone standards. Existing deficiencies in the area of the existing high mast lights shall not be addressed under this project. Any existing equipment damaged by the Design-Build Firm shall be replaced at the Design-Build Firms expense. Review and evaluate all existing sign structures affected by the project construction. This review includes: conductors, conduit, distribution equipment, grounding, luminaires, voltage, height, pullboxes, etc. Modified sign structures shall have new electrical equipment, conduit and conductors and comply with all applicable criteria in the governing documents and attachments of this RFP.

New load centers shall comply with applicable criteria in the governing documents and attachments of this RFP.

Where new electrical service is required, the Design-Build firm shall coordinate location of distribution transformer and service pole to minimize service conductors/conduit lengths.

Refer to Section VI.N for Temporary Lighting requirements.

## **R. Florida's Turnpike Enterprise Intelligent Transportation System Plans:**

### **1. General**

For the purposes of this section, Florida's Turnpike Enterprise, FTE, Department and Florida Department of Transportation refers to the Florida's Turnpike Enterprise. The Department has prepared ITS Concept Plans (See Reference Documents) to be used as guidance. The Design-Build Firm shall be responsible for the preparation of ITS plans in accordance with the RFP and the latest FDOT Standard Specifications for Road and Bridge Construction and the FDOT Design Standards. The testing requirements of the FDOT Standard Specifications for Road and Bridge Construction as applicable shall be enforced for all ITS System components impacted as a result of the Design-Build Firm proposed scope of work. These plans shall include, but not be limited to, key sheet, general notes, ITS plan sheets, ITS device details, pull box and splice box details, splicing diagrams, test plan and maintenance of communications (MOC) plan.

At a minimum, the ITS work in this project consists of the following major components:

1. Ensure the continuous operation of all existing ITS System components including the ITS fiber optic cable (FOC) communications backbone (backbone) and the FOC lateral drops (lateral drops)

to all ITS System components within the Project limits. The use of wireless ITS, for any purpose, is strictly prohibited.

2. New power distribution systems and new metered electrical service points to serve the ITS system components and cabinets.
3. Testing of backbone and lateral drops provided or modified by the Design-Build Firm.
4. Testing of ITS system.
5. Refer to Section VI.N for Temporary ITS requirements.

## **2. Existing Conditions:**

This section is intended to provide a general overview of the existing conditions of the Department's ITS System and its components such as fiber optic network (FON) communications infrastructure within the project limits. The Design-Build Firm shall refer to the ITS As-Built Plans provided with this RFP as Reference Documents for additional information and shall be responsible for field verifying all existing site conditions within the project limits.

The ITS System components along the Turnpike are owned, operated and maintained by the FTE. Some of the ITS System components are connected to the backbone for connectivity with the Local Hubs along the corridor and FTE Operations Center in Pompano (Milepost 65), the FTE Tolls Data Center in Boca Raton (Milepost 75), and FTE Headquarters in Ocoee (Milepost 263). The following is an overview of the existing ITS System components including communications infrastructure along the Turnpike.

The ITS components shall be defined as follows:

1. Closed Circuit Television (CCTV) Camera System: The CCTV Camera System on the Turnpike consists of pan-tilt-zoom (PTZ) cameras along the corridor and are typically spaced at one (1) mile intervals. The CCTV cameras are used by FTE Traffic Management Center (TMC) staff for incident management and traffic monitoring. The cameras are integrated and communicate with Local Hubs along the corridor and FTE Operations Center in Pompano via the 96-count single mode FOC communications backbone running along the corridor.
2. Travel Time System (TTS): The TTS provides travel time information from vehicles equipped with the SunPass Automatic Vehicle Identification (AVI) toll transponders. The system's field components consist of AVI antennas and readers placed at intermediate locations and interchanges along the corridor. The TTS field devices are typically thirteen (13) feet or closer to the edge of travel lane and are installed on concrete poles, existing DMS structures or other ITS components along the corridor. The TTS are connected and communicate with the FTE Operations Center via the 96-count single mode FOC communications backbone running along the corridor.
3. Vehicle Detection Systems (VDS): The VDS consists of non-intrusive, microwave technology sensors used to collect vehicle volume, speed and occupancy data from mainline travel lanes. The detectors are typically placed at approximately one-half (1/2) mile intervals. The detectors are installed on stand-alone concrete poles or attached to other ITS devices in a side-fired configuration from each side of the corridor to detect data on a lane by lane basis. The VDS is used for incident detection by TMC's Operations staff and communicate with the FTE Operations Center via the 96-count single mode FOC communications backbone running along the corridor.
4. Highway Advisory Radio (HAR) System: There are no HAR systems within this project.
5. Remote Weather Information System (RWIS): There are no RWIS devices within this project.
6. Speed Monitoring System (SMS): There are no SMS sites within this project.
7. Fiber Optic Network (FON): The FON infrastructure provides communications for FTE's ITS

components. The FON is composed of the FOC communications backbone, lateral connections and communications equipment including but not limited to field and HUB Ethernet switches, port servers, routers, fiber patch panels installed at the various ITS device(s) serving as a LHUB.

8. The FOC communications backbone consists of a 96-count single mode fiber optic cable and four (4), 1.25-inch HDPE conduit, locate tone wire, warning tape, fiber route markers, pull boxes, and splice boxes running along the southbound side of the corridor. Three (3) of the four (4), 1.25-inch HDPE conduits are spare conduits. The backbone provides access points for the various ITS and Toll System components along the corridor for network connectivity as previously described. Additionally, the FTE Pompano Operations Center is also connected with the FTE Headquarters in Ocoee via the FTE Mainline FOC communications backbone.
9. Some components are typically connected to the backbone through a lateral twelve (12) count single mode fiber optic cable inside a one (1), 1.25-inch HDPE conduit. ITS components on arterials, such as ADMS, connect with the backbone through a WAP and LHUBs which are physically connected to the backbone through a lateral fiber connection.

### **3. Design Analysis:**

#### Preservation of Existing ITS System

The existing ITS System components shall remain operational throughout the duration of the Project. The Design-Build Firm may propose minimal downtime of ITS components as result of new construction as defined in this RFP. The Design-Build Firm shall be responsible for developing engineering design and construction plans of new ITS construction and relocation of existing ITS components found to be in conflict with the proposed scope of work and for submitting the plans to the Department for review and approval. The Design-Build Firm shall be responsible for all labor and materials associated with the relocation of ITS components, and associated power and communications infrastructure. Any ITS components and/or supporting power and communications infrastructure damaged by the Design-Build Firm, shall be replaced by the Design-Build Firm with equal or better product at no additional cost to the Department.

When relocating or re-routing affected ITS devices to an existing or new LHUB, the Design-Build Firm is responsible for all modifications and materials for a fully functional LHUB. When connecting directly to the backbone, the Design-Build Firm shall ensure there is no distance limitation for the new fiber connection. The Design-Build Firm shall provide all communications hardware required to ensure there is no excess signal degradation between the new fiber connection point and nearest HUB.

Prior to the relocation or downtime of any ITS System component as approved by the Department, the Design-Build Firm shall submit a Method of Procedure (MOP) to the Department for review and approval. The MOP shall be submitted for review seven (7) working days prior to the proposed outage and shall outline the anticipated field procedures to take place. After a proposed ITS component or backbone downtime MOP is approved, the Design-Build Firm shall provide a minimum of two (2) working days advance notice prior to disconnecting any ITS System component or relocation of the backbone.

The existing ITS System to be protected and remain operational before, during, and after construction includes, but is not limited to, the following:

1. *Closed Circuit Television Cameras (CCTV)*
2. *Travel Time System (TTS)*
3. *Vehicle Detection Systems (VDS)*

4. ***Fiber Optic Network (FON)***
5. ***Fiber Optic Cable (FOC) – Mainline FOC backbone and lateral FOC drops, pull boxes, splice boxes, route markers***
6. ***Fiber Locate System (route markers and locate wire)***
7. ***Miscellaneous ITS Components (Encoders, Switches, etc.)***
8. ***Wireless Equipment***
9. ***Power run and service***

The relocation of any of the above ITS components, as approved by the Department, shall provide at a minimum the same coverage, service and functionality currently being provided by the ITS component.

For any relocated ITS Component and associated power and communications, fiber backbone segment, new splices, new ITS lateral, new ITS components, the Design-Build Firm shall submit hard copies and an electronic file of updated As-Built Plans as required in Section V.I of this RFP. The as-built plans shall be submitted to the Department for review and approval. The Design-Build Firm shall submit a shape file document containing Global Positioning System (GPS) coordinates acceptable for the Department's use for all ITS components and associated power and communications, relocated fiber backbone segments and ITS laterals affected by the scope of work. The GPS unit shall be provided by the Design-Build Firm and used to collect data with a sub-foot accuracy level.

#### Stationary Devices

All stationary ITS components determined to be in conflict and to be relocated as approved by the Department. All stationary devices located above ground level and within the clear zone must be protected with guardrail or barrier. The Department, before construction, must approve the location of all stationary devices. This approval will occur during the Phase III-90% plans review.

#### Utility Conflicts

The Design-Build Firm shall identify, evaluate, address, and mitigate any conflicts between existing ITS System components, including but not limited to the FON infrastructure, and proposed work. All conduit and utility adjustments shall be reviewed and approved by the Department. The Design-Build Firm shall be responsible for relocation of all existing utilities as per FTE Manuals, FDOT Standards and FDOT Utilities Accommodation Manual. Any segment of the FOC communications backbone determined to be in conflict and to be relocated as approved by the Department shall meet the requirements in the RFP.

#### Structure Conflicts

The Design-Build Firm shall investigate and show all potential conflicts of the existing ITS components and proposed work including but not limited to proposed mainline and ramp gantries, barrier walls, toll plaza demolition work, drainage structures, guardrail, sign structures including but not limited to full span trusses, half span trusses, cantilever trusses, light poles, post mount signs, sheet pile wall, barrier wall, retaining walls, etc.

#### Grade Change (+ or -)

The final elevation of underground ITS conduits shall be 36 inches below final grade. When the ITS conduit is directionally bored, then the conduit duct bank depth shall be 48 inches below final grade or ten (10) times the diameter of the casing, whichever is greater. If the ITS system will be affected by "fill section" conflicts, the Design-Build Firm shall be responsible for raising all ITS components, with the exception of

conduit, including ITS poles and boxes to grade level. Conduit shall be placed at the depths defined above. Raising pull boxes may also require the adjustment of conduits entering the boxes. Adjustment to conduits, pull boxes, splice boxes shall be performed as per manufacturer's recommended procedures. Any damaged pull boxes (power and communications) or fiber splice boxes during adjustment operations shall be replaced with a new equal or better product.

For any sections that require grading including, the existing fiber backbone and conduit system shall be located and maintained operational throughout construction. Pull boxes, splice boxes, fiber route markers, conduits, locate wire and warning tape shall be adjusted or replaced with new product as a result of the grade change.

All concrete aprons around ITS device poles, cabinets, pull boxes and splices boxes impacted by the grade change shall be leveled to match the new grade. All concrete aprons damaged as a result of the work in the scope shall be replaced with a new concrete apron as per FDOT Design Standards.

### Maintenance Pads

The Design-Build Firm shall furnish and install poured in place maintenance pads at each ITS component support pole location and ground mount cabinets that require relocation. The size of the maintenance pad shall comply with the existing ITS concrete pads currently deployed within the project limits. The Design-Build Firm shall modify the size and shape of the maintenance pad design to accommodate sloped areas where device support poles are to be relocated.

### Conduit and Interconnect System

The existing fiber and conduit systems to be impacted and relocated or replaced shall be replaced with 4-1 ¼" conduits with 144 single mode fiber optic cable for the backbone and 2-1 ¼" conduits with 24 single mode fiber optic cable for the fiber drops. The Department must approve the location of any proposed conduit during the plans review phase. All spare conduits shall be continuous and tested prior to final acceptance of the project. The following general criteria must be employed:

1. The installation and routing of the fiber optic conduit system at any specific location shall not damage trees and landscaping. The fiber optic drop conduit system shall maintain a minimum clearance from utilities as outlined in the FDOT Design Standards and Utilities Accommodation Manual.
2. Design criteria shall use the most feasible horizontal and vertical location of the conduit line.
3. All building, HUB and cabinet penetrations shall be sealed and waterproofed.
4. Avoid existing and proposed utilities.
5. Avoid future roadway and ramp.
6. Minimize clearing and grubbing.
7. Maintain a straight conduit line.
8. The mainline and drop fiber line shall not be attached to bridge structures, plaza canopy's or run along roof tops.
9. Install fiber 15 feet from right-of-way where there are no sound walls and 5 feet in front of existing sound walls whenever possible.
10. All conduit installation and construction activity must take place within the Department right-of-way.
11. All spare conduits shall have a pull tape installed and shall be capped with a waterproof seal approved by the conduit manufacturer immediately after testing. Ensure all conduit duct banks

have a tone wire connection from end to end.

12. ITS conduit installed underground shall be high density polyethylene (HDPE).
13. All conduit interconnect system, locate tone wire, fiber route markers, warning tape shall comply with the FDOT's Specifications for Road and Bridge Construction and applicable FDOT Design Standard indices.
14. Provide directional boring reports with specific information on when an outer casing is required if directional boring under and existing roadway.

#### Fiber Optic Pull Boxes

Fiber optic pull boxes shall be installed at the following locations:

1. At all new or relocated ITS components
2. Both ends of directional bores
3. 90 degree turns in the conduit system
4. Include a concrete apron around the pull box of one (1) foot minimum width from edge of the pull box by six (6) inches deep

The spacing of the fiber optic pull boxes shall not compromise the maximum pulling tension of the fiber optic cable. Locations must be approved by the Department during the 90% review phase. All pull boxes must meet HS-20 loading if they are to be installed in the limited access right-of-way.

All fiber optic pull boxes shall comply with the FDOT's Specifications for Road and Bridge Construction and applicable FDOT Design Standard indices.

#### Electrical Utility Service to ITS Device Cabinets

For new or relocated service, or for new or relocated ITS cabinets, the electrical conductors shall be increased so that maximum voltage drop at the new location does not exceed the voltage drop at the existing cabinet location, as well as meet FTE requirements.

If the Design-Build Firm designs new or relocated power services, the Design-Build Firm shall be responsible to coordinate with the power service provider(s). Overhead services shall not be used. The Design-Build Firm shall be responsible for any and all associated design, labor and material costs for new or relocated power services including but not limited to:

1. HDPE power conduit (sized to accommodate new service wire)
2. Electric power cable
3. Pull boxes
4. Grounding
5. Surge suppression
6. Disconnect switch
7. Transformers
8. Power distribution panels

#### Electrical Pull Boxes

Electrical pull boxes shall be installed at:

1. All ITS device locations
2. Over all grounding rods at power service points
3. Adjacent to existing building transformer / load center
4. 90 degree turns in the power conduit system
5. At both ends of directional bores crossing travel lanes
6. Include a concrete apron around the pull box of one (1) foot minimum width from edge of the pull box by six (6) inches deep

The spacing of the electrical pull boxes shall not exceed 500 feet. Locations must be approved by the Department during the Phase III-90% review phase. All pull boxes must meet HS-20 loading and shall comply with the applicable FDOT's Specifications for Road and Bridge Construction and applicable FDOT Design Standard indices.

#### **4. Fiber Optic Cable Relocation Requirements:**

The Design-Build Firm shall be responsible for identifying any conflicts between the existing backbone and the proposed work within the limits of this project. In event of a conflict, the Design-Build Firm shall develop design plans and a fiber relocation procedure and submit to the FTE ITS Office for review and approval prior to relocating any segment of the mainline FOC communications backbone. At a minimum, the Design-Build Firm shall comply with the following criteria for relocating any portion of the FOC communications backbone.

Introduction of new fiber splice boxes or butt splices for the relocation of any segment of the FOC communications backbone is not allowed unless approved by the Department. The section of fiber to be replaced as approved by the Department will be from the nearest butt end splice point on either side of the section in conflict. This new cable shall be housed in the same color conduit as the existing cable and shall include the re-splicing of the fiber optic drop cables within the section. The Design-Build Firm shall be limited to use of an existing splice box to perform any new butt splice as approved by the Department.

The fiber optic splice box shall be HS-20 rated, shall meet the requirements of the existing splice box and shall comply with the FDOT's Specifications for Road and Bridge Construction and applicable FDOT Design Standard indices. Splice box spacing shall not compromise the maximum pulling tension of the fiber optic cable. Splice box locations must be approved by the Department during the 90% review phase.

Splice boxes must come equipped with knock-outs on all four sides to facilitate any future conduit installations and splicing needs. If the area for the proposed fiber splice box is not easily accessible then a reasonable amount of extra slack beyond the 200 feet minimum required slack per FDOT Standard Specifications for Road and Bridge Construction shall be furnished and installed to accommodate future splicing. The amount of proposed slack must be noted on the 90% plan submittal. Actual slack amounts shall be noted on final project as-built plans.

Any relocated segment of the fiber backbone and ITS laterals shall be tested using an OTDR. The following allowable attenuation losses shall not be exceeded between any two master HUB switches: 0.4 db/km for 1310 nanometer wavelength, 0.3 db/km for 1550 nanometer, plus 0.5 db for any connectors and 0.1 db for splices. A CD/DVD with all OTDR test results performed on existing fiber, new fiber reel test, and factory test results shall be submitted to the Department's Construction Project Manager. The fiber testing and certification shall comply with the FDOT's Specifications for Road and Bridge Construction.

## **5. ITS Testing:**

### General

The testing requirements of the Department specifications shall apply to any and all ITS components affected by the construction of this project including but not limited to proposed conduits, proposed and existing fiber optic cables within the project areas, and ITS components that experience interruptions in communications or require relocation as a result of conflicts associated with this project. ITS testing shall also include a Spare Conduit Test (SCT), Fiber Optic Cable Test (FOCT), Stand Alone Test (SAT), Operational System Acceptance Test (OSAT), and a Burn-In Period as described below. The Department reserves the right to have a representative witness all testing. The Design-Build Firm shall request in writing the Department's approval for each test procedure a minimum of 14 calendar days prior to the requested test date.

### Spare Conduit Test

The Design-Build Firm shall complete a conduit proofing test of all conduits within the project limits prior to the beginning of any construction to identifying any damaged conduit. The Design-Build Firm shall be responsible for completing a final conduit proofing test of all conduits that were relocated or adjusted or were installed within the limits of any roadway work as part of this Project. The Design-Build Firm shall be responsible for identifying and repairing any damage to the spare conduit regardless of whether the conduits were damaged before or during this project. The conduit proof test method to be applied throughout the project shall consist of blowing a proofing dart through the conduit system in at least one direction with a force pressure of 60 psi. The diameter of the proofing dart shall be a minimum of 80% of the actual duct inside diameter. The proofing dart shall have a minimum length of three (3) inches. The ability to successfully blow the pull string in the conduit for the proofing dart will satisfy the requirement for testing an airtight seal. The Design-Build Firm will not be permitted to blow ball bearings in empty conduits.

### Fiber Optic Cable Test

The Design-Build Firm shall conduct an initial fiber test of all fibers through the project limits to test the FOC communications backbone. The test shall be conducted at the start of the project before breaking ground using a test procedure approved by the Department with District Traffic Operations staff present. The fiber tests shall be bi-directional tests at a single wavelength using an Optical Time Domain Reflectometer (OTDR). After substantial completion of the project but before final acceptance, the Design-Build Firm shall perform a final fiber test of the same fibers using the same test procedure and repair any damage or excessive degradation (as defined below) found at no additional cost to the Department. This fiber optic testing shall include the fiber optic cable to the nearest master hub beyond the project limits in both directions.

The FTE ITS fiber optic network shall not experience communication degradation greater than 0.4 db/km for 1310 nanometer wavelength, 0.3 db/km for 1550 nanometer, plus 0.5 db for any connectors and 0.1 db for any two master hub switches due to unnecessary splicing of the backbone fiber as a result of the work being performed by the Design-Build Firm and its sub-contractors. Any dB loss greater than that described above between any two master hub switches will result in the Design-Build Firm being required to replace a section of the 144 single mode fiber optic cable to remove unnecessary splices and bring the communication loss back within the tolerance identified above. The section of fiber to be replaced will be from and to the nearest butt end splice point on either side of the section experiencing high loss. This new cable shall be housed in the same color conduit as the existing cable and shall include the re-splicing of the fiber optic drop cables within the section. The Design-Build Firm shall be limited to installing only one

new fiber optic splice between two existing fiber optic splice boxes.

The Design-Build Firm shall be responsible for completing a final test of proposed fiber optic cable within the project limits per the Department's Specifications for Road and Bridge Construction ITS Specification 633 including the use of an optical time domain reflectometer (OTDR) to ensure the specifications are met and to take responsibility for repairing any damage found at its own cost. Any segment of the FOC communications backbone to be relocated shall also meet the testing requirements described in this section of the RFP.

### Stand Alone Test

The Design-Build Firm shall perform a complete SAT on all ITS components affected in any way by this project. The SAT shall demonstrate that all equipment and materials are in full compliance with all project requirements and fully functional as installed and in final configuration. If a unit fails its stand-alone test, the Design-Build Firm shall correct the problem or replace the unit and retest it until satisfactory completion of the SAT. All equipment used to conduct the SAT shall be provided by the Design-Build Firm.

The SAT shall demonstrate full compliance with all operational and performance requirements of the project including but not limited to full coverage of CCTV camera location to meet or exceed previous coverage, detection accuracy for VDS, reception coverage for HAR, and full operation of RWIS and SMS sites if impacted by the project. SATs also include a visual inspection of the cabinets and all construction elements at the site to ensure they are compliant with the specifications of this project.

## **6. Operational System Acceptance Test (OSAT):**

The Design-Build Firm shall perform a complete OSAT on all equipment and materials affected in any way by this project including but not limited to relocated ITS Components, new ITS Components replaced as a result of damages by the Design-Build Firm. The Design-Build Firm shall not request the OSAT test until all SATs have been satisfactorily completed. Prior to the official OSAT, the Design-Build Firm shall provide advance notice of and written test results documentation that the Design-Build Firm has performed a dry-run of the OSAT. The FTE ITS Office reserves the right to require the attendance of a dry run test session.

The Design-Build Firm shall test all project systems simultaneously from the TMC in the FTE Operations Center in a manner equivalent to the normal day-to-day operation of the system. The OSAT shall demonstrate that all equipment and materials in the network are in full compliance with all project requirements and fully functional as installed and in final configuration, communicating with and being controlled through the TMC.

The FTE ITS Office reserves the right to require, at no additional expense, the attendance of a qualified technical representative of the equipment and/or software manufacturers to attend any given OSAT.

## **7. ITS Burn-In Period:**

Following the FTE ITS Office's written notice of successful completion of the CSAT, the Burn-In Period for ITS will begin. The entire ITS system within the project limits excluding toll equipment but including communication infrastructure to toll equipment must operate successfully for 30 days. The Design-Build Firm shall be responsible for the full maintenance of the ITS system components within the project limits during the Burn-In Period and until Final Acceptance. Successful completion of the Burn-In Period will occur at the end of the 30 days of operation without a system failure due to failed ITS Component, hardware,

software or communications components.

Each system failure during the Burn-In Period will require an additional 10 days of successful operation prior to being eligible for Final Acceptance. (i.e., if there are two system failures during the initial 30 day period, the burn-in period would be increased to 50 days). If the Department decides that any material used for the relocation of the DMS part of the project is defective or otherwise unsuitable, and the workmanship does not conform to the design or specifications of the Contract, the Design-Build Firm shall replace such defective parts and material at no cost to the Department.

**S. Florida Department of Transportation Intelligent Transportation System Plans:**

**1. General:**

For the purposes of this section, Florida Department of Transportation, FDOT D5, D5 and Department shall refer to Florida Department of Transportation District 5. In the event the adjacent project to the south of this Project (FPID 242626-3) is not complete, the Design-Build Firm shall provide all FDOT D5 splice boxes and a 96 SM Fiber Optic Cable from the existing FDOT D5 Tower Site at SR 44 along the eastbound side of NB I-75 south to the end of the project limits. In the event the adjacent project to the south of this Project (FPID 242626-3) is completed prior to this project, the Design Build Firm shall perform all other necessary ITS work included in this RFP.

In the event the adjacent D5 ITS project to the north of this Project (FPID 428213-1) is not complete, the Design-Build Firm shall provide all work necessary to complete the proposed ITS work included in this RFP. In the event the adjacent D5 ITS project to the north of this Project (FPID 428213-1) is completed prior to this project, the Design Build Firm shall provide all additional equipment necessary to provide a fully operational system. The necessary items include but are not limited to any needed parts, devices, connectors, jumpers, etc. to make the connections to the existing Layer III switch and the 144 SM FOC.

The Design-Build Firm shall examine the Contract Documents and the site of the proposed work carefully before submitting a Proposal for the work contemplated and shall investigate the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished.

The Design-Build Firm shall prepare Intelligent Transportation Plans in accordance with Department criteria.

The Design-Build Firm shall prepare design plans and provide necessary documentation for the procurement and installation of the Intelligent Transportation System devices as well as overall system construction and integration. The construction plan sheets shall be in accordance with Department requirements and include, but not be limited to:

- Project Layout / Overview sheets outlying the locations of field elements
- Detail sheets on:
  - Fiber optic splice and conduit
  - Wiring and connection details
  - Conduit, splice box , and vault installation
  - Communication Hub and Field Cabinets
  - Fiber optic Splicing Diagrams

- System configuration /Wiring diagram /Equipment Interface for field equipment at individual locations and communications hubs
- Electrical grounding details

The Design-Build Firm shall prepare a detailed inventory of existing Intelligent Transportation System equipment and report which devices will be removed, replaced, or relocated by project work.

## **2. Design and Engineering Services:**

All plans shall be accurate, legible, complete in design, and drawn to the scale as indicated in the Department's manuals, and furnished in reproducible form. ITS plans are to include wiring diagrams for cabinet layouts and wiring and pole attachment tables if applicable in addition to those items mentioned in the Plans Preparation Manual. Logical topology should be separate from plan sheets and should depict the scheme for all subsystems. Splicing plans shall be separate from plan sheets and shall include hub numbers, reference page numbers for plan sheets, buffer and strands references by number and color, approximate station and offset for the cabinets, end devices that connect to the cabinets, and enclosures in addition to depicting the splicing. A visual depiction is required for splicing diagrams. This may be augmented, but not substituted by a table.

## **3. Construction Services:**

The Design -Build Firm shall be responsible for all ITS construction, however FDOT D5 will provide a Layer III Switch for the tie in to D-5 system and perform the system integration. The contractor shall contact the FDOT D5 ITS Manager to gain access to the Tower Site at the I-75/SR 44 interchange to work on the fiber connection to the switch. The communication equipment for the proposed 144 SM fiber optic cable line from splice vault 91-308.9-NB to the Master Hub Tower Site at the I-75/SR 44 interchange shall consist of fiber optic cable, a Brocade FastIron GS Layer III Switch, that currently exists within the Master Hub Tower Site, as well as other required and necessary equipment (jumpers fiber/UTP, rack, patch panels, parts or devices) to provide a full operational system. In Addition, splice boxes and a 96 SM Fiber Optic Cable run will be added going south along NB I-75 to end of project limits. It shall be installed to provide a tie to the FDOT fiber project (FM 242626-3) south of the interchange. The new 96 SM Fiber Optic Cable shall run to a splice enclosure at the end limit of this project. Spare fiber should be stored in the splice box per FDOT Specification. This Design-Build Project includes any parts or devices, connectors, jumpers needed to make the connections to the existing Layer III switch and the new 96 SM FOC.

The existing master hub will provide communications back to the RTMC through the proposed 144 SM Fiber Optic Cable.

It is the responsibility for the Design-Build Firm to comply with the FDOT's standard fiber scheme.

### **a. Fiber Optic Cable**

The Design Build Firm shall install a 96 single mode fiber optic cable in accordance with Specification Section 633. The Design -Build Firm shall be required to investigate, identify and include their fiber needs for this project in connecting all the required devices. No dark fibers shall be allowed unless approved by FDOT.

Conduit shall be directional bored at no additional cost. The conduits installed for fiber shall be within 10 feet of the Right of Way line. The conduit shall only be moved further than 10 feet so that it can be installed on higher ground to avoid flood zone areas.

Splice loss for Single Mode Fiber fusion splice shall not exceed a maximum bidirectional average of .10 decibel for any splice. The core diameter for Single Mode Fiber shall be 8.3  $\mu$ m. The Design-Build Firm shall measure the link loss and summarize losses in a table once before and after installed. A table shall be provided to have splice loss for each direction on each fiber. The table shall be certified as matching the OTDR readings. Both the OTDR table shall be submitted to the Department. The ODTR can be submitted in paper or electronic format. It shall be compatible with Microsoft Excel.

b. Splice Enclosures

The Design Build Firm shall furnish and install splice enclosure in accordance with Specification section 633.

c. New Conduit

The new conduit installed shall be a minimum of 4 – 1 ¼ inch conduits. The conduits shall be colored; two orange conduits (fiber). One orange conduit will be for the newly installed 144 SM fiber and the other orange conduits shall be for a fiber spare. The Design-Build Firm shall design and install the conduit in accordance with Specification Section 630 and Stand Index 1 7721 .

The Design-Build Firm shall be allowed to connect conduit/inner duct (Interstate) from plow portions or underground conduit to bore portions if the connection method is concurred with by the FDOT Project Manager. The connection conduit method and material shall be submitted for concurrence to the FDOT Project Manager.

d. Splice Boxes

New splice boxes are not to be placed in a swale or drainage area and shall be placed above seasonal high water. All splice boxes shall be in accordance with Specification Section 635 and meet the requirements of Standard Index 17700.

e. Pull Boxes

New pull boxes are not allowed.

f. Locate Wire

A locate wire shall be continuous from pull box to pull box following the path parallel to the fiber. Any splices to this wire shall only be done at a splice box, no in-conduit splicing shall be allowed. Splices at the pull box for the locate wire shall meet NEC requirements for continuity and in pull box splices. Locate wire and fiber optic cable shall always be placed in separate conduit. The Design Build Firm shall install a locate wire in accordance to Specification Section 630-2. The Design-Build Firm may use one of the spare conduits for the locate wire if approved by FDOT. Route markers will be required and will be designed in accordance with Specification 630-2.

g. Connectors

The Design Build firm shall use only Type SC connectors for patch panel connections. The Design Build Firm shall use LC connectors for the Layer III switch that exists. Epoxy filled connectors shall be used for all power runs, no wire nuts shall be allowed.

h. Jumpers

Provide jumpers for all connections and cross connections according to the plans. Furnish jumpers that are pre-connectorized by the factory with SC connectors. The Design Build Firm shall use jumpers to meet the appropriate length within the cabinets for cable management. Fiber jumpers shall have SC connectors for patch panels while LC jumpers shall be used for the Layer III switch within the Master Hub Tower Site.

i. Splice Tray/Fiber Termination/Patch Panels

To avoid micro bending the Design Build Firm Shall meet the bend radius specification in accordance to Section 633-2. 1.1.9.2. Splice trays, fiber terminations and patch panels shall meet requirements set in section 633-2.1. There shall be only one buffer tube per splice tray. All splice trays shall be capable of closing without the use of tape or other adhesive devices. No fiber optic strands shall enter more than one splice tray. Pre-terminated Connector Assemblies shall be used. All patch panels shall be in accordance with 633-2.1 .4 and have SC connectors.

j. Cross Connect Fields

All local hubs shall have a minimum of 6 fibers from each direction. The Master hub Tower Site shall stay with all fiber strands terminated in the patch panel. Any pigtailed used shall match the color of the fiber strand that they are spliced to.

k. Master Hub Cabinet

The Design -Build Firm shall use the existing Central Office's Tower Site located in Wildwood, FL on SR 44 and I-75.

i. Cabinet Locking System

The Design-Build Firm shall furnish and install locks and keys that are compatible with the Department's existing Cyber lock programming equipment on all master hubs and local hubs cabinets. Cabinet keys shall be provided to the Department thirty days prior to the installation of any cabinets. The Department shall have twenty days from the time that all keys and locks are provided to program the keys and locks. At least two locks per cabinet on the job is to be provided. One key for CEI staff plus a sufficient number of keys are to be provided to the Design-Build Firm for maintenance. All keys and locks shall become the property of the Department at the end of the construction job. All keys shall be turned in to the Department's ITS Project Manager prior to final acceptance.

ii. Layer III Switch

The Design-Build Firm shall use the existing Layer III switch that currently resides within the Master Hub Tower Site at SR 44 and I-75.

iii. Patch Panel

All fibers strands shall be kept terminated in the patch panel of the Master Hub Tower Site. Additional patch panels shall be added as necessary. Only one buffer tube shall be connected to each connector panel and the color of the buffer tube that connects to the connector panel. The connector panels shall be incremental from left to right, 1 to 12. All strands of each fiber shall be terminated on the patch before another fiber's strands are terminated. Color coded buffer tube fan out kits are accepted. The Design Build Firm shall comply with Specification Section 633. All pigtailed shall match the color of the fiber strand that they are spliced to. Pigtailed shall be used for all fiber terminations. All local hubs drop cables shall be terminated on the patch panel at each site in accordance with specification section 633-2. SC connectors shall be used.

**4. Integration**

The logical topology for integration is to include all Layer II switches and the Layer III switch within the project limits. The Design-Build Firm shall setup an integration meeting with the Department, allowing minimally 2 weeks of notice and review time of the logical topology. During the integration meeting the Department will provide an IP Scheme, VLAN Tagging Scheme for all subnets, and information on the Layer III, if necessary, and higher protocols to be run on the switches.

It is the Design-Build Firm's responsibility to setup all tagging, disable all applicable ports and setup all IP addresses. The Design-Build Firm shall not place any Layer III or higher protocols on the switches at this time. The Design-Build Firm shall supply the Department with addresses and all other needed information for the configuration of SunGuide. The Design-Build Firm shall allow 2 weeks for FDOT to enter the information into the management software. The Design-Build Firm shall troubleshoot with the Department's assistance any issues that arise from configuring the central software.

The Design-Build Firm shall provide any assistance necessary to provide the Department with IP addresses and auto negotiation speeds for all switches that cannot be acquired from the remote location.

Inability of the Department to access the information remotely will constitute failing the inspection. If the inspection is failed the Design-Build Firm shall reconfigure the devices and again work with the Department to get the devices into the central management software. After this is complete the switches shall again be inspected. Failure will result in repeating the earlier step until the integration inspection is successfully completed.

Once the test is completed the Design-Build Firm shall start placing all protocols on the switch, but only while under the supervision of FDOT District 5 ITS Staff. Under no circumstance shall the Design-Build firm place anything greater than a Layer II protocol on the switch without District 5 ITS supervision. Once all protocols are in place the Design-Build Firm shall verify their functionality under District 5 ITS supervision.

**5. Testing and Acceptance:**

A new backbone fiber shall be installed from splice vault 91-308.9-NB to the Master Hub Tower Site at I-75 and SR 44 while utilizing the existing ITS sites. The fiber tie-in point shall remain the same with the Turnpike and is to be left uninterrupted.

The Design-Build Firm shall be responsible for the integration to the existing network and

communication scheme of the District 5 Central Software (SunGuide); however the Department retains the right to perform any maintenance activities on the central software, including but not limited to updated versions. The Design-Build Firm shall also be responsible for communicating with FL Turnpike with any technical coordination when or if necessary.

The Design-Build Firm shall perform all tests. The testing includes, but is not limited to Pre-Installation Testing, FOC Installation Testing, Post-Installation Testing, System Integration Testing, Turn-on Inspection, and System Test. In the event of a conflict between this document and the ITS Statewide Specifications the more stringent requirement shall govern.

a. Fiber Optic Installation Testing/Pre-Installation Testing

The Design Build Firm shall make sure the fiber optic cable is tested before installation to ensure it does not exceed the allowable db loss in accordance with specification section 633-3. The Design Build Firm shall test all devices prior to the installation of them within the cabinet to ensure the equipment is fully functional. If the device is non-functional, it will be the Design Build Firm's responsibility to replace with a functional device.

b. System Acceptance Test Plan (SATP)

The Design-Build Firm shall perform a System Acceptance Test Plan (SATP) on the entire project system. The System Acceptance Test Plan shall consist of the following requirements.

- Post Installation, System Integration Testing (5 days), Turn-On Test (10 days), System Test (30 days)
- System Test procedure will be reviewed and approved by FDOT.
- The testing schedule will be reviewed and approved by FDOT.

If during testing sessions, any ITS component fails to meet this RFP, or the ITS Statewide Specifications requirements, the Design-Build Firm shall correct the problem. If a problem arises that delays system integration testing by more than 24 hours, then system integration testing shall be terminated and rescheduled to install a new one at a future date. In the event that more than one system integration testing session is necessary, the Design-Build Firm shall be responsible for all costs associated with the extra test session(s).

## **6. Maintenance**

The Design-Build Firm shall be responsible for repairing and replacing all components/software used on the project that have become defective from the completion of the Turn-On Inspection until the completion of the System Test. Repairs made shall conform to the Plans, this RFP, the ITS Statewide Specifications and the FDOT Standards.

The Design-Build Firm shall maintain the current ITS system on the project throughout construction until the project is ready to be cut over to the new system. The Design-Build Firm shall ensure the ITS Preservation of Property Specification is met.

Maintenance and repair is defined as all activities that shall be performed for the system to remain in, or return to, operation as specified in the Plans and Technical ITS Statewide Specifications. The work shall also include preventative/routine maintenance. The work shall not include repairs or replacements made

necessary by defects resulting from a third party; vandalism, traffic accidents, or acts of God. In the event, that such repair or replacement is necessary, the FDOT'S Project Representative reserves the right to negotiate with the Design-Build Firm for such repair or replacement or reserves the right to use the current FDOT maintenance contractor to rectify the third party damage . Maintenance shall include repair and replacement of the current system components and new system components. The Design-Build Firm shall maintain a maintenance staff of adequate size to respond to any and all maintenance requirements of the project at all times from NTP to Final Acceptance. If the Design-Build Firm damages fiber optic cable, the fiber shall be replaced from hub to hub, as approved by FDOT. The fiber replacement shall be at Design-Build Firm's expense.

The need for maintenance shall be detected by a number of sources including but not limited to operator observation, Design-Build Firm personnel, FDOT maintenance personnel, Florida Highway Patrol, citizen reports, etc. When maintenance activities are being performed by the Design-Build Firm, the Design-Build Firm shall notify the FDOT'S Project Representative as soon as possible of the location and the work activity being performed , and shall provide the FDOT'S Project Representative with an anticipated schedule for completion of the work. This shall be in accordance with the Preservation of Property Spec.

FDOT shall make the final determination of whether a defective component/software shall be repaired or replaced. If repair is permitted, the FDOT'S Project Representative shall determine if the repair shall be made in the field, or if the component/software shall be removed (and replaced with a replacement component/software) and repaired elsewhere. The costs of removal, shipping, and related activities are to be borne by the Design-Build Firm and are considered incidental to the System Testing.

Any software or hardware system or subsystem shall be considered defective if either of the following conditions occurs within the System Test period:

Above the normal frequency of maintenance: For all components furnished within the project the Design-Build Firm shall furnish the FDOT with manufacturer supplied and certified test results indicating the mean time between failure (MTBF) for that component on or before the date of construction Final Acceptance . If a component fails prior to its MTBF, the Design-Build Firm shall either repair or replace the component at the FDOT'S discretion at the Design-Build Firm's expense. If the same component fails again prior to its MTBF, it shall be replaced by the Design-Build Firm at the Design-Build Firm's expense.

Failure of system or subsystem components/software to perform: Components/software that fails to operate in the manner described in the Plans, this RFP and the ITS Statewide Specifications, shall be replaced by the Design-Build Firm at Design-Build Firm's expense with components/software that meet the requirements of the Plans, this scope of services, and the Technical ITS Statewide Specifications. The FDOT'S Project Representative shall make the sole determination of whether or not a given system/subsystem has failed to perform.

The Design-Build Firm shall maintain a log of all response maintenance and repair activities performed during the Burn-in period by the Design-Build Firm. The log shall be kept in a database management system utilizing FDOT-approved database software, and include, as a minimum, the following:

- Date and time defect reported
- Entity reporting the defect
- Description of the reported defect

- Arrival time at the site of the reported defect
- Technician performing defect repair or replacement
- Corrective actions taken
- Model and serial number of any component repaired or replaced
- Date and time defect rectified.

The Design-Build Firm shall maintain records to show the itemized material, equipment, and labor cost incurred to provide maintenance during the burn-in period. These records shall be provided to the FDOT within 10 working days after the 30-day burn-in period. The purpose of this requirement is to provide the FDOT with information to estimate the maintenance budget needed for the system after the burn-in period. These records shall not be used as a basis of payments to the Design-Build Firm. The Design-Build Firm shall assure that these cost records are complete and accurate. The FDOT may perform an audit to verify the accuracy of the cost records.

When performing maintenance activities, the Design-Build Firm shall use appropriate traffic control measures. The traffic control procedures implemented shall be based on and conform to the traffic control plan contained in the project Plans and the current FDOT Roadway and Traffic Design Standards. All lane closures required to perform work shall be consistent with current FDOT maintenance of traffic requirements. Approval for lane closures shall be obtained from the FDOT'S Project Representative prior to the implementation of any lane closure. The costs of any and all activities relating to maintenance of traffic are to be borne by the Design-Build Firm and are considered incidental to the work. No lane closures shall be allowed from 6:00AM to 9:00PM.

If the Design-Build Firm fails to perform any maintenance within the time frame for component-related defects or central system defects, the FDOT shall either perform the corrective work itself or contract with a third party to perform the necessary corrective work. Corrective work necessary due to non-performance by the Design-Build Firm shall be deducted from any payments due the Design-Build Firm. Consistent non-performance on the part of the Design-Build Firm shall result in attachment of the supplemental performance bond.

FDOT or FDOT representative's performance of corrective work under this provision shall have no effect on the Design-Build Firm's warranty obligations.

The Design -Build Firm shall be responsible for all locates throughout the duration of the project from the Notice to Proceed to Final Acceptance. The Design-Build Firm shall be provided with locates at the beginning of the project by FDOT. After initial locates are provided to the Design-Build Firm by FDOT, they shall add their name to Sunshine One Call and be responsible for all locates at no cost to FDOT.

## **7. Training**

The Design-Build Firm shall meet all training requirements set forth in the "ITS Equipment and Network Device Subsystem Training" documentation for all applicable subsystems prior to final acceptance.

## **8. Spare Parts**

All spare parts shall be handed back to the Department upon final acceptance.

## **9. Inventory Control**

Upon installation of the ITS equipment, the Department requires all installed components, to include fiber, to be documented in a form for inventory control. The following information is required:

- Record the manufacturer, model and serial number of all equipment within the cabinet.
- Record all fiber buffers and fiber strands used.
- The sequential footages from the cable sheaths where fiber enters and exits the vault/pull boxes.
- Record each cable footage at the splice enclosure, to include where each cable enters and/or exits the vault.
- Record cable stealth footage entering the cabinet.
- Record all fibers that are terminated and landed on the patch panel.
- Record type of termination within the cable.
- Record a splice diagram or a spreadsheet of each splice location.
- Record patches between all equipment and patch panels.
- Record the GPS parameters associated with all pull boxes, splice vaults and cabinets within 1 meter of their location.

#### **T. Landscaping:**

It is the intent of this work item to preserve the opportunity to provide for significant landscape planting areas within the Project limits that meet the intent of FDOT Highway Beautification Policy. The landscape design shall adhere to the FDOT Highway Beautification Policy with the intent of creating a unified landscape theme for the project.

The Design-Build Firm shall provide the necessary site inventory and site analysis and shall prepare a “Landscape Opportunity Plan” (Opportunity Plan) as part of the roadway plan set. The Landscape Opportunity Plan shall consider the Design-Build Firm’s proposed roadway improvements, utilities, setbacks and clear zone dimensions, community commitments and other Project needs in identifying future landscape planting areas. Landscape opportunity areas should be preserved in accordance with the Departments “Bold” initiative.

The Opportunity Plans shall include the following:

1. Proposed improvements and existing elements to remain as associated with the Project.
2. Vegetation disposition depicting existing plant material to be removed, relocated or to remain.
3. Wetland jurisdictional lines.
4. Proposed drainage retention areas and easements.
5. Proposed utilities and existing utilities to remain.
6. Graphically depicted on-site and off-site desired or objectionable views.
7. Locations of landscape opportunity planting areas in a bubble format which identifies various vegetation groupings in a hatched or colorized manner. Examples are: “trees/palms/shrubs”, “shrubs only”, “buffer plantings”, etc.
8. Provided and labeled applicable clear zone, horizontal clearance, setback dimensions on the plans and in chart form which reflect AASHTO, FDOT and Department guidelines for landscape installation and maintenance operations, including those that have been coordinated with other disciplines

9. Identified outdoor advertising locations, owners and contacts and shown 1000 ft. view zone.
10. Indicated potential area(s) for wildflower plantings.

The Opportunity Plan shall match the scale and format used for the proposed roadway sheets. Should this format not convey design intent that is clearly legible, an alternate format may be considered.

Landscape construction documents and landscape installation are not included in this contract and shall be provided by others.

Disciplines that will have greatest impact to preserving landscape opportunities include environmental, drainage, utilities, signing, lighting and ITS. The DBLA shall identify potential conflicts relating to preserving opportunity landscape areas and provide suggested resolutions to preserve them. If conflicts cannot be resolved by the Design-Build Firm and the DBLA, they shall be discussed with the Department's Project Manager and District Landscape Architect for coordination and resolution.

The DBLA shall research and confirm any legally permitted outdoor advertising billboard (ODA) within 1,000-feet of the Project limits. The ODA sign(s) and 1,000-foot maximum vegetation protection zone limit shall be indicated on the plans. The Design-Build Firm's Landscape Architect shall provide a copy of all correspondence and attachments to the Department's District Landscape Architect.

The DBLA shall conduct a visual survey of existing vegetation within and adjacent to the right-of-way of the project. General locations of existing vegetation that will remain after roadway and associated improvements are completed shall be shown with notations of general plant species in each location on the Opportunity Plan. DBLA shall identify proposed buffer areas as needed.

The DBLA shall meet with the District Landscape Architect prior to the beginning of work for the purposes of coordination and to discuss adherence to the Highway Beautification Policy. No proposed planting areas indicated on the Opportunity Plan can occur in: federal and/or state jurisdictional wetlands or other surface waters; within open water bodies; in the bottom of stormwater management facilities; or use obligate wetlands or facultative wetland species within 25 feet of the seasonal high water of wetlands or other surface waters. Limited plantings may occur on the slopes and bottom of stormwater management facilities once coordinated with the District EMO office, District Drainage Engineer and the District Landscape Architect. Trees may not be planted within 5 feet of storm sewer pipes and utilities.

## VII. Technical Proposal Requirements:

### A. General:

Each Design-Build Firm being considered for this Project is required to submit a Technical Proposal. The proposal shall include sufficient information to enable the Department to evaluate the capability of the Design-Build Firm to provide the desired services. The data shall be significant to the Project and shall be innovative, when appropriate, and practical.

### B. Submittal Requirements:

The Technical Proposal shall be bound with the information, paper size and page limitation requirements as listed herein.

A copy of the written Technical Proposal must also be submitted in .pdf format including bookmarks for each section on a CD. No macros will be allowed. Minimum font size of ten (10) shall be used. Times New Roman shall be the required font type.

Only upon request by the Department, provide calculations, studies and/or research to support features identified in the Technical Proposal. This only applies during the Technical Proposal Evaluation phase.

Submit 1 Original, 7 CD's/DVD's, and 7 hard copies of the Technical Proposal to:

Mr. Richard Nethercote  
Turnpike Contract Administrator  
Florida's Turnpike Enterprise  
Phone: (407) 264-3885  
Fax: (407) 264-3058

#### By Federal Express:

Florida's Turnpike Enterprise  
Turkey Lake Service Plaza  
Building 5315, Mile Post 263  
Florida's Turnpike  
Ocoee, Florida 32761

#### By Hand Delivery:

Florida's Turnpike Enterprise  
Turkey Lake Service Plaza  
Building 5315, Mile Post 263  
Florida's Turnpike  
Ocoee, Florida 32761

The minimum information to be included:

#### Section 1: Project Approach

- Paper size: 8½" x 11". The maximum number of pages shall be 10, single-sided, typed pages including text, graphics, tables, charts, and photographs. Double-sided 8½" x 11" sheets will be counted as 2 pages. 11"X17" sheets are prohibited.
- Describe how the proposed design solutions and construction means and methods meet the project needs described in this Request for Proposal. Provide sufficient information to convey a thorough knowledge and understanding of the project and to provide confidence the design and construction can be completed as proposed.

- Provide the term, measureable standards, and remedial work plan for any proposed Value Added features that are not Value Added features included in this RFP, or for extending the Value Added period of a feature that is included in this RFP. Describe any material requirements that are exceeded.
- Provide a Written Schedule Narrative that describes the Design and Construction phases and illustrates how each phase will be scheduled to meet the project needs required of this Request for Proposal. Bar or Gantt charts are prohibited. Do not reveal or describe the Proposed Contract Time. Proposed Contract Time will be evaluated when Bid Price Proposals are received.

## Section 2: Plans and Technical Special Provisions

- Plan and Profile views of the proposed improvements shall be submitted in roll-plot format. The maximum width of the roll-plots shall be 36". The maximum length of the roll-plot shall be 8'. Inclusion of additional information on the roll-plot, other than depictions of the Plan and Profile views, is allowed provided it clarifies the plan and profile views. However, the Department may determine that such additional information is excessive and may require the Design-Build Firm to revise and resubmit the roll-plots. If this occurs, the Design-Build Firm will have 2 business days to revise and resubmit the roll-plots upon notification by the Department. All other information not included on the roll plots, such as typical sections, special emphasis details, structure plans, etc., shall be provided on 11"x17" sheets.
- Provide Technical Proposal Plans in accordance with the requirements of the Plans Preparation Manual, except as modified herein.
- The Plans shall complement the Project Approach.
- Provide Landscape Opportunity Plan sheets that depict a Bold Landscape design for the entire project limits. The Landscape Plan shall include graphic plant symbols that show the plant location, plant type, plant quantity, plant botanical and common name and installed plant size.
- Provide any Technical Special Provisions which apply to the proposed work. Paper Size: 8½" x 11".

### **C. Evaluation Criteria:**

The Department shall evaluate the written Technical Proposal by each Design-Build Firm. The Design-Build Firm should not discuss or reveal elements of the price proposal in the written proposals. A technical score for each Design-Build Firm will be based on the following criteria:

<u>Item</u>	<u>Value</u>
1. Design	30
2. Construction	30
3. Innovation	10
4. Value Added	10
<b>Maximum Score</b>	<b>80</b>

The following is a description of each of the above referenced items:

**1. Design (30 points)**

Credit will be given for demonstrating a design that adheres to the RFP requirements. The design should limit the risk to the Department, minimize additional design variations, optimize sight distance, provide a safe, effective, and innovative traffic control design that minimizes disruption of travelling patrons, provide for utility accommodation and be technically sound and be well coordinated between the various disciplines. Each Proposer shall describe how the Design-Build Firm intends to comply with these requirements.

The conceptual drawings (and CADD files) included in the RFP, at the Proposer's option, may be used to develop sufficient drawings and other documentation to demonstrate to the Department the Proposer's complete comprehension of the design solution. Regardless of any modifications made, the Design-Build Firm shall remain obligated to provide work complying with the requirements of the Design and Construction Criteria documentation.

Credit will be given for the quality and suitability of the following elements:

- Roadway Components, including widening, milling & resurfacing, site work, drainage, lighting, signing and pavement marking, and other incidental site work as applicable,
- Structural Components,
- Environmental protection,
- The role of the Design-Build Firm's Project Manager in the overall management of the design and role in the construction phase of the project. An outline prepared by the Design-Build Firm's Project Manager of the activities the Design-Build Firm's Project Manager would be involved with and the basis for how the project will be directed through the design and construction phases.
- Delivering the design, design coordination and meeting the Project's scheduling needs should be discussed.
- A Maintenance of Traffic (MOT) scheme that minimizes disruption of roadway traffic. Consideration factors include, but are not limited to, minimization of lane closures, detours, lane widths, visual obstructions, reductions in speed limits, and reductions in weave distances and merges, incident management goals and protection of utilities.

Credit will be given for aesthetics features of the design including but not limited to the following: considerations in the geometry, landscape opportunity plan, suitability and consistency of structure type, structure finishes, shapes, proportions and form throughout the limits of the project.

Credit will be given for design and utility coordination efforts that minimize the potential for adverse impacts and project delays due to utility involvement.

Credit will be given for development of design approaches which minimize periodic and routine maintenance. The following elements should be considered: access to provide adequate inspections and maintenance, access to structure's lighting system, and impacts to long term maintenance costs.

## **2. Construction (30 points)**

The Proposers shall include a narrative in the Proposal clearly defining their understanding of those construction activities scheduled to be performed.

Credit will be given for the quality and suitability of the following elements:

- Safety
- Structures construction
- Roadway construction
- Drainage construction
- Construction coordination plan minimizing construction changes
- Minimizing impacts to adjacent properties and structures through construction
- Implementation of the Environmental design and Erosion/Sediment Control Plan
- Implementation of the Maintenance of Traffic Plan
- Implementation of the Incident Management Plan
- Utility Coordination and Construction

Credit will be given for developing and deploying construction techniques that minimize disruptions to roadway traffic, the traveling public, business/property owners, enhance project durability, reduce long term and routine maintenance, and those techniques which enhance public and worker safety. This shall include, but not be limited to, minimization of lane and driveway closures, lane widths, visual obstructions, construction sequencing, and drastic reductions in speed limits.

Credit will be given for minimizing impacts to the environment during all phases of construction and insuring all environmental commitments are honored.

Credit will be given for construction and utility coordination efforts that minimize the potential for adverse impacts and project delays due to utility conflicts.

## **3. Innovation (10 points)**

Credit will be given for introducing and implementing innovative design approaches and construction techniques which address the following elements:

- Minimize or eliminate Utility relocations
- Materials
- Workmanship

- Enhance Design and Construction aspects related to future expansion of the transportation facility

**4. Value Added (10 points)**

Credit will be given for the following Value Added features:

- Broadening the extent of the Value Added features of this RFP while maintaining existing threshold requirements
- Exceeding minimum material requirements to enhance durability of project components
- Providing additional Value Added project features proposed by the Design-Build Firm

The following Value Added features have been identified by the Department as being applicable to this project. The Design-Build Firm may propose to broaden the extent of these Value Added features.

Value Added Feature	Minimum Value Added Period
Value Added Asphalt	3 years
Value Added Concrete Pavement	5 years
Value Added Bridge Components	5 years
Value Added Lighting	3 years

**D. Final Selection Formula:**

The Selection Committee shall publicly open the sealed bid proposals and calculate an adjusted score using the following formula:

$$\frac{BPP}{TS} = \text{Adjusted Score}$$

BPP = Bid Price Proposal

TS = Technical Score (Combined Scores from ELOI and Technical Proposal)

Points will be added to the Technical Score, at the time of Bid Price Proposal opening, according to the Proposed Contract Time based on the following table. The number of days shown on the bid proposal form shall be the official Proposed Contract Time.

Proposed Contract Time (Days)	Points Awarded
1115-1048	0
1047-980	1
979-912	2
911-844	3
843-776	4

775 or less	5
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The Design-Build Firm selected will be the Design-Build Firm whose adjusted score is lowest.

The Department reserves the right to consider any proposal as non-responsive if any part of the Technical Proposal does not meet established codes and criteria. If the Proposed Contract Time is greater than Maximum Contract Time of 1115 calendar days the Bid Price Proposal will be considered non-responsive.

#### **E. Final Selection Process:**

After the sealed bids are received, the Department will have a public meeting for the announcement of the Technical Scores and opening of sealed Bid Price Proposals. This meeting will be recorded. At this meeting, the Department will announce the score for each member of the Technical Review Committee, by category, for each Proposer and each Proposer's Technical Score. Following announcement of the Technical Scores, the sealed Bid Price Proposals will be opened and the adjusted scores calculated. The Selection Committee should meet a minimum of two (2) calendar days (excluding weekends and Department observed holidays) after the public opening of the Technical Scores and Bid Price Proposals. The Department's Selection Committee will review the evaluation of the Technical Review Committee and the Bid Price Proposal of each Proposer as to the apparent lowest adjusted score and make a final determination of the lowest adjusted score. The Selection Committee has the right to correct any errors in the evaluation and selection process that may have been made. The Department is not obligated to award the contract and the Selection Committee may decide to reject all proposals. If the Selection Committee decides not to reject all proposals, the contract will be awarded to the Proposer determined by the Selection Committee to have the lowest adjusted score.

#### **F. Stipend Awards:**

The Department has elected to pay a stipend to a limited number of non-selected Short-Listed Design-Build Firms to offset some of the costs of preparing the Proposals. The non-selected Short-Listed Design-Build Firms meeting the stipend eligibility requirements of the Project Advertisement and complying with the requirements contained in this section will ultimately be compensated. The stipend will only be payable under the terms and conditions of the Design-Build Stipend Agreement and Project Advertisement, copies of which are included with this Request for Proposal. This Request for Proposal does not commit the Department or any other public agency to pay any costs incurred by an individual firm, partnership, or corporation in the submission of Proposals except as set forth in the Design-Build Stipend Agreement. The amount of the stipend will be \$90,000 per non-selected Short-Listed Design-Build Firm that meets the stipend eligibility requirements contained in the Project Advertisement. The stipend is not intended to compensate any non-selected Short-Listed Design-Build Firm for the total cost of preparing the Technical and Price Proposals. The Department reserves the right, upon payment of stipend, to use any of the concepts or ideas within the Technical Proposals, as the Department deems appropriate.

In order for a Short-Listed Design-Build Firm to remain eligible for a stipend, the Short-Listed Design-Build Firm must fully execute with original signatures and have delivered to the Department within one (1) week after the Short-List protest period, four (4) originals of the Design-Build Stipend Agreement, Form No. 700-011-14. The Short-Listed Design-Build Firm shall reproduce the necessary copies. Terms of said agreement are non-negotiable. A fully executed copy of the Design-Build Stipend Agreement will be returned to the Short-Listed Design-Build Firm.

A non-selected Short-Listed Design-Build Firm eligible for stipend compensation must submit an invoice for a lump sum payment of services after the selection/award process is complete. The invoice should include a statement similar to the following: "All work necessary to prepare Technical Proposal and Price Proposals in response to the Department's RFP for the subject Project". If a non-selected Short-Listed Design-Build Firm eligible for stipend compensation is deemed to be non-responsive, for reasons other than the Price Proposal exceeding the Maximum Price as established herein, as determined by the Department, then no stipend will be paid.

## **VIII. Bid Proposal Requirements**

### **A. Bid Price Proposal:**

Bid Price Proposals shall be submitted on the Bid Blank form attached hereto and shall include one lump sum price for the Project and the number of calendar days within which the Proposer will complete the Project. The lump sum price shall include all costs for all design, geotechnical surveys, architectural services, engineering services, Design-Build Firms quality plan, construction of the Project, and all other work necessary to fully and timely complete that portion of the Project in accordance with the Contract Documents, as well as all job site and home office overhead, and profit, it being understood that payment of that amount for that portion of the Project will be full, complete, and final compensation for the work required to complete that portion of the Project. One (1) hard copy Bid Price Proposal shall be hand delivered in a separate sealed package to the following:

Mr. Richard Nethercote  
Turnpike Contract Administrator  
Florida's Turnpike Enterprise  
Turkey Lake Service Plaza  
Building 5315, MP 263  
Ocoee, Florida 32761

The package shall indicate clearly that it is the Bid Price Proposal and shall identify clearly the Proposer's name, and Project description. The Bid Price Proposal shall be secured and unopened until the date specified for opening of Bid Price Proposals.

The following Bid Price Proposal Forms are included as attachments to this RFP:

1. Attachment No. 1 – Bid Blank (375-020-17)
2. Attachment No. 2 – Design Build Proposal of Proposer (375-020-12)
3. Attachment No. 3 – Design Build Bid Proposal Form
4. Attachment No. 4 – Bid or Proposal Bond (375-020-34)
5. Attachment No. 5 – DBE Forms (as applicable)