



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

**DESIGN-BUILD MAXIMUM PRICE  
REQUEST FOR PROPOSAL**

**for**

**SR 821 (HEFT) Widening from South of SW 104<sup>th</sup> St.  
(Killian Parkway) to North of SW 72<sup>nd</sup> St. (Sunset Drive),  
Miami-Dade County**

**Financial Project Number: 415051-1-52-01 and 430811-1-52-01**

**Federal Aid Project Number(s): N/A**

**Contract Number: E8N18**

**DRAFT RFP 10/17/2013**

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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.

<b>Attachment No. 1</b>	<b>Design Build Bid Blank</b>
<b>Attachment No. 2</b>	<b>Design Build Proposal of Proposer</b>
<b>Attachment No. 3</b>	<b>Design Build Proposal Form</b>
<b>Attachment No. 4</b>	<b>Bid or Proposal Bond</b>
<b>Attachment No. 5</b>	<b>DBE Forms</b>
<b>Attachment No. 6</b>	<b>Design Build Contract</b>
<b>Attachment No. 7</b>	<b>Design Build Contract Bond</b>
<b>Attachment No. 8</b>	<b>Contract Affidavit</b>
<b>Attachment No. 9</b>	<b>Division I Design Build Specifications</b>
<b>Attachment No. 10</b>	<b>Project Advertisement</b>
<b>Attachment No. 11</b>	<b>Florida's Turnpike Enterprise Field Operations Guide</b>
<b>Attachment No. 12</b>	<b>Typical Section Package</b>
<b>Attachment No. 13</b>	<b>Design Variations</b>
<b>Attachment No. 14</b>	<b>Minimum Pavement Design Requirements</b>
<b>Attachment No. 15</b>	<b>FDOT AADT Traffic Data and Equivalent Single Axle Loading (ESAL) Memorandum</b>
<b>Attachment No. 16</b>	<b>FDOT Pavement Survey and Evaluation Report</b>
<b>Attachment No. 17</b>	<b>Resilient Modulus Recommendations Report</b>
<b>Attachment No. 18</b>	<b>Design Website</b>
<b>Attachment No. 19</b>	<b>Technical Memorandum Traffic Control Restrictions</b>
<b>Attachment No. 20</b>	<b>Project Traffic Forecast Memorandum (PTFM)</b>
<b>Attachment No. 21</b>	<b>Express Lanes Access Locations</b>
<b>Attachment No. 22</b>	<b>Median Opening Review Memo</b>
<b>Attachment No. 23</b>	<b>SFWMD Permit No.</b>
<b>Attachment No. 24</b>	<b>USACE Permit No.</b>
<b>Attachment No. 25</b>	<b>Final Noise Study Technical Memorandum</b>
<b>Attachment No. 26</b>	<b>Design Build Shop Drawing Procedures</b>
<b>Attachment No. 27</b>	<b>Value Added Specifications</b> Section 475, Value Added Bridge Component Section 725, Value Added Highway Lighting System
<b>Attachment No. 28</b>	<b>Special Provisions</b> Contractor Quality Control General Requirements (SP1050813DB) Structures Foundations (SP4550000DB)
<b>Attachment No. 29</b>	<b>ITS Minimum Technical Requirements</b>
<b>Attachment No. 30</b>	<b>Existing Bridge Load Rating Analysis</b>
<b>Attachment No. 31</b>	<b>FTE Maintenance and Access Requirements Memorandum</b>
<b>Attachment No. 32</b>	<b>FTE Bridge Maintenance Repair Recommendations</b>
<b>Attachment No. 33</b>	<b>Pipe Repairs</b>
<b>Attachment No. 34</b>	<b>Miami-Dade County Transit Requirements</b>
<b>Attachment No. 35</b>	<b>Applicable Design Standards</b> Turnpike Plans Preparation and Practices Handbook (TPPPH) Turnpike Drainage Manual Supplement General Tolling Requirements (GTR) Florida Intersection Design Guide

## **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 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.

1. Composite Project Overview
2. CADD Files (All Component Files)
3. Express Lanes Alternatives Technical Memorandum
4. Conceptual Roadway Permit Plans (HEFT)
5. Conceptual Roadway Plans (Sunset Drive)
6. Drainage Report
7. Signing Master Plan
8. Conceptual Signalization Plans (Killian Parkway)
9. Conceptual Signalization Plans (Kendall Drive)
10. Lighting Concept Report
11. Concept Tolling Plans
12. ITS Concept Plans
13. Technical Memorandum Detours
14. Killian Parkway Design Memorandum
15. Kendall Drive Interchange Alternatives Design Memorandum
16. HEFT Side Streets Memorandum
17. ACM Testing Report
18. Existing Record Plans
19. Bridge Concept Report (Killian Parkway)
20. Bridge Concept Report (Kendall Drive)
21. Bridge Concept Report (Sunset Drive)
22. Geotechnical Report (Bridges)
23. Geotechnical Report (Roadway)
24. Geotechnical Report (Sound Walls and Retaining Walls)
25. Geotechnical Report (Mast Arms and Gantry Structures)
26. Advanced Utility Coordination Documentation
27. Landscape Analysis Roll Plot
28. Landscape Opportunity Roll Plot
29. Outdoor Display Advertisement (ODA) Review
30. Contamination Survey Reports
31. PD&E Study Documents
32. PD&E Study Re-evaluation Study Documents
33. Community Awareness Plan
34. Public Hearing Documents
35. Miami Dade County Improvements (Killian Parkway & SW 122<sup>nd</sup> Ave.)
36. Survey Documentation
37. Summary of Electric Services Required

- 38. Inventory of Existing Sign Structures
- 39. Sample Inventory for Welding Inspection
- 40. Crash Data (2007-2011)

DRAFT

## **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 the design, widening and reconstruction of SR 821, the Homestead Extension of the Florida Turnpike (HEFT), from South of SW 104<sup>th</sup> Street (Killian Parkway) to North of SW 72<sup>nd</sup> Street (Sunset Drive).

For the purpose of bidding, the Department has established a maximum price of \$97,857,267. This amount is not the Department's official cost estimate for the work but is the maximum price constraint established for this contract. Submission of a bid under the maximum price is not a guarantee of contract award and cannot be interpreted as an appropriate or awardable bid amount. For this contract, the Department will reject as non-responsive any Price Proposal in excess of the maximum price amount shown above and the firm will not be considered for Final Selection.

During preparation of the bid, if concerns regarding the Department's maximum price arise, submit a letter of maximum price concern to Mr. Richard Nethercote by (03/17/2014). The Department will review the letter of maximum price concern and determine its next course of action. This process is established to provide the opportunity for Firms to express maximum price concerns prior to submission of a Proposal.

Each Design-Build Firm is to develop design approaches with corresponding schedules in accordance with the scope described in the RFP that can be designed and built without exceeding this maximum price. If notified of a concern with the maximum price amount, the Department may modify the scope.

Portions of this RFP have been placed in <angle brackets> to identify components of a future ultimate Killian Parkway Interchange that is desired by the Department. RFP language in these angle brackets identifies scope which will be considered as "future construction by others" but will be designed to a 90% level by the Design-Build Firm within this contract. The Design-Build Firm should design and construct improvements from the begin project limits to the ramp terminals on the south side of Kendall Drive to be compatible with the ultimate Killian Parkway Interchange to the maximum extent practical and minimize rework with a future contract. For example, the stormwater permitted facilities should be located to avoid reconstruction with the ultimate interchange.

The intent of this project is to not replace the existing Killian Parkway overpass, but to transition from that underpass constrained area to the ultimate alignment needs south of Kendall Drive with accommodations being made for the future interchange. The interim transition construction requirements are currently in the project's scope and are identified with [square brackets].

The Department will continue to work with the community and elected officials during this contract procurement. A potential exists for the interchange final design and construction to be included in this contract with an addendum during this Design Build procurement.

SR 821 (HEFT) is an urban Principal Arterial Expressway with a 65 mph design speed and extends from Milepost 0 to Milepost 27.5 near the Miami-Dade / Broward County Line. It is also part of the National Highway System and Florida's Strategic Intermodal System (SIS) and is a designated hurricane evacuation route. Within its work program, FTE has programmed improvements to the HEFT between SW 288<sup>th</sup> Street and SR 836 (Dolphin Expressway). This Design Build Project includes the limits from south of Killian

Parkway to north of Sunset Drive. The main objective of the SR 821 (HEFT) portion (FPID 415051-1-52-01) of the Project is to improve traffic flow on SR 821 (HEFT) by:

1. Widening the HEFT to include three (3) general purpose (GP) lanes and two (2) express lanes in each direction in addition to auxiliary lanes as required. A four (4) foot buffer that includes high performance tubular delineators will separate the express lanes from the GP lanes.
2. <Adding a new partial interchange at Killian Parkway with direct access to the new express lanes in each direction.>
3. <Improvements along Killian Parkway from SW 122<sup>nd</sup> Ave. to east of SW 117<sup>th</sup> Ave. Exclusive right turn lanes shall be provided at the Killian Parkway / SW 117<sup>th</sup> Ave. for the westbound to northbound and the eastbound to southbound movements. The existing left turn lanes (westbound to southbound) at the intersection shall be lengthened.>
4. Providing access to the new express lanes as follows:
  - a. <Ingress and Egress at the new Killian Parkway Interchange. A new intersection shall be constructed that connects Killian Parkway traffic to the new HEFT express lanes. The intersection geometrics shall provide equal number of lanes as shown and queue lengths provided in Attachment No. 20, Project Traffic Forecast Memorandum (PTFM).>
  - b. Ingress in the northbound direction south of Kendall Drive and north of Kendall Drive. Slip ramps shall be provided at each ingress point as shown in Attachment No. 22, Express Lanes Access Locations. <Ultimate access to Killian Parkway is shown in this attachment for the development of the design>. [Interim connections of the express lanes to the Turnpike are also described in this document].
  - c. Egress in the southbound direction north of Kendall Drive. Slip ramps shall be provided at each egress point as shown in Attachment No. 22, Express Lanes Access Locations.
  - d. The proposed express lanes to be built under this Project will continue north to SR 836 under a separate project to be let as a design build project. At SR 836, provisions for ingress in the southbound direction and egress in the northbound direction will be provided.
5. Improving operations at the Kendall Drive Interchange by increasing the number of lanes along the mainline and ramps. Maintain existing turbo lane configuration at intersection with SW 117<sup>th</sup> Ave.
6. Providing improvements along Kendall Drive at the ramp intersections as well as a modified direct access from Kendall Drive westbound to HEFT southbound.
7. Providing sidewalk continuity for pedestrians through the HEFT Right of Way (ROW). Currently, there are no pedestrian facilities located along the south side of Kendall Drive within the HEFT ROW limits. The Design-Build Firm shall provide a route that enables pedestrians on the south side of Kendall Drive approaching the HEFT, safe and controlled access through the HEFT Right of Way. Pedestrian access along the north side shall be maintained. The concept depicted in Reference Document No. 15 was approved by FDOT District 6 and FTE. Any changes to this concept shall be submitted to FTE for review and approval.

## **Description of Work**

The overall goal of corridor improvements defined in the Project (FPID 415051-1-52-01) includes improving capacity, operations and safety along SR 821 (HEFT) from South of Killian Parkway (SW 104<sup>th</sup> Street), Station 1500+85.35 (Milepost 19.031) to North of Sunset Drive (SW 72<sup>nd</sup> Street), Station 1655+00 (Milepost 21.949), a distance of approximately 2.9 miles. This Project will also include the resurfacing, restoration, and rehabilitation (RRR) of Sunset Drive (FPID 430811-1-52-01). To the south, the Project will connect to the ongoing Design-Build project between SW 216<sup>th</sup> Street to South of Killian Drive (FPID 406096-1-52-01) that was awarded in July 2013. To the north, the Project will connect to two separate Design-Build projects that will be built consecutively. FPID 427146-1-52-01 connects with this Project on the north end and continues to North of Bird Road, a distance of approximately 2.1 miles. FPID 415051-4-52-01 begins North of Bird Road and ends at the SR 836 (Dolphin Expressway) interchange. All of the aforementioned projects will be under construction at the same time and proper coordination with the adjacent construction projects shall be performed. Refer to Reference Document No. 1 for a composite overview of the Project.

The following improvements shall be provided:

### **Roadway:**

#### **A. HEFT**

- i. Provide four (4) general purpose lanes from the begin Project (connection with FPID 406096-1-52-01) <to new Killian Drive interchange>.
- ii. <Provide a new partial interchange at the Killian Parkway Interchange with access to northbound HEFT and southbound HEFT express lanes, north of Killian Parkway>.
- iii. <Provide additional HEFT northbound express lane, joining the express lanes from Killian Parkway, at the south approach to the Kendall Drive overpass creating two (2) northbound express lanes and three (3) GP lanes>. [The inside lane of the northbound GP lanes will become an express lane and the second northbound GP lane will offer an option to enter the express lane or continue north in the GP lanes].
- iv. Provide three (3) general purpose lanes and two (2) express lanes in each direction from south of Kendall Drive to North of Sunset Drive Station 1655+00.00. Include auxiliary lanes as required.
- v. <Provide HEFT southbound express lanes from station 1665+00 to mainline HEFT Killian Parkway interchange including the proposed auxiliary lanes to exit the express lane to access the off ramp to Kendall Drive and to access the HEFT southbound>.
- vi. [Provide HEFT southbound express lanes from station 1665+00 to Killian Parkway interchange including the proposed auxiliary lanes to exit the express lane to access the off ramp to Kendall Drive and to access the HEFT southbound with a two lane ramp terminal prior to Snapper Creek Service Plaza].
- vii. Construct interchange improvements at Kendall Drive.

#### **B. <Killian Parkway>**

- i. <Construct three (3) through lanes in each direction along Killian Parkway in addition to the turn lanes and auxiliary lanes required. Refer to Attachment No. 20, PTFM, for the lengths of the new turn lanes required at each intersection>.
- ii. <At the HEFT intersection, there shall be dual lefts and dual rights from HEFT southbound to Killian Parkway and a two lane entrance ramp from Killian Parkway to HEFT northbound>.
- iii. <Provide exclusive right turn lanes on the east and west approaches to the SW 117<sup>th</sup> Avenue intersection>.
- iv. <Extend dual westbound to southbound left turn lanes at the SW 117<sup>th</sup> Avenue intersection>.
- v. <Provide sidewalks along both sides of Killian Parkway improvements for pedestrian mobility>.

**C. Kendall Drive**

- i. Provide intersection improvements at each of the ramp intersections with Kendall Drive. The northbound off-ramp shall provide dual left and dual right turn lanes. The southbound off-ramp shall provide triple left and triple right turn lanes.
- ii. Provide three continuous westbound and eastbound through lanes as well as the westbound single lane on-ramp and eastbound dual lane on-ramp along Kendall Drive within the Project limits.
- iii. Ensure a 4-ft. wide envelope is provided below HEFT mainline bridge for future bike lane usage.
- iv. Provide sidewalk continuity for pedestrians through the HEFT Right of Way (ROW). Pedestrian access along the north side shall be maintained.  
Currently, there are no pedestrian facilities located along the south side of Kendall Drive within the HEFT ROW limits. Pedestrian mobility along the south side of Kendall Drive approaching the HEFT ROW shall be provided within the interchange limits. At grade crossings of dual lane on-ramps such as the existing dual lane eastbound to northbound ramp in the southeast quadrant will not be permitted.

**D. Sunset Drive**

- i. Improvements along Sunset Drive are proposed from west of the HEFT to east of SW 117<sup>TH</sup> Ave. Refer to Reference Document No.5, Conceptual Roadway Plans (Sunset Drive), FPID: 430811-1-52-01.
- ii. Mill and resurface Sunset Dr. / SW 72nd St from East of SW118th Ave. to East of SW 117th Ave. (1,120 lf)
- iii. Correct manhole cover;
- iv. Replace broken/cracked sidewalks at spot locations to comply with current ADA standards as indicated in concept plans
- v. Construct new curb ramps/provide detectable warnings to comply with current ADA standards at SW 117th Ave intersection
- vi. Removal and/or relocate business sign to comply with current ADA standards as indicated in concept plans

The number of lanes and storage lengths for surface street and ramp turn lanes are depicted in the Attachment 20, PTFM. Traffic volumes and analysis are provided in the Attachments section. Any changes to the interchange or intersection configurations and turn lane lengths must provide the same or lesser intersection delay and queue lengths for signalized intersection operations. The

Design –Build firm shall use Synchro 7.0 Software to evaluate any changes to the interchange or intersection configurations. Any proposed changes will be verified by the Department through the ATC process.

Structures:

A. Bridges

a. Killian Parkway (SW 104<sup>th</sup> Street) over HEFT:

- i. [Provide retaining walls, pier protection, underdeck lighting, and required maintenance repairs for the existing Killian overpass that is to remain].
- ii. <Replace the existing bridge. The new bridge structure abutment and piers shall be set to accommodate the HEFT northbound and southbound roadway clear zone. Roadside barriers shall not be used to reduce the length of the bridges>.
- iii. <Provide a minimum of 16'-6" vertical clearance>.

b. HEFT over Kendall Drive (SW 88<sup>th</sup> Street) and Auxiliary Lanes:

- i. Provide a minimum of three (3) general purpose lanes and two (2) express lanes in each direction.
- ii. The bridge must accommodate the proposed Kendall Drive typical section.
- iii. Provide a minimum of 16-ft vertical clearance if widening the existing bridges. The existing bridge has less than 16-ft vertical clearance.
- iv. Minimum vertical clearance to new or replacement bridges shall be 16.5-feet.

c. HEFT over Sunset Drive (SW 72<sup>nd</sup> Street):

- i. Provide a minimum of three (3) general purpose lanes and two (2) express lanes in the southbound direction.
- ii. Provide a minimum of three (3) general purpose lanes, two (2) express lanes and a transition area for the new ingress point in the northbound direction.
- iii. Maintain existing vertical clearance and existing lane calls under bridge.

B. Walls

- a. Permanent Retaining Walls
- b. Temporary Critical Walls
- c. Sound Walls
- d. Protection of existing walls to remain and supporting calculations

C. Miscellaneous Structures

- a. Box Culverts
- b. Special Drainage Structures
- c. Cantilever Sign Structures
- d. Span Sign Structures
- e. Multi-post ground mounted sign structures
- f. Bridge Mounted Signs
- g. Signal Structures

- h. Light Poles
- i. DMS Structures
- j. CCTV Poles
- k. MVDS Poles
- l. TTS Poles
- m. Pier Protection Barriers
- n. The Marjory Stonemen Douglas monument at Sunset Drive needs to be re-established

Architecture/Tolling Infrastructure and Toll Equipment Buildings

- A. All Electronic Tolling (AET) mainline express lanes.
- B. AET gantry site reconstruction and adjacent ramp roadway sections for SR 821 (HEFT) southbound entry and northbound exiting ramps at Kendall Drive /SW 88<sup>th</sup> Street.

Other major work elements include drainage, permit modifications, traffic control, traffic signals, signing and pavement markings, lighting and ITS. See Sections V and VI.

Adjoining projects will be built concurrently with this Project. Therefore, coordination of all design elements and construction activities at these interface points will be imperative for safe traffic flow through the corridor. FPID 406096-1-52-01 is a Design-Build Project that will widen the HEFT to four general purpose lanes at the connection point to the south.

FPID 427146-1-52-01 is a Design-Build Project that will widen the HEFT to three (3) general purpose lanes and two (2) express lanes in each direction from sta. 1665+00.00 to sta. 1765+00.00. Critical path work elements to that project require replacement of the existing mainline toll facilities at Bird Road with a new Toll Gantry structure, building and equipment to be located just north of the end Project limits. The new toll facilities are required prior to demolition of the existing toll facilities in order to ensure continuity of toll revenue collection. Lane transitions from the new Toll Gantry structure on the north end will extend to the south and within these Project limits. Coordination with the adjacent Design-Build Firm will be important to ensure timely and efficient completion of the required improvements.

<Miami-Dade County is proposing improvements to the intersection of Killian Parkway and SW 122<sup>ND</sup> Ave. Refer to Reference Document No. 35 for the limits of proposed works>.

The Design-Build Firm shall review and identify future unencumbered landscape areas for this Project. This Project shall reserve landscape opportunities to implement the FTE BRAND Guidelines and the FDOT "BOLD VISION" concept targeted by the FDOT's landscape initiative. Landscaping will be constructed by others and not included with this Project but should be considered during the Design-Build Proposal and Design process and areas should 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 with FTE Landscape Architect and interdisciplinary coordination between Design-Build Firm's Landscape Architect and Engineer will be required during the Design-Build plans development process to ensure landscape opportunities can be accommodated within the Interchange to greatest extent possible.

**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 reviewing 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 M (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 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 and as to the requirements of all Contract Documents. Written notification of differing site conditions discovered during the design or construction phase of the Project will be given to the Department's Project Manager.

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 develop an Inventory of Structural Welding, Metals and Coatings Inspection (Inventory) and provide this inventory to the DEPARTMENT's Materials Office (Contact: Mr. Brad Biery, Turnpike Contract and Certification Manager- Metals & Coatings Specialist; Email: brad.biery@dot.state.fl.us) prior to the RFC Plans. The Inventory should include List of Components to be inspected and Type of Services Requested. See the Sample Inventory for Welding Inspection in Reference Document No. 39.

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.

**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.

<b>Date</b>	<b>Event</b>
<u>10/17/13</u>	Advertisement
<u>11/7/13</u>	Expanded Letters of Interest for Phase I of the procurement process due in District Office by 5:00 pm local time
<u>12/02/13</u>	Proposal Evaluators submit Expanded Letter of Interest Scores to Contracting Unit 5:00 pm local time
<u>12/03/13</u>	Contracting Unit provides Expanded Letter of Interest scores and Proposal Evaluators comments to Selection Committee 5:00 pm local time
<u>12/05/13</u>	Public Meeting of Selection Committee to review and confirm Expanded Letter of Interest scores 10:00 am local time
<u>12/05/13</u>	Notification to Responsive Design-Build Firms of the Expanded Letter of Interest scores 5:00 pm local time
<u>12/09/13</u>	Deadline for all responsive Design-Build firms to affirmatively declare intent to continue to Phase II of the procurement process 5:00 pm local time
<u>12/10/13</u>	Shortlist Posting 10:00 am local time
<u>12/10/13</u>	Final RFP provided to Design-Build firms providing Affirmative Declaration of Intent to continue to Phase II of the procurement process
<u>12/19/13</u>	Pre-proposal meeting at 2:00 pm local time in Snapper Creek Service Plaza ( <i>Milepost 19 Florida's Turnpike</i> ).

## Request for Proposal

SR 821 (HEFT) Widening from S. of Killian Parkway to N. of Sunset Drive

FPIDs 415051-1-52-01, 430811-1-52-01

October 16, 2013

<u>12/20/13</u>	Utility Pre-proposal Meeting facilitated by the District Utility Engineer at 9:00 am local time in Snapper Creek Service Plaza ( <i>Milepost 19 Florida's Turnpike</i> ).
<u>12/30/13</u>	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 1
<u>01/02/14</u>	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
<u>01/08/14</u> & <u>01/09/14</u>	One-on-One Alternative Technical Concept Discussion Meeting No. 1. 90 Minutes will be allotted for this Meeting.
<u>01/13/14</u>	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 2
<u>01/17/14</u>	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
<u>01/22/14</u> & <u>01/23/14</u>	One-on-One Alternative Technical Concept Discussion Meeting No. 2. 90 Minutes will be allotted for this Meeting.
<u>02/05/14</u>	Deadline for submittal of Alternative Technical Concept Proposals 5:00 pm local time.
<u>02/05/14</u>	Final deadline for submission of requests for Design Exceptions or Design Variations
<u>02/25/14</u>	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.
<u>03/04/14</u>	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.
<u>03/11/14</u>	Technical Proposals due in District Office by 2:30 p.m. local time.
<u>03/12/14</u>	Deadline for Design-Build for to "opt out" of Technical Proposal Page Turn meeting.
<u>03/17/14</u>	Technical Proposal Page Turn Meeting. Times will be assigned during the Pre-Proposal Meeting. 30 Minutes will be allotted for this Meeting.
<u>04/02/14</u>	Question and Answer Session. Times will be assigned during the pre-proposal meeting. One hour will be allotted for questions and responses.
<u>04/09/14</u>	Deadline for submittal of Written Clarification letter following Question and Answer Session 5:00 pm local time
<u>04/10/14</u>	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.
<u>04/17/14</u>	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.
<u>04/21/14</u>	Price Proposals due in District Office by 2:30 pm local time.
<u>04/21/14</u>	Public announcing of Technical Scores and opening of Price Proposals at 10:00 am local time in <i>District Office</i>
<u>05/03/14</u>	Public Meeting of Selection Committee to determine intended Award

	Posting of the Department's intended decision to Award (will remain posted for xxxx hours/days)
	Anticipated Award Date
	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/variatioins, 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:  
<http://www2.dot.state.fl.us/construction/bidquestionmain.asp>.

#### **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 may 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 receipt of this Request for Proposals. 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, Room 562  
Tallahassee, Florida 32399-0458

The formal written protest must state with particularity the facts and law upon which the protest is based and be legible, on 8 ½ x 11-inch white paper and contain the following:

1. Name, address, telephone number, and Department identifying number on the Notice, if known, and name, address and telephone number of a representative, if any; and
2. An explanation of how substantial interest will be affected by the action described in the Request for Proposals; and
3. A statement of when and how the request for Proposals was received; and
4. A statement of all disputed issues of material fact. If there are none, this must be indicated; and
5. A concise statement of the ultimate facts alleged, as well as the rules and statutes, which entitle to relief; and
6. A demand for relief; and
7. Conform to all other requirements set out in Florida Statutes (F.S.), Chapter 120 and F.A.C., Chapter 28-106, including but not limited to Section 120.57 F.S. and Rules 28-106.301, F.A.C., as may be applicable.

A formal hearing will be held if there are disputed issues of material fact. If a formal hearing is held, this matter will be referred to the Division of Administrative Hearings, where witnesses and evidence may be presented and other witnesses may be cross-examined before an administrative law judge. If there are no disputed issues of material fact, an informal hearing will be held, in which case the person filing the protest will have the right to provide the Department with any written documentation or legal arguments which they wish the Department to consider.

Mediation pursuant to Section 120.573, F.S., may be available if agreed to by all parties, and on such terms as may be agreed upon by all parties. The right to administrative hearing is not affected when mediation does not result in a settlement.

Failure to file a protest within the time prescribed in Section 120.57(3), F.S., shall constitute a waiver of proceedings under Chapter 120, F.S.

#### **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.

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 on the bid blank/contract front page under "% DBE Availability Goal". Although not a contract requirement, the Department believes 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 Anticipated DBE Participation Statement.

**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/regulations.shtm>
6. Florida Department of Transportation Drainage Manual  
<http://www.dot.state.fl.us/rddesign/dr/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/manlib.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) Production Criteria Handbook  
<http://www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandBook/>
11. Florida Department of Transportation Production Criteria Handbook CADD Structures Standards  
<http://www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandBook/>
12. Instructions for Design Standards  
<http://www.dot.state.fl.us/structures/IDS/IDSportal.pdf>
13. AASHTO – A Policy on Geometric Design of Highways and Streets  
[https://bookstore.transportation.org/item\\_details.aspx?ID=110](https://bookstore.transportation.org/item_details.aspx?ID=110)
14. MUTCD - 2009  
<http://mutcd.fhwa.dot.gov/>
15. Safe Mobility For Life Program Policy Statement  
<http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/000750001.pdf>
16. Traffic Engineering and Operations Safe Mobility for Life Program  
<http://www.dot.state.fl.us/trafficoperations/Operations/SafetyisGolden.shtm>
17. 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>
18. Florida Department of Transportation Florida Sampling and Testing Methods

- <http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/publications/fstm/disclaimer.shtm>
19. 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>
  20. Florida Department of Transportation Design Bulletins and Update Memos  
<http://www.dot.state.fl.us/rddesign/updates/files/updates.shtm>
  21. Florida Department of Transportation Utility Accommodation Manual  
<http://www.dot.state.fl.us/rddesign/utilities/UAM.shtm>
  22. AASHTO LRFD Bridge Design Specifications  
[https://bookstore.transportation.org/category\\_item.aspx?id=BR](https://bookstore.transportation.org/category_item.aspx?id=BR)
  23. Florida Department of Transportation Flexible Pavement Design Manual  
<http://www.dot.state.fl.us/pavementmanagement/PUBLICATIONS.shtm>
  24. Florida Department of Transportation Rigid Pavement Design Manual  
<http://www.dot.state.fl.us/pavementmanagement/PUBLICATIONS.shtm>
  25. Florida Department of Transportation Pavement Type Selection Manual  
<http://www.dot.state.fl.us/pavementmanagement/PUBLICATIONS.shtm>
  26. Florida Department of Transportation Right of Way Manual  
<http://www.dot.state.fl.us/rightofway/Documents.shtm>
  27. Florida Department of Transportation Traffic Engineering Manual  
<http://www.dot.state.fl.us/TrafficOperations//Operations/Studies/TEM/TEM.shtm>
  28. 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)
  29. 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>
  30. 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)
  31. 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)
  32. 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>
  33. Florida Department of Transportation Project Development and Environment Manual, Parts 1 and 2  
<http://www.dot.state.fl.us/emo/pubs/pdeman/pdeman1.shtm>
  34. Florida Department of Transportation Driveway Information Guide  
<http://www.dot.state.fl.us/planning/systems/sm/accman/pdfs/driveway2008.pdf>

35. AASHTO Highway Safety Manual  
<http://www.highwaysafetymanual.org/Pages/default.aspx>
36. 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. The alternative technical concept shall provide an approach that is equal to or better than what is required by the Request for Proposal (RFP), as determined by the Department. Concepts which reduce scope, quality, performance, or reliability should not be proposed. A proposed concept is not an ATC if it is contemplated by the RFP.

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 meeting. 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 meeting. 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.

The following requirements described by this RFP shall not be modified by the Design-Build Firm:

- Design Variations or Exceptions for design speed will not be permitted.
- Incorporation of Express Lanes.
- PD&E Commitments made for SR 821 (HEFT), as updated in the Environmental Re-evaluation.
- <Inclusion of new Partial Interchange at Killian Parkway>.
- <Exclusive right turns lanes along Killian Parkway at SW 117<sup>th</sup> Ave>.
- Provide pedestrian accommodation / continuity for south side of Kendall Drive across HEFT ROW.
- <Maintain sidewalk along both sides of Killian Parkway>.

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 fail to present and obtain Department approval of the proposed alternates through the ATC process.

- <Alternate alignments for Killian Parkway>.
- <Alternate span arrangements for Killian Parkway Bridge over HEFT>.
- Alternate pedestrian accommodations for south side accessibility on Kendall Drive through the HEFT ROW.
- Alternate Kendall Drive interchange concepts.

## **2. 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 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;
- k) \*Handback: Any changes in Handback Requirements associated with the ATC;
- l) \*Project Revenue: A preliminary analysis of potential impacts on Project Revenue;
- m) \*Payments: A preliminary analysis of potential impacts on the Upfront Concession Payment and Annual Lease Payment

\* These submittal requirements will be needed for Public Private Partnership (PPP) Projects only.

### **3. Review 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.

If the ATC will result in changes to design standards or criteria, the changes will need to be approved in accordance with the Department's procedures prior to responding to the Design-Build Firm.

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

ATC's are accepted by the Department at its discretion and the Department reserves the right to reject any ATC submitted.

Approved Design Exceptions or Design Variations required as part of an approved ATC 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.

The Department reserves the right to disclose to all Design-Build Firms any issues raised during the 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.

### **4. Incorporation into Proposal**

The Design-Build Firm will have the option to include any ATC's to which it received acceptance in their proposal and the Proposal Price should reflect any incorporated ATC's.

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.

Based on past experience hard limestone formation will be encountered in this Project. It will be difficult to excavate. Also, limestone is porous and dewatering in this stratum will be difficult.

Borings performed encountered organic and plastic soils. These soils can be encountered also under existing paved shoulders.

The GTR has additional language and guidelines for the design and construction of the foundations for the Toll Equipment Structures (gantry) and the Design-Build Firm is reminded to investigate Chapters 1-33 of the TPPPH for additional information.

**D. Department Commitments:**

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

1. FTE will continue to coordinate with elected officials and agency/municipality representatives during the courses of the Final Design phase of the Project. A Public Involvement Program will be carried out during the design phase.

**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 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. A copy of any and all correspondence with any of the environmental permitting agencies shall be sent to the District Environmental Permits Office. 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 Conceptual Design 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: N/A**

**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, Florida Administrative Code (F.A.C.), pursuant to Section 472.027, Florida Statutes (F.S.) and any special instructions from the Department. This survey also must comply with the Department of Environmental Protection Rule, Chapter 18-5, F.A.C. pursuant to Chapter 177, F.S., and the Department of Environmental Protection.

**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.

Plans for improvements within Miami Dade County roads will be developed in separate components sets (i.e. Killian Parkway). Likewise, separate component sets will be developed for FDOT District 6 roadways (i.e. Kendall Drive). Sunset Drive is within the jurisdiction of both Miami Dade County and FDOT District 6, therefore a single component set can be developed.

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.

The Design-Build Firm shall refer to the revised Chapter 2 – Sequence of Plans Preparation – of the FDOT PPM Volume 2, which is available on the FDOT website. This revised Chapter 2 Section 3 shall be used by the Design-Build Firm to determine what is to be provided to the Department for review as part of the following submittals: the Technical Proposal, Preliminary Phase and Final Phase.

In addition to what is identified as submittal requirements in Chapter 2 of the PPM, the Design-Build Firm shall submit a Landscape Opportunity Roll Plot with their Technical Proposal depicting the areas available for landscaping using their conceptual design. Particular emphasis is required along Killian Parkway for replacement of existing trees.

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:

- Plan sheets for the component under review developed to the specified level of detail (i.e. 90% plans, Final plans, etc.),
- 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.
- Design documentation including a complete set of calculations, geotechnical reports, pertinent correspondence, etc. in support of the 90% and final component submittals.
- 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.

#### **Preliminary Phase / 90% Design Submittal**

##### Hard Copy

- 1 set of each plan component set in 11” x 17” plan sheets
- 1 set of all preliminary design calculations / documentation
- 1 signed and sealed Final Geotechnical Report

- Independent Peer reviewer's comments and comment responses

Electronic

- 2 CD/DVDs containing PDFs of all hardcopies listed above

### **Final Phase / 100% Design Submittal**

Hard Copy

- 1 set of each plan component set in 11" x 17" plan sheets
- 1 set of all final design calculations / documentation
- 1 set of final Specifications Package and Technical Special Provisions
- Independent Peer Reviewer's signed and sealed cover letter that all comments have been addressed and resolved
- Inventory for Welding Inspection

Electronic

- 2 CD/DVDs containing PDFs of all hardcopies listed above

### **Construction Set:**

Hard Copy

- 1 set of 11" X 17" copies of the signed and sealed plans for the department to stamp "Release for construction"
- 1 signed and sealed Specifications Package including individually signed and sealed Technical Special Provisions
- 1 set of signed and sealed design documentation / calculations

Electronic

- 2 CD/DVDs containing PDFs of all hardcopies listed above

Final signed and sealed plans will be delivered to the Department's Project Manager prior to construction of any component. The Department's Project Manager will send a copy of final signed and sealed plans to the appropriate office for review and comment. 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". <All comments must be satisfactorily addressed and incorporated into the 90% design of the Killian Parkway Interchange prior to submitting any plans to the Department for the "Release for Construction" review. Updates or revisions to the project's design in the area between Snapper Creek Service Plaza and Kendall Drive must be accompanied by updated 90% design plans for the Killian Parkway Interchange>. 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.

### **Record Set:**

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

- 1 set of 11" X 17" signed and sealed plans
- \_\_\_ sets of 11 "X 17" copies of the signed and sealed plans
- 1 signed and sealed copy of the Bridge Load Rating based on as-built conditions
- \_\_\_ sets of final documentation (if different from final component submittal)
- 2 (two) Final Project CD's

The Design-Build Firm's Professional Engineer in responsible charge of the Project's design shall professionally endorse (signed and sealed and certified) the record prints, 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 record set as the Project is being constructed. The record set becomes the as-builts at the end of the Project. All changes shall be signed/sealed by the EOR. The record set shall reflect all changes initiated by the Design-Build Firm or the Department in the form of revisions. The record set shall be submitted on a Final Project CD upon Project completion.

The CEI shall do a review of the record set prior to final acceptance in order to complete the record set. Refer to Section V.S Computer Automation regarding final as-built" CADD requirements.

The CEI shall certify the final plans as per Section 4.5.7 of Chapter 4 of the Preparation and Documentation Manual (TOPIC No. 700-050-010).

**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.

- Pavement Design Package
- Drainage Design Report
- Plans review prior to submittal for environmental permits (if required)
- Permit documentation and submittal (if required)
- ITS Test Plans and Test Results
- Other submittals identified by Proposers in their Technical Proposal

**3. Railroad Coordination: N/A**

**J. Contract Duration:**

The Department has established a Contract Duration of 1220 calendar days for the subject Project.

**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 a 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 twenty (20) calendar days (excluding weekends and Department observed Holidays) for these reviews.

In addition to the non-working holidays identified in Specification 8-6.4, additional lane closure restrictions are as follows:

- Sun Life Stadium Events (Miami Dolphin Games)
- Homestead Motor Speedway
- Working day before Martin Luther King Jr. Day
- Working day before President's Day
- Before/After Independence Day, July 3<sup>rd</sup> and July 5<sup>th</sup>
- Friday before Easter
- Friday before Memorial Day
- Wednesday before Thanksgiving

Due to the close proximity of the Sun Life Stadium and the Homestead Speedway, it is recommended to restrict lane closures and ramp closures two hours before, two hours after and during any events at the Sun Life Stadium and the Homestead Speedway.

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
- Design Survey
- Submittal Reviews by the Department and FHWA
- Design Review / Acceptance Milestones
- Materials Quality Tracking
- Geotechnical Investigation
- Start of Construction
- 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
  - Roadway Design
  - Roadway Construction
  - 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
  - ITS System Design
  - ITS System Construction
  - Toll Facilities Design
  - Toll Facilities Construction
  - 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 submit a monthly projected schedule submittal list for Department use in resource loading for design reviews. The submittal projections for the upcoming month are due to the department Project Manager by the end of the third week of each month. Unexpected submittals that are not on the projected submittal list may require an additional week of Department review and the Design-Build Firm's schedule must be adjusted to reflect the additional 5 days of review time (excluding weekends and Department observed Holidays). The original design schedule shall be updated as the project proceeds through the design period. The updated schedule shall be submitted to the Project Manager at the progress meetings.
  - For Preliminary Phase-90% and Final Phase-100% design submittals, comments and responses shall be exchanged using the FTE's Electronic Review Comment (ERC) System: <http://www.fltpkdb.com/>.

**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

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.

Prior to proceeding with the Landscape Opportunity Plan, the Design-Build Firm's Landscape Architect (DBLA) shall meet with the FTE Landscape Architect. The purpose of this meeting is to provide information to the DBLA that will better coordinate the Landscape Opportunity Plan intent and efforts.

**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 Information 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. Community Awareness:**

The Design-Build Firm will review and comment on a Community Awareness Program provided by the

Public Involvement Office (PIO) for the Project.

**3. Public Meetings:**

The Design-Build Firm shall provide all support necessary for the PIO 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 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/PIO. The Design-Build Firm shall forward all requests for group meetings to the PIO. The Design-Build Firm shall inform the PIO of any meetings with individuals that occur without prior notice.

**4. Public Workshops, Information Meetings:**

The Design-Build Firm shall provide all the support services listed in No. 3 above.

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

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

**5. Public Involvement Data:**

The Design-Build Firm is responsible for the following:

- Coordinating with the Public Involvement Office (PIO).
- Identifying possible permit and review agencies and providing names and contact information for these agencies to the PIO.
- Providing required expertise (staff members) to assist the 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 PIO for their use and records.

In addition to collecting public input data, the Design-Build Firm may be asked by the 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:**

Engineers Field Office not required.

**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.

The Design-Build Firm will develop and submit for review separate schedule of values for improvements within Miami Dade County right of way and Department, District 6 right of way at Kendall Dr. and Sunset Dr. with the submittal of release for construction plans. This is required to determine final bonded project value and Department insurance requirements.

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 of Transportation policies and procedures. Seed Files, Cell Libraries, User Commands, MDL Applications and related programs developed for roadway design and drafting are available for the MicroStation V8i format in the FDOT CADD Software Suite. However, 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 in Intergraph / Micro station format, as described in the above referenced document.

As part of the Record/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) working days to review Record / 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.

Testing of the ITS and Tolling Equipment shall be in accordance with the requirements stated within those sections. Testing of the ITS Systems shall be completed by the Design-Build Firm.

**V. Value Added:**

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

- Roadway features
- Roadway drainage systems,
- Approach slabs
- Superstructure
- Substructure
- Concrete defects
- Structural steel defects
- Post-tensioning systems

- Specified ITS field elements and software not listed in the APL
- 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 for features proposed by the Design-Build Firm.

**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 and are identified in the Table Below:

FPID Number	Project Description	Department Contact	Design Status	Construction Status
423372-2-52-01	HEFT Widening SW 288 <sup>th</sup> Street to SW 216 <sup>th</sup> Street	Henry Pinzon	RFP Development	Letting Date: Fall 2014
406096-1-52-01	HEFT Widening SW 216 <sup>th</sup> Street to S. of Killian Parkway	Paul Naranjo	Contract Award: 7/2013. Design Underway	Contract Award: 7/2013 / SD = 9/2013
427146-1-52-01	HEFT Widening N. of Sunset Dr. to N. of Bird Road	Craig Bostic	RFP Development	Letting Date: 06/16/14
415051-4-52-01	HEFT Widening N. of Bird Road to SR 836	Paul Naranjo	RFP Development	Letting Date: Fall 2014
N/A	Killian Parkway / SW 122 <sup>nd</sup> Avenue Improvements	Joan Chen (MD County)	Final Design	To be Determined

**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); as described in the RFP; and the Design and Construction criteria package. 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 FTE 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.

The Design-Build Firm shall be responsible for selecting appropriate construction methods and techniques for various activities; including but not limited to pile driving, installation and extraction of casing, installation and extraction of sheet pile, vibratory compaction, and demolition work such that excessive vibration shall not occur at any building or appurtenant structures, such as garages or swimming pools, existing bridges, and sound barrier walls in the vicinity of the construction area. Vibration levels from construction activities shall be limited such that the peak particle velocity does not exceed 0.20 in/sec when measured on the ground surface immediately outside any existing building or appurtenant structures, including those structures located within 175 feet of the following locations:

- Station 1529+00 LT and RT – Vicinity of Killian Parkway
- Station 1635+75 RT – Vicinity of Sunset Drive
- Station 1636+50 LT – Vicinity of Sunset Drive
- Station 1639+00 RT – Vicinity of Sunset Drive

Vibration levels from construction activities at MSE walls shall not exceed the threshold criteria established by the MSE wall supplier. Such activities include installation and/or extraction of sheet pile or soldier pile in the proximity. The threshold vibration criteria shall be provided to the Department as a required component of the MSE wall Shop Drawing.

Engage a Specialty Engineer to monitor vibration level during construction and submit all vibration data to the Department within 7 days after data collection. As a minimum, vibration monitoring shall be carried out by the Specialty Engineer whenever compaction of asphalt, base course, and earthwork are within 100 feet from any existing buildings or appurtenant structures and whenever installation and/or extraction of sheet pile or soldier pile occur within 100 feet from any permanent MSE walls, existing

buildings or appurtenant structures. In addition, vibration monitoring shall also be carried out at the existing M-D WASH utility pipes located at/near the bridges at Killian Parkway, Kendall Drive and Sunset Drive (see Section VI, subsections C and G) whenever construction activities occur within 200 feet from the utility unless the M-D WASH has a more stringent requirement. Before the end of the Project, submit to the Department a signed and sealed vibration report compiling all vibration monitoring data and clearly document the monitoring locations relative to the construction work areas using roadway baselines depicted on the "Released for Construction" Plans.

Prior to submittal to the Department, all Category level 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 and FDOT 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. Geotechnical Services**

### **Driven Pile Foundations for Bridges and Major Structures Including Toll Equipment Structures (Gantry)**

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 levels, as well as the same loading times as specified for the Modified Quick Test. Comply with the instrumentation requirements of Specifications 455-2.4. Before the resistance factors for static/statnamic load testing may be used for pile foundations. A minimum of one (1) successful load test must be performed for each bridge site in representative locations of that area. 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 Pile Installation Plan for Department's acceptance.
7. Selection of production pile lengths.
8. Development of the driving criteria.
9. Driving piles to the required capacity and minimum penetration depth.
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**

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 Specification 455-2.4. Before the resistance factors for static/statnamic load testing may be used for drilled shafts, a minimum of one (1) successful load test must be performed for each bridge site in representative locations of that area.

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. For redundant drilled shaft bridge foundations, perform at least one test boring in accordance with the Soils and Foundations Handbook at each bent/pier.
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 Drilled Shaft Installation Plan for Department's acceptance.
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) tests on all nonredundant drilled shafts supporting bridges. For redundant drilled shaft bridge foundations and drilled shafts for miscellaneous structures, perform CSL on a minimum of 30% of the drilled shaft and 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.

### **Auger Cast Piles for Sound Barrier Walls**

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

1. Evaluating geotechnical conditions and designing the foundations, including diameter and lengths.
2. Constructing all auger cast piles to the required tip elevation and socket requirements, in accordance with the specifications.
3. Preparing and submitting Auger Cast Pile Installation Plan for Department's acceptance.
4. Inspecting and documenting the auger cast pile installation.
5. Submitting Foundation Certification Packages in accordance with the specifications.
6. Providing safe access, and cooperating with the Department in verification of the auger cast piles, both during construction and after submittal of the certification package.

### **Drilled Shaft Foundations for Toll Equipment Structures (Gantry) and Miscellaneous Structures**

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 prior to establishing the drilled shaft tip elevations and socket requirements.
3. Preparing and submitting Drilled Shaft Installation Plan for Department's acceptance.
4. Constructing all drilled shafts to the required tip elevation and socket requirement in accordance with the specifications.
5. Inspecting and documenting the construction of all drilled shafts in accordance with the specifications.
6. Performing Cross-Hole Sonic Logging (CSL) tests on all toll equipment structure (gantry) drilled shafts and any shaft suspected of containing defects.
7. Repairing all detected defects and conducting post repair integrity testing using 3D tomographic imaging and/or gamma-gamma density logging.
8. Submitting Foundation Certification Packages in accordance with the specifications. Providing safe access, and cooperating with the Department in verification of the drilled shafts, both during construction and after submittal of the certification package.

### **C. 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. 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.
  3. Scheduling utility meetings, preparing and distributing minutes of all utility meetings, and ensuring expedient follow-up on all unresolved issues.
  4. Distributing all plans, conflict matrices and changes to affected Utility Agency/Owners and making sure this information is properly coordinated.
  5. Identifying and coordinating the execution and performance under any agreement that is required for any utility work needed in with the Design-Build Project.
  6. Preparing, reviewing, approving, signing, coordinating the implementation of and submitting to the Department for review and acceptance, all Utility Work Schedules.
  7. Resolving utility conflicts.
  8. Obtaining and maintaining all appropriate Sunshine State One Call Tickets.
  9. 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.
  10. Providing periodic Project updates to the Department Project Manager and District Utility Office as requested.
  11. Coordination with the Department on any issues that arise concerning reimbursement of utility work costs.
  12. Coordination with the Department Landscape Architect

The following UA/O's have been identified by the Department as having facilities within the Project corridor which may be impacted by the Project. Also provided below is a determination made by the Department as to the eligibility of reimbursement for each potentially impacted UA/O identified herein.

UA/O	Eligible for Reimbursement (Y/N)
AT&T Distribution Dade	Pending
Florida City Gas	N
Comcast	N
Florida Power and Light - Transmission	Pending
Florida Power and Light Dade – Distribution	Pending
FPL FiberNet, LLC.	Pending
Level 3 Communications	N
Miami-Dade Water and Sewer Department	Pending

Where the Department has identified the UAO is eligible for reimbursement and their facilities are in direct conflict and must be relocated due to the Project's work effort, the replacements for any impacted utilities shall be designed and constructed to provide service at least equal to that offered by the existing facilities (unless the UAO specifies a lesser replacement), but shall not include any betterments, unless

added to the Utility Adjustment Work through a Utility Agreement between the UAO and the Design-Build Firm. UAO's may request the Department to allow the Design-Build Firm to perform additional Utility Adjustment Work relating to betterments at the UAO's expense.

Miami-Dade Water and Sewer Department (M-D WASD) is eligible for reimbursement for any impact to their facilities within Miami-Dade County Right of Way. Please refer to Survey Documentation, Reference Document No. 36 distinguishing jurisdictional limits (FTE, Miami-Dade County) of each agency. Refer to Reference Document No. 26, Advanced Utility Coordination Documentation, for UAO easements through the corridor.

The acquisition of utility services and removal of utility services is covered below.

### **1. Electric Services**

The Design-Build Firm shall coordinate the plans and design documents with FPL Distribution. The aforementioned coordination shall include but not be limited to demolition/ relocation of existing primary circuiting and transformers, routing of the new primary circuiting, installation of pull boxes, and service points. The Department shall pay for electric services for toll facilities, signalization, roadway lighting and ITS facilities. Transformers for Toll Facilities shall be exclusive and not serve any other loads such as roadway lighting.

A summary of the service points provided by FPL for tolling, ITS, lighting and signalization has been included in Reference Document 37. The services required shall be separated to ensure each agency responsible for maintaining the proposed equipment can be distinguished. Documents illustrating jurisdictional limits have been provided in Reference Document No. 36, Survey Documentation.

All proposed AET tolling points will require 400 Amp 120/240 Volt, single phase underground electric power service. If the proposed AET tolling point is situated such that it requires new primary circuiting to cross the HEFT and/or ramps, the Design-Build Firm shall furnish and install circuiting underground via jack and bore or directional drill, a minimum 6-inch high density polyethylene casing to house the utility power service conduits. The utility power service conduits shall be as specified by the utility company as required for the completion of electrical service to each site.

It is the responsibility of the Design-Build Firm to complete all work associated with electrical services, sufficiently in advance of turning over each AET tolling point to the Department for toll equipment installation and testing so as not to impact the Project schedule. It is the responsibility of the Design-Build Firm to obtain all new physical addresses that are required for the initiation of new electric service.

The electrical service requirements for the new Tolling Equipment Buildings are specified within the attached General Tolling Requirements (GTR) (See Attachment No. 35).

### **2. Existing Utilities**

The Department has conducted field surveys and early coordination with UAO's for the entire corridor. The results of these efforts are meeting minutes, as-built plans, utility owner mark-ups, above ground and subsurface utility surveys, potential utility conflicts matrix based on the concept plans, and a utility contact listing. These materials are provided in Reference Document No. 26 and will need to be verified by the Design-Build Firm.

The Design-Build Firm will be responsible for removal of Department-owned utilities and responsible to pay for any costs associated with having the utility-owned utilities removed by others.

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 utility company(ies) 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. Coordination with M-D WASD New-Business Department will be required for removal of water and waste water services.

There is an existing cell tower belonging to T-Mobile located to the west of the existing eastbound to southbound entrance ramp at Kendall Drive. The Design-Build Firm shall not encroach beyond the limits of the existing fence surrounding the cell tower and shall maintain at least 8-ft between the fence and the toe of slope to enable proper maintenance of the proposed finished grade. Stormwater runoff shall not be directed to this cell tower site and access to the site will be with at least as good or better than the access that exists preconstruction.

There is an existing Asbestos Cement (AC) 12-inch water line located within the median of Kendall Drive that is to remain. If the Design-Build Firm's design or construction methods affect this AC line then the Design-Build Firm will be responsible for all work required to properly handle and dispose of the AC line including the portions connecting to the existing 8 inch water line west of the Turnpike that connects to the 12-inch AC line. If the Design-Build Firm chooses to replace the bridges at Kendall Drive or to reconstruct Kendall Drive, then it will need to replace this line. All cost and time required to perform this work is the responsibility of the Design-Build Firm. Access to the cell phone tower will be maintained at all times.

It is the responsibility of the Design-Build Firm to coordinate with M-D WASD concerning pile driving operations within the vicinity of their existing large diameter Prestressed Concrete Cylinder Pipe (PCCP) which are located at/near the overpasses of Killian Parkway, and Sunset Drive. Through previous coordination efforts between the Department and M-D WASD it was agreed upon that the Design-Build Firm shall adhere to the following:

- Coordinate and obtain approval of a vibration monitoring plan from MD-WASD prior to the 90% submittal of Bridge plans which include pile driving operations in the vicinity of PCCP.
- Pre-drill below invert of PCCP at a minimum horizontal distance of 10 feet from the outside wall of the main.
- No large trees should be planted above or within 3-feet of existing M-D WASD facilities.

- Only M-D WASD personnel shall operate existing water and waste water valves.
- Special precautions are required when installing new foundations for sound walls in the vicinity of M-D WASD facilities.

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

It is the Design-Build Firm's responsibility for the verification and location of all utility facilities, including any 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, electric). Additionally, note that Department-owned facilities are not part of the Sunshine One-Call list of utilities.

### **4. Utility Work by Highway Contract**

M-D WASD will enter into a Utility Work by Highway Contractor Agreement (Lump Sum) with the Department for all relocation work as well as adjustment of existing valves and manholes to either temporary or permanent surfaces as required throughout construction. The Design-Build Firm shall include all costs required to design, permit, inspect and construct the MD WASD facilities and the price proposal.

#### **D. 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. Optional Pipe Materials sheets are not required to be included in the Roadway Plans Package; however, the Optional Pipe Materials tabulation sheets shall be included in the Drainage Report that is submitted to the Department for review and approval as part of the Preliminary Phase-90% Plans submittal.

##### **Design Analysis:**

The Design-Build Firm shall develop and submit a signed and sealed Pavement Design Package and Drainage Analysis Report for review and concurrence by the Department.

Any deviation from the Department's design criteria will require a design variation or a Technical Memorandum if PPM is met but TPPPH criteria is not met. Any deviation from AASHTO will require a design exception. Design variations, exceptions or technical memorandums do not represent approval and shall be coordinated with the Department prior of preparation and submittal.

These packages shall include the following as a minimum:

1. **Roadway Design:**

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

For side street design, refer to Reference Document No. 16, HEFT Side Street Memorandum. This memorandum outlines the design criteria along the side streets and the required improvements to upgrade the facilities.

2. **Typical Section Package:**

Attachment No. 12 contains an approved typical section package. Any deviation from the approved Typical Section Package or criteria must be approved by the Department as part of the ATC process and is at the sole risk of the Design-Build Firm.

- Transmittal letter
- Location Map
- Roadway Typical Section(s)
  1. Minimum lane, shoulder, median widths
  2. Lane and shoulder cross slopes
  3. Slopes requirements
- Bridge Typical Section(s)
  1. Minimum lane, shoulder, median, buffer widths
  2. Cross Slope requirements
- Data Sheet
- Design Speed
- Traffic Data

SR 821 (HEFT)

HEFT from Milepost 0 to Milepost 27.5 is classified as an Urbanized Freeway and will have a design speed of 65 MPH in accordance to AASHTO design criteria, for horizontal and vertical curve length and stopping sight distance, with the exception of K-Values for crest vertical curves that shall meet or exceed the more stringent FDOT 60 MPH criteria. All other design elements shall conform to FDOT criteria.

The minimum lane widths along the SR 821 HEFT shall be 12-ft. Buffer widths separating the general purpose lanes and express lanes shall be 4-ft. wide.

<Killian Parkway (SW 104<sup>th</sup> Street)>

<The approved typical sections for Killian Parkway are included within Attachment No. 12 and were approved by both FTE and Miami-Dade County. Any changes to the typical sections on Miami –Dade County jurisdiction must be approved by Miami-Dade County prior to submittal to FTE>.

Kendall Drive (SW 88<sup>th</sup> Street) and Sunset Drive (SW 72nd Street)

The approved typical section for Kendall Drive and Sunset Drive are included within Attachment No. 12 and was approved by both FTE and FDOT. Any changes to the typical section on FDOT District 6 jurisdiction must be approved by FDOT District 6 prior to submittal to FTE.

The typical section for Kendall Drive below the HEFT should provide an envelope for future 4-ft bike lanes in each direction.

**3. Pavement Design Package:**

The following documents have been provided by the Department in support of the Pavement Design Development:

1. Attachment No. 15 FDOT AADT Traffic Data and Equivalent Single Axle Loading (ESAL) Memorandum
2. Attachment No. 16 FDOT Pavement Survey and Evaluation Report
3. Attachment No. 17 Resilient Modulus Recommendations Report
4. Attachment No. 35 TPPPH Chapter 16.

The Pavement Design shall provide the minimum structural number stipulated in Attachment No. 14 for each facility (e.g. mainline widening and new construction, ramps, side streets, etc.). The Pavement Design Package for Kendall Drive and Sunset Drive shall be approved by FDOT District 6.

- Pavement Design
  1. Minimum design period
  2. Minimum ESAL's
  3. Minimum design reliability factors
  4. Roadbed resilient modulus
  5. Minimum structural asphalt thickness
  6. Minimum structural number per facility
  7. Cross slope
  8. Identify the need for modified binder
  9. Pavement coring and evaluation

Other requirements include:

1. The structural and friction courses under the tolling points, including the general purpose lane and buffer adjacent to the express lane as identified in Attachment No. 35, GTR General Tolling Requirements. Refer to FTE's 2010 Flexible Pavement Design Guide for Toll Plaza with Electronic Data Collection.
2. The use of FC-12.5 friction course shall be used at the tolling points, including on the general purpose lane adjacent to the express lane as identified in the GTR. Refer to FTE's 2010 Flexible Pavement Design Guide for Toll Plaza with Electronic Data Collection.
3. 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.
4. The pavement design for widening cannot be less in structural number than the pavement of the adjacent, existing travel lane per the current FDOT Flexible Pavement Design Manual.
5. The Resilient Modulus (MR) are provided in Attachment No. 17 to assist the Design-Build Firm in developing the applicable Final Pavement Design.
6. Full depth pavement reconstruction is required for inside and outside shoulders at all TES locations. Milling and resurfacing of travel lanes at all TES locations is allowed. Refer to FTE's 2010 Flexible Pavement Design Guide for Toll Plaza with Electronic Data Collection.
7. In areas where the proposed base clearance will be less than 3-ft to the Design High Water, the Design-Build Firm shall reduce the Resilient Modulus in accordance with the Pavement Design

Manual. Refer to Attachment No. 13, Base Clearance Design Variation, for some areas that may have reduced base clearance.

8. <The roadway section located along Killian Parkway between the two bridge approach slabs within the Turnpike median envelope shall be concrete pavement. Any roadway sections similar to this whereby the remaining sections are relatively short and located between concrete approach slabs shall be concrete pavement to simplify future maintenance / paving operations>.
9. Refer to Attachment No. 18, Design Website for longitudinal asphalt pavement detail to be applied to widening sections along the HEFT.

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:**

The following Design Variations have been approved by the Department and are included in Attachment No. 13:

- Vertical Clearance Variation
- Base Clearance Variation
- Shoulder Width Variation
- Stopping Sight Distance Variation
- Vertical Alignment Variation
- Border Width Variation
- Cross Slope Variation

Any deviation from the Department's criteria will require a design variation or a Technical Memorandum if PPM is met but TPPP criteria are not met. Any deviation from AASHTO will require a design exception. All such design variations, technical memorandum and exceptions must be approved. Attachment No. 13 contains design variations already approved by the Department. Any deviation from the approved Design Variations must be approved by the Department as part of the ATC process and is at the sole risk of the Design-Build Firm. The Design-Build Firm shall identify in writing their intention to use a design variation and/or exception during the ATC process and submit the design variation and/or exception along with the submission of the ATC proposal. Any design variation and/or exception accepted as part of an approved ATC is considered only preliminarily approved. If the ATC is approved and incorporated into the design, the Design-Build Firm shall resubmit a written, comprehensive Design Variation and/or Exception with proper support documentation, using standard Department procedures, for final approval by the Turnpike Design Engineer. Additional design variations and/or exceptions beyond those identified in this RFP, are at the risk and solely the responsibility of the Design-Build Firm to prepare. The acceptance of any proposed variations and/or exceptions is at the sole discretion of the Department.

#### 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; 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, French 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. Full coordination with all permitting agencies, the district Environmental Management section and Drainage Design section will be required from the outset. Coordination with the Design Landscape Architect may be necessary in order to give direction as to location of plantings. Consideration for location of landscape materials should be given to the extent where it does not interfere with the functionality of the stormwater management system or maintenance thereof. 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, 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. The Design-Build Firm shall prepare drainage plans in accordance with the Department criteria. Also, for the preliminary locations of drainage facilities refer to the conceptual drainage design contained in the Conceptual Design Plans-Roadway provided in Reference Document No. 4. The conceptual design includes seven basins and sixteen stormwater management facilities, which are currently permitted. Open and closed conveyance systems are anticipated in the Project. There are also two cross drains to be extended, including a box culvert.
2. Permits from the US Army Corps of Engineers (USACE) and the South Florida Water Management District (SFWMD) have been obtained (See Attachment Nos. 23 and 24) and are in accordance with the Conceptual Design Plans and documentation provided in Reference Document No. 4 (Roadway Concept Plans) and Reference Document No. 6 (Drainage Report). The Design-Build Firm shall be responsible for modifying the issued permits as necessary to accurately depict the proposed final design. It should be noted that the permits reflect the regulations and conditions present at their date of issuance and the Design-Build Firm is responsible for accommodating any changes therein. Joint-use ponds or alternative stormwater management solutions can be considered; however, the Design-Build Firm is responsible for all associated coordination, costs, permitting fees and fines, as well as any time extensions. The Design-Build Firm shall design appropriate water treatment and discharge attenuation in accordance with the South Florida Water Management District and the Department criteria for each existing and proposed basin within the Project limits.
3. Perform design and generate construction plans documenting the permitted systems function to criteria.

For purposes of determining base clearance, the Design-Build Firm may use the seasonal high groundwater table as the design high water if Type A Hydrologic Soils are present. Exfiltration trenches or other suitable methods may be used as an alternative to drawdown the water treatment volumes in no more than a 24 hour period with the approval of the FTE Drainage Engineer.

FTE has evaluated the condition of existing cross drains and storm sewers that may remain for adequate hydraulic capacity and design life. Refer to Attachment No. 33 (Pipe Repairs) for a schedule of the necessary repairs to existing pipes if they are to remain operational. All repairs shall be made in accordance with the requirements of this RFP. If the Design-build firm's final design requires other

existing pipes to remain, the conditions of those pipes will have to be evaluated by the Design- Build firm.

The Design-build firm shall ensure that noise walls will not impact off-site or on-site drainage. Noise wall openings for conveyance of off-site drainage may require a special design if the inverts of the standard noise wall openings are not at the elevation meeting the drainage requirements.

If deck drains are proposed on the bridges, they shall be closed systems with no direct discharge to the canals or roadway facilities beneath the bridges. All deck drain dimensions and pipe sizes shall be in accordance with the Department criteria. The minimum pipe size for the deck drain conveyance system shall be six inches in diameter. In addition, any pipes running along the bridge deck to the piers should have a minimum slope of two percent.

The inlets on bridge decks and approach slabs, if any, should be sized and spaced based on an assumed 50 percent blockage. The minimum grate area should be six square feet; orifice flow and pipe flow should be considered to ensure the hydraulic grade line is kept at or below the grate elevation.

The use of trench drains is not preferred, but will be allowed if the diameter is 12 inches or larger.

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

The documentation supporting the optional pipe material including the Culvert Service Life Estimator Program analysis shall meet the requirements of Chapter 6 of the FDOT Drainage Manual and the FTE Drainage Manual Supplement. The Design-Build Firm shall only use one type of pipe materials on pipe runs between structures. Dissimilar materials shall be constructed in accordance with the Standard Indexes. A2000 PVC (ASTM F 949) shall not be used in areas exposed to direct sunlight for extended periods of time, such as above ground, non-shaded installations, endwalls, and mitered end sections. PVC pipes shall be installed within two years from the date of manufacture. Pipe more than two years of age may not be used unless it can be demonstrated to the satisfaction of the Engineer that the pipe has been stored adequately protected from direct exposure to sunlight. Pipe material type installed in the Project shall be indicated on the as-built drawings.

All precast storm sewer manholes and inlets near the MSE walls shall be provided with resilient connectors as specified in Article 942-3 of the FDOT Standard Specifications for Road and Bridge Construction. It is the responsibility of the Design-Build Firm to communicate the type of pipe chosen and the type of resilient connector to be used to the precast provider, prior to the fabrication of any applicable structures. It is recommended that the contractor includes the type of resilient connectors and any required pipe adaptors for each structure in the drainage structure shop drawing submittal.

The Design-Build Firm will provide grading details for all of the design features encroaching into the proposed drainage facilities to assure that appropriate drainage solutions and outfalls are provided at each location.

Prior to proceeding with the Drainage Design, the Design-Build Firm may meet with the District Drainage Engineer for the Turnpike, FDOT District 6 and Miami Dade County Public Works to provide information that will better coordinate the Preliminary and Final Drainage Design efforts. This meeting is optional and should occur prior to any submittals containing drainage components. Information regarding the preparation for this meeting is available in the FTE webpage.

The Design-Build Firm shall provide the Department's District Drainage Engineer for each associated agency a signed and sealed Drainage Design Report... It shall be a record set of all drainage computations, both hydrologic and hydraulic. The engineer shall include all necessary support data. The Drainage Report will include, at a minimum, a clear description of the overall stormwater management system, pond routing calculations in ICPR or equivalent software with a node-reach diagram, justifications of all tailwaters utilized, stormsewer tabulations in FDOT format reporting the adequate pipe sizes to meet the FDOT design criteria, pond recovery calculations, spread calculations, special gutter grade calculations, structure and liner flotation calculations, ditch conveyance calculations, skimmer calculations, cross drain calculations and other calculations relative to drainage or any changes or additions to the drainage solutions. If the final drainage solution includes new outfalls or peak outfall increase into off-site properties, the critical storm analysis will be required. All calculations shall require the approval from the District Drainage Engineer for the Turnpike, FDOT District 6 and Miami Dade County Public Works.

**E. 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.

Attachment No. 21, Express Lanes Access Locations illustrates the methodology for developing ingress and egress from the express lanes to the general purpose lanes along with the location of the ingress and egress points in each direction. The Design-Build Firm shall adhere to the layout presented in the Attachment. Consideration for acceleration from the general purpose lanes to the express lanes, deceleration from the express lanes to general purpose lanes, along with proper gap acceptance, taper lengths, slip ramp layouts and lane shifts were taken into consideration and shall not be reduced from the values depicted unless approved through the ATC process.

Access along the median is required by Florida Highway Patrol for emergencies. The Design-Build Firm will abide by the proposed openings described in Attachment No. 22, Median Opening Review.

At each of the signalized intersections, the Design-Build Firm shall adhere to the Florida Intersection Design Guide for establishing proper intersection geometrics. The required Design Vehicles shall be used in particular at intersections with dual or triple left turns and opposing turning movements. The Design-Build Firm shall abide by the queue lengths provided in Attachment No. 20, PTFM.

The use of Urban criteria with 5% maximum superelevation rates is permitted at the at grade intersections where pedestrian mobility is expected in order to comply with ADA and FDOT standards.

The Design-Build Firm shall coordinate with Miami-Dade County for all work pertaining to existing and proposed bus stops. Work elements include installation of new bus shelters, signs, benches, pads; removal of existing bus shelters, etc. Refer to Attachment No. 34 Miami-Dade County Transit Requirements, for work required.

**F. 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 record set 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. For additional design documentation requirements, the Design-Build Firm shall utilize the FTE Design Web site in Attachment No. 18.

**G. 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 the latest design standards and practices and shall be accurate, legible, complete, drawn to scale and furnished in reproducible form.

Refer to Section VII for submittal requirements.

The structural design shall include, but not be limited to, widening of existing bridges, existing bridge rehabilitations (if necessary), new bridge construction, walls (retaining walls, sound barrier walls, etc.), sign structures, new tolling point locations (including foundations, TES plans and site adaptation) for the GP and express lanes, and other structures, as identified in this RFP. The Design-Build Firm shall ensure that all required final geotechnical and hydraulic recommendations and reports required for structure design are submitted with the 90% plans.

If the Design-Build Firm proposes to remove and replace any existing toll equipment structures with new toll equipment structures then the Structures Plans shall also address the removal of existing toll equipment structures and the implementation of the new toll equipment structures. The structural design developed by the Design-Build Firm shall be an engineering solution and not merely an adherence to minimum criteria. The Design-Build Firm is encouraged to develop and provide innovative solutions that can reduce costs and time for the Project.

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. Load Ratings of the existing bridges is provided in Attachment No. 30, Existing Bridge Load Rating Analysis. 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 shall be submitted to the Department for review with the 90% superstructure submittal. The as-bid load rating (based on the 90% design plans) shall be provided to the Department before any traffic is placed on the bridge. The as-bid load rating shall be signed and sealed by a Professional Engineer licensed in the State of Florida. A final, signed and sealed copy of the Bridge Load Rating, updated for the as-built conditions shall be submitted to the Department's Project Representative and the District Structures Maintenance Engineer with the as-built bridge plans.
- c. Any erection, demolition, and any proposed sheeting and/or shoring plans that may potentially impact the railroad must be submitted to and approved by the railroad. This applies to areas adjacent to, within and over railroad rights of ways.
- d. 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. **Criteria**

The Design-Build Firm shall incorporate the following 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, Plans Preparation Manual, Turnpike Plans Preparation and Practices Handbook (TPPPH), 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.

a. **Bridges**

1. Each single or dual bridge superstructure beams/girders are to be constructed of the same material (i.e. all prestressed concrete or all structural steel).

2. Widening of existing bridges, in general, shall match the existing as per the Department Structures Manual.
3. Structural depth of the fascia girders exposed to view for each bridge is to be held constant, without steps at supports.
4. Open expansion joints are not allowed.
5. GRS walls or abutments are prohibited.
6. The Design-Build Firm shall use an operational importance factor equal to 1.0 for all bridges.
7. Grade of bridge sidewalks shall be 5% or less.
8. The following environmental classifications shall be used for the bridges:

Bridge Number(s)	Bridge Name	Super-structure	Substructure	
			Concrete	Steel
<*>	<Killian Parkway over SR 821>	<Slightly Aggressive>	<Moderate Aggressive>	<Extremely Aggressive Resistivity=987 ohm-cm>
870203 SB 870409 NB	SR 821 over Kendall Drive (SW 88 <sup>th</sup> St.)	Slightly Aggressive	Moderately Aggressive Resistivity=1090 ohm-cm	Moderately Aggressive Resistivity=1090 ohm-cm
870207 SB 870413 NB	SR 821 over Sunset Drive (SW 72 <sup>nd</sup> St.)	Slightly Aggressive	Moderately Aggressive Resistivity = 941 ohm-cm	Extremely Aggressive Resistivity = 941 ohm-cm

\* New bridge number to be obtained by Design-Build Firm. The new bridge replaces Bridge No. 870208.

(Note: the Design-Build Firm may calculate their own environmental classifications instead of using those provided by the Department, but any environmental classifications calculated and used by the Design-Build Firm that differ from those provided within this table must be approved by the Department as part of the ATC process and are at the sole risk of the Design-Build Firm).

9. For widening superstructures, the new deck slab shall be 8-inches thick. The new bridge floor finish shall match that of the existing bridge deck surface (see TPPP Volume 1, Section 26.19.3). Furthermore, the deck surface does not need to meet profilograph requirements.
10. Remove each existing expansion joint seal in its entirety across the entire width of the existing bridges to be widened for replacement with a poured joint seal with backer rod system in conformance with Index 21110, which shall also extend integrally for the full length of the proposed bridge width. The existing concrete joint headers are to be repaired and/or reconstructed as necessary to accommodate proper installation of the required seal material.
11. Uncoated weathering steel is required for new steel bridges (including steel pedestrian bridges).
12. For all bridges, open scuppers will not be allowed. If deck drainage is required it shall consist of

bridge deck inlets with a closed piping system hidden from view.

13. Two (2) – 2” diameter conduits with expansion fittings and embedded junction boxes in accordance with Design Standard Index 21210 shall be installed in all new traffic railings mounted on bridges and retaining walls.
14. The existing columns of the SR 821 bridges over Sunset Drive (Bridge No. 870204 SB; Bridge No. 870410 NB) do not have adequate capacity to resist the required vehicular collision force. Index 411 Pier Protection Barriers are required to protect the existing columns.
15. The existing columns of the SR 821 bridges over Kendall Drive (Bridge No. 870203 SB; Bridge No. 870409 NB) do not have adequate capacity to resist the required vehicular collision force. The existing Index 410 F-shape barrier shall be extended to shield new columns.
16. All required structural steel bolts, anchor bolts, rods, nuts, washers and other associated tie-down hardware shall be mechanically galvanized in accordance with the specifications.
17. The proposed widenings are classified as Minor Widenings in accordance with Structures Design Guidelines Section 7.2.
18. The Design-Build Firm shall perform required maintenance repairs on existing bridges to be widened as described in the Bridge Maintenance Repair Recommendations Memorandum, included in Attachment No. 32.
19. Existing minimum vertical clearance at the SR 821 bridges over Kendall Drive (Bridge No. 870203 SB; Bridge No. 870409 NB) is 15.90-feet at the northbound bridge and 16.00-feet at the southbound bridge, as documented in the Final Bridge Analysis Report dated September 2008, developed as part of the PD&E Study for this corridor and confirmed by surveys performed for RFP development. This clearance was determined by field surveys conducted as part of the PD&E Study. The conceptual widening plan developed replaces the low existing beam on the northbound bridge to achieve a minimum vertical clearance of 16.00-feet. A Design Variance (See Attachment No. 13) has been obtained for this proposed condition. The proposed bridge widening shall not reduce the vertical clearance below 16.00-feet. Minimum vertical clearance to new or replacement bridges shall be 16.5-feet.
20. Existing minimum vertical clearance at the SR 821 bridges over Sunset Drive (Bridge No. 870204 SB) is 16.22-feet, as documented in the Final Bridge Analysis Report dated September 2008, developed as part of the PD&E Study for this corridor, and confirmed by surveys performed for RFP development. The widening concept presented will reduce the vertical clearance to 16.16-feet. A Design Variance (See Attachment 14) has been obtained for this clearance.
21. Critical existing utilities exist at three bridge locations:
  - <Killian Parkway (SW 104th Street) – Miami-Dade Water and Sewer Department (MD-WASD) 72” Force Main crossing on the south side of Killian overpass>.
  - Kendall Drive (SW 88th Street) – AT&T Florida 12-4” PVC duct bank crossing on the north side of Kendall overpass, which is a primary feeder for western Miami. Test holes

have been performed and will be included in concept plans. AT&T FL claims that the duct bank is in an easement, and has provided documents which are under review by the Department.

- Sunset Drive (SW 72nd Street) – MD-WASD 96” Concrete Raw WM crossing on the north side of SW 72nd St overpass. VVH test holes have been performed and are included with the CADD Files in Reference Document No. 36, Survey Documentation. Due to the critical nature of this utility it is very important to avoid damaging it during construction. See Section VI.A for vibration monitoring and control requirements. See Section VI.C.2 for restrictions on pile driving operations in the vicinity of existing MD-WASD utilities.

**b. Walls**

1. The Design-Build Firm is responsible for the design and construction of any required retaining walls, both temporary and permanent.
2. Critical Temporary Retaining Walls: Whenever the construction of a structural component (such as a wall, footing, or other such component) requires excavation that may endanger the public or an existing structure that is in use 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 and detailing the wall in the set of contract plans. These plans and calculations must be signed and sealed by the Structural Engineer in responsible charge of the wall design.
3. Permanent Retaining Walls: All permanent retaining walls shall be full height walls. All permanent retaining walls shall have a concrete facing. Retaining wall heights shall not exceed 40 feet (MSE wall height shall be measured from the top of the natural ground to the top of the highest coping). Partial height walls, as shown in FDOT Structures Design Guidelines Section 3.12, such as perched (walls founded on fill above the elevation of the natural ground line, or located within a fill slope between the toe of slope and the top of slope) and toe walls (walls that preserve a portion of an existing fill slope, or eliminate only a portion of sloped embankment at the bottom of the slope) are not permitted, with the following exception: the existing gravity toe walls at Sunset Drive may be extended as needed to maintain sidewalk access beneath the bridges.

Fill slopes that create a perched wall and/or create a retaining wall greater than 40 feet in height if the perched condition is eliminated are not permitted. Proposed retaining walls adjacent to existing bridge embankment slopes shall have the top of leveling pads placed below the embankment toe of slope such that the proposed leveling pad is not within an existing or proposed fill slope or embankment slope.

MSE retaining walls on fill shall not be considered perched walls when the following criteria are met:

- A level area of fill is provided in front of the wall at a minimum elevation 2-feet above the top of leveling pad.

- This level area shall extend laterally from the front face of wall, and longitudinally from the begin and end of wall, for a minimum horizontal distance equal to the MSE wall height.

For these walls, the wall height can be measured from the top of leveling pad to top of highest coping.

4. Flowable fill backfill is not allowed for MSE walls.
5. New MSE wall panels that are tied to an existing MSE wall shall use the same panel shape as the existing MSE wall panels. Coat new structure to match the existing scheme and clean the existing structure. If cleaning alone is insufficient, then clean and recoat the existing structure.
6. Noise walls shall be designed and constructed so as to satisfy the SR 821 (HEFT Final Noise Study Technical Memorandum (see Attachment No. 25). During the design of the sound wall, the Design-Build Firm shall include specific maintenance access points along the sound barrier walls as per TPPPH 32.3 and account for access points for fire service as well as need to mount street name signs where required.

**c. Sign Structures**

1. All sign structures that are removed as part of this Project shall become the property of the Design-Build Firm and disposed of properly. For a listing of existing sign structures see Reference Document No. 38, Inventory of Existing Sign Structures.
2. The following sign structures, if removed, cannot be reused on the Project for the reasons noted:
  - 87T120 – Remove/Replace due to past performance issues with type of structural detailing present
  - 87T086 – Remove/Replace due to nearing end of useful life of galvanized coating
  - 87T123 – Preclude from reuse due to previous weld crack issue
3. The Design-Build Firm shall provide signed and sealed design calculations documenting the acceptability for the proposed use of any existing sign structures the Design-Build Firm proposes to reuse. Repairs to all existing sign structures approved for reuse shall be performed as determined necessary by the FTE Structures Maintenance Engineer. Repairs may include:
  - All hardware (nuts, bolts, clips, etc.) which exhibits corrosion or is missing shall be replaced in kind with new hardware.
  - Clean and Repair Galvanizing for all structural elements (Columns, Chords, Bracing Members, Plates, etc.) which exhibit localized areas of corrosion.
  - Tighten or replace all loose hardware.
  - Check-out and testing of electrical and lighting systems is required.
  - Repair or replace broken electrical conduit, reconnect grounding system, align lights, etc.
4. A Signing Master Plan Concept has been provided as Reference Document No. 7. The plan contains the location of proposed overhead sign structures required in advance of the new express lanes in each direction of travel. Some structures contained mixed static / dynamic message signs. The sign structures design shall take into consideration all of the proposed loading conditions.

5. There are new sign structures required outside the Project limits to the south. The Design-Build Firm is responsible for design and construction of these sign structures. Coordination with the adjacent Design-Build firms will be necessary for proper and efficient installation and construction.

### 3. **Bridge Structures**

The following list of bridge structures identify existing and new bridges and related Reference Documents describing viable alternatives that may be used as a guideline as to what satisfies the requirements and expectations of the Department:

- a. <Killian Parkway over SR 821 (HEFT). Two new bridges (Bridge Nos. to be obtained by the Design-Build Firm) shall replace the existing bridge (Bridge No. 870578). Refer to Reference Document No. 19, Bridge Concept Report (Killian Parkway)>.
- b. NB and SB SR 821 (HEFT) over Kendall Drive (SW 88th Street) (Bridge No. 870409 NB & 870203 SB). Existing bridges proposed to be widened to the outside and median. Refer to Reference Document No. 20 Bridge Concept Report (Kendall Drive).

NB and SB SR 821 (HEFT) over Sunset Drive (SW 72nd Street) (Bridge No. 870410 NB & 870204 SB). Existing bridges proposed to be widened to the outside and median. Refer to Reference Document No. 21 Bridge Concept Report (Sunset Drive).

### 4. **Toll Equipment Structure (Gantry)**

Refer to Section VI.T, New Toll Equipment Structure (TES) Site Location, of this RFP for proposed locations of gantry structures. Refer to Section VI.V, Tolling Infrastructure Requirements, for gantry design requirements.

### 5. **Other Structures**

- a. The structures criteria in this section of the RFP is not intended to apply to building/architectural structures. Refer to other sections of this RFP as appropriate.
- b. 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.
- c. The Design-Build Firm shall insure that the final geotechnical and hydraulic recommendations and reports required for structure designs are submitted with the 90% bridge plans.

6. Aesthetic Criteria

**a. Concrete Surface Finishes**

1. New Structures – No concrete surface finishes are to be used.
2. New Structures adjacent to Existing Structures and Bridge Widening – If existing structure has a concrete surface finish then a concrete surface finish shall be applied to the new/widened structure, matching the existing scheme. The existing structure shall be cleaned. If cleaning alone is insufficient to restore the appearance then recoat the existing structure.

**b. Steel Girders**

1. New Structures – Painted steel girders are not allowed. Uncoated weathering steel shall be used.

**c. Textures/Graphics**

1. Surface texture Type “G”, Index 5200, shall be provided on both the front and back faces of sound wall panels.

**d. Anti-Graffiti Coating**

1. Anti-Graffiti Coatings shall not be used.

7. 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-feet, span sign structures, gantry structures, bridge mounted sign structures, and any structures with field welds, etc. See Reference Document No. 39 for a Sample Inventory for Welding Inspection.

**H. 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.

#### **I. Shop Drawings:**

The Design-Build Firm shall be responsible for the preparation and approval of all Shop Drawings. Shop Drawings shall be submitted to the Department and shall bear the stamp and signature of the Design-Build Contractor, Design-Build Architect of Record (AOR)/Engineer of Record (EOR), 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 Contractor. The Department's procedural review of shop drawings is to assure that the Design-Build Contractor and the Design-Build AOR/EOR have both accepted and signed the drawing, the drawing has been independently reviewed and is in general conformance with the Construction Set, Specifications and any Technical Special Provisions (TSPs). The Department's review is not meant to be a complete and detailed review. Upon review of the shop drawing, the Department's reviewer will stamp, initial and date shop drawing. In addition, the Resident Engineer will stamp "Released for Construction" or "Released for Construction As Noted", initial and stamp.

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.

The Design-Build Contractor shall submit shop drawings as described in Attachment No. 26, Design-Build Shop Drawing Procedures.

For shop drawing coordination, please contact the Shop Drawing Coordinator for Florida's Turnpike Enterprise, Headquarters, Ocoee, FL, 407-532-3999.

**J. Sequence of Construction:**

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

1. Expedite construction of noise walls. Note the contract to the south FPID 406096-1-52-01 includes noise wall construction along the ROW limits to just south of Killian Parkway. Coordination in this area will be required.
2. 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.
3. Minimize the number of different Traffic Control Plan (TCP) phases, i.e., number of different diversions and detours for a given traffic movement.
4. 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.
5. 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.
6. Proper coordination with adjacent construction projects and maintaining agencies.
7. Obtain permits for work within Miami-Dade County Right of Way prior to submittal to FTE. MOT on Miami-Dade County roadways cannot commence until permit is approved.
8. Perform all installation of new structures, and demolition of existing facilities, as described in the RFP.
9. Maintain functionality of existing ITS equipment during design and construction of new ITS equipment to support express lanes.
10. Perform ITS testing.
11. Allow the Department's Toll Equipment Contractor (TEC) to install and test the toll equipment system.
12. Implement AET express lanes.
13. <The Killian Interchange connections to the HEFT cannot be opened to traffic until implementation of the Express Lanes is approved by FTE for this project. Traffic on Killian Parkway must be maintained at all times>.

AET express lanes will be implemented upon completion of work under FPID 427146-1-52-01 and FPID 415051-4-52-01. Upon completion of all three (3) Projects, the Department will perform operational testing until such time that the AET express lanes are functioning properly and ready to open. The Design-Build firm shall include a period of XXX calendar days at the end of contract time allowing for placement of final friction course FC-5 only within the express lanes. Friction course FC-12.5 shall be

placed beneath the tolling points together with the loops during construction and shall not be deferred until the express lanes are ready to open. Implementation of AET express lanes will require:

1. Installation and testing of new tolling equipment, to be provided by FTE's TEC.
2. On the day AET express lanes are implemented, all toll related signage required by the Conceptual Signing Plan is furnished and installed and uncovered and all conflicting and non-relevant signage is covered or removed.
3. When toll related signs are placed prior to AET express lane implementation, these signs shall be covered until AET express lanes implementation. Refer to Section VI.Q for details.
4. The actual date of AET express lanes implementation shall be as directed by the Department upon confirmation that all activities required for the safe and coordinated implementation can be performed.

FTE's TEC will perform the installation of toll cables, tolling equipment and roadway loops including tuning, testing and lane certification, per the GTR. The Department will remove any existing tolling equipment, per the RFP and the GTR. The Design-Build Firm shall be required to perform all installation of new structures, all accompanying utility modifications (including ITS) and demolition of any existing facilities, as described in this RFP, in support of this toll equipment addition.

**K. 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.

**L. 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, coordination with adjacent construction projects, utility relocation, drainage structures, signalization, ditches, front slopes, back slopes, drop offs within clear zone, 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 such as the Advanced Maintenance of Traffic course, and in accordance with the Department's Design Standards, Roadway Plans Preparation Manual and TPPP.

A Transportation Management Plan (TMP) is required for this Project and 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 chapter 10 of the PPM and TPPP as well as the FTE design website Maintenance of Traffic General Notes.

## 2. **Hurricane Readiness Plan**

Refer to the FTE's Field Operations Guide (see Attachment No. 11) for requirements of the Design-Build Firm as related to the implementation of Hurricane Operations on the FTE System.

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

### a. **General**

1. The Design-Build Firm shall utilize Index Series 600 of the Department's Design Standards and the Turnpike's Supplemental 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).
2. The Design-Build Firm shall prepare additional plan sheets such as detours, cross sections, profiles, drainage structures, retaining wall details, and sheet piling as necessary for proper construction and implementation of the Temporary Traffic Control Plan.
3. The Design-Build Firm shall design a safe and effective TCP to ensure that all vehicular traffic can be accommodated through the construction 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.

This section defines the minimum requirements noted below:

- **Number of Lanes:** The minimum number of lanes along the mainline should be equal to the existing number of lanes. Lane closures are only allowed as noted in section e (below), Traffic Control Restrictions.

- Lane Width: Per the FDOT Standard Index 600 Series.
- Shoulder Width: Refer to TPPPH Chapter 10 Volume I, Section 10.12.6
- Cross slopes: The proposed cross slopes shall match existing or the proposed slopes. There should not be a break in the cross slope along a travel lane. Overbuild shall be used on the shoulders to match the slope(s) of the adjacent lane(s). A temporary pavement design shall be approved by FTE prior to implementation in the traffic control plans.
- Median Barriers: Temporary Concrete Barrier wall, or an approved equivalent, should be used in all cases to separate traffic in opposing directions.
- Superelevation HEFT and Local Roads: Refer to TPPPH Chapter 10, Volume I, Section 10.12.5
- Emergency Pull Off Area: Refer to TPPPH Chapter 10 Volume I, Section 10.12.6.1

Refer to the Turnpike Plans Preparation and Practice Handbook Volume I Chapter 10 for other requirements and guidance on the Turnpike MOT Policy.

1. Special consideration shall be given for temporary drainage for each construction phase. Positive drainage must be maintained at all times. Gutter spread calculations at the temporary barrier walls shall be performed. Temporary barrier walls adjacent to an adjacent travel lane shall be placed so that the resulting gutter spread due to the temporary barrier wall does not encroach beyond the temporary pavement stripe.
2. 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. Emergency contact information shall be provided to the engineer, appropriate agencies and adjacent project managers.
3. The Design-Build Firm shall maintain a median barrier (permanent or temporary) on the HEFT during all phases of construction.
4. The Design-Build Firm shall use only paint for temporary pavement markings on asphalt pavement. Refer to TPPPH Volume I Chapter 10, Section 10.12.21 for use of Low profile reflective pavement markers.
5. Overlays or milling with overlays will be the only acceptable method(s) to achieve positive means for the obliteration of existing pavement markings in areas such as long term crossovers, diversions, and in some cases tangent sections that provide a rough riding pavement.
6. High pressure water blasting is the only acceptable method for the removal of

- conflicting pavement markings in those areas not mentioned above. When removing pavement marking messages via water blasting, the entire area within the pavement message, including the interior of the message that is not painted or have thermoplastic, shall be water blasted so that the message outline is completely obliterated and drivers are not able to read or see the scar outlining former message.
7. Throughout the milling operations, the Design-Build Firm shall use a self-contained vacuum type mobile broom for cleanup of milled dust material.
  8. The final pavement lift of any paving operation, including temporary overbuilding of existing shoulders, shall be constructed with a paving machine to insure adequate rideability.
  9. The Design-Build Firm shall ensure that street name signs are visible in order to facilitate emergency vehicle traffic.
  10. All commercial material for temporary driveway maintenance shall be milled asphalt.
  11. 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.
  12. The Design-Build Firm shall ensure that all logo signs are displayed to the travelling public at all times during the Project. The Design-Build Firm shall coordinate any relocation of the signs with Andrew Hennoy of Florida Logos, Inc. at 888-60-0833.
  13. The Design-Build Firm shall operate and maintain existing signals for the entire Project duration or until the signal is no longer necessary and removed from service. New signals shall be operated and maintained commencing with the need for the new signal and continuing through to the Project completion.
  14. 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.
  15. Special attention is required due to existing equestrian traffic along Sunset Drive from the Horse Country community. The contractor shall make provisions to allow for safe equestrian use at all times along Sunset Drive. A minimum of width of 10-ft and height of 12-ft shall be provided along Sunset Drive throughout construction to enable safe passage of equestrian traffic.
  16. The Design-Build Firm shall maintain the existing AET facilities until the proposed AET facilities is in operating condition and approved by the FTE. Once the new toll gantries are operational on the Express Lanes, traffic must be placed in its permanent position to ensure proper toll collection at all times.
  17. Median U-turn closures during MOT shall be coordinated and approved by FTE

Troop K.

**b. Temporary Lighting Notes and Criteria**

1. The Design-Build Firm shall maintain lighting throughout all phases of construction either by maintaining the existing lighting system, providing temporary lighting, or activating the proposed lighting system.
2. If providing temporary lighting, the Design-Build Firm shall comply with the following Criteria:
  - a. Average Initial Intensity 1.7 foot candles
  - b. Uniformity Ratio Avg./Min. 4:1 or less  
Uniformity Ratio Max./Min. 10:1 or less
  - c. Wind Speed 130 mph

The Design-Build Firm shall provide a temporary lighting design signed and sealed by a professional engineer registered in the State of Florida. The Design-Build Firm shall provide voltage drop calculations, conductor and conduit sizes, load center drawings and wiring diagrams for temporary power service.

4. All structure calculations and drawings must be signed and sealed by a professional engineer registered in the State of Florida.
5. Furnish, install and maintain and remove the temporary lighting system in accordance with the National Electric Code and National Electric Safety Code requirements.
6. Provide overhead wiring wherever possible, however, the use of underground conduit and conductors shall be provided where overhead wiring would interfere with construction.
7. Provide all maintenance of temporary lighting equipment, including existing load centers, once they are connected to the temporary lighting system.
8. Coordinate all temporary lighting work with the Design-Build Firm and Traffic Control Plans for the appropriate sequence of construction.
9. The overhead electrical supply conductors shall be a minimum of 15 feet above the highest construction grade level during all phases of construction.
10. The nominal height of the temporary light poles shall not exceed the nominal height of the existing light poles.
11. Wherever possible, the Design-Build Firm shall utilize existing circuits from the

existing service points to power the temporary lighting system.

12. Install temporary or proposed lighting fixtures and modifications to existing systems during daylight hours. Those poles replaced or installed by the Design-Build Firm shall be operational at night. The Design-Build Firm may elect to remove/install poles at night, but shall provide sufficient lighting per the Temporary Lighting criteria (provided above) to compensate for the down poles.
13. All components of the temporary lighting systems that are not part of the proposed lighting system shall be removed when no longer needed and disposed of by the Design-Build Firm.
14. Prior to any equipment order, submit for approval of equipment specifications or design data for all material proposed for the temporary lighting design. These must specifically include:
  - a. Luminaire photometrics, including electronic IES photometric files
  - b. Pole strength calculations
  - c. Pole frangibility test
  - d. Temporary service points
  - e. Calculations and drawings for temporary barrier wall light poles and mountings.
  - f. Load center electrical equipment, including wiring schematics
  - g. Design calculations, including voltage drops and load analysis

**c. Temporary ITS Requirements**

1. The temporary ITS system shall be installed and demonstrated by the Design-Build Firm to the Engineer's satisfaction to be a fully functioning ITS system before the existing ITS system is removed from service.
2. The Design-Build Firm shall furnish and install additional temporary poles with wireless radios as needed in order to obtain full communications to all work zone ITS (WZITS) locations.
3. The Design-Build Firm may field adjust WZITS locations in order to avoid construction activity conflicts. Submit new locations to the Engineer for approval.
4. Temporary WZITS CCTV cameras shall be installed a minimum of 40' above the adjacent roadway's final grade elevation at the WZITS camera location.
5. The Design-Build Contract shall submit all WZITS equipment to the Engineer for approval.

6. Temporary WZITS locations shall be submitted to the Engineer for approval. They shall remain in place in that phase throughout the duration of construction unless relocation is needed due to a conflict.
7. Temporary WZITS DMS shall be installed within 20' of the outside travel lane at a height that is visible to all lanes of oncoming traffic.
8. All WZITS equipment installed in the clear zone that is not protected by a permanent traffic railing or guardrail shall be protected by temporary barrier wall.
9. At the Design-Build Firm's discretion, WZITS equipment shall be installed on temporary poles or mobile trailers fitted with vertical masts. The Design-Build Firm shall construct temporary mounds as needed to meet installation location and height requirements.
10. All WZITS CCTV cameras shall be able to be viewed and controlled by Adtech Steelbox software.
11. All CCTV video shall be encoded MPEG-2.
12. The Design-Build Firm shall be responsible to integrate the temporary WZITS DMS's into the FTE Turkey Lake and Pompano Sunguide Systems. DMS's shall be Sunguide compatible and shall provide full functionality (DMS control) through the Sunguide software. The Design-Build Firm shall be responsible to integrate the temporary WZITS CCTV cameras into the FTE Turkey Lake and Pompano TMCs Steelbox software systems. All CCTV cameras shall be Adtech Steelbox software compatible and shall provide full functionality (CCTV video and control) through the Steelbox software. The Design-Build Firm shall coordinate with FTE TMC personnel for access to the TMC and network configuration information (i.e. IP addresses, port numbers, security settings, etc.).
13. The Design-Build Firm shall be responsible for the removal of all temporary WZITS items after Department acceptance of the permanent ITS system.

**d. Temporary Signal**

1. Temporary signals may be required along Kendall Drive and Sunset Drive. The Design-Build Firm shall coordinate and gain approval from Miami Dade County Traffic Division for use of temporary signals.
2. Temporary signal details shall be provided with the Traffic Control Plans associated with each facility.

**4. Traffic Control Restrictions:**

The Design-Build Firm shall maintain the existing number of lanes on all roadways at all times, except for during permissible lane closures and detours. A lane may only be closed during active work periods. All lane closures, including ramp closures, must be reported to the local emergency agencies, the media and the District PIO and shall be in accordance with Florida's Turnpike Enterprise Lane Closure Policy.

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 or if the lane closure causes a driver delay greater than 20 minutes. For Lane Closure Restrictions refer to Attachment No. 19.

Dual lane closures will be allowed during milling and resurfacing operations of the center travel lane in order to avoid bifurcation of the travel lanes. NO DUAL LANE CLOSURES ALLOWED between the hours of 6:00 A.M. and 11:30 P.M. Dual lane closures will not be permitted on facilities that carry less than three lanes in each direction.

5. Anticipated Closures:

The proposed improvements require temporary closures of the mainline, entrance/exit ramps and arterial underpasses during overhead construction or paving operations for safety and constructability purposes. Table 1 lists the crossroads subject to potential closure along with the responsible maintaining agency. The Design-Build Firm (DBF) should seek approval from FTE as well as local road agencies prior to any closures taking place. The request should include the frequency of night closures, the closure date(s), and the closure duration along with backup information specifying the type of construction work to be done during the closure period. The detour routes shown in Reference Document No. 13 have been approved by the maintaining agencies. In the event alternate detour routes are proposed, the Design-Build Firm shall seek approval from the local agency prior to implementation. Once approved, an early public awareness program should be implemented. Electronic Message Signs should be posted two weeks in advanced of the actual work to promote public awareness about the scheduled closure(s). Closures can only be performed during the hours noted in Attachment No. 15.

Ramp closures of both on ramps simultaneously or both off ramps simultaneously shall not be allowed at each individual interchange. Closure of all ramps simultaneously or in any other combination is not permitted. Only close those ramps that are intended to be worked on each evening. Coordinate ramp closures with any adjacent construction at adjoining interchanges.

All ramp closures shall be accompanied by the appropriate detours; however, these closures shall be restricted. Ramp closures shall be allowed only during the allotted hours for a dual lane closure along the mainline.

Table 1: Cross Roads under the Turnpike HEFT requiring nighttime closure(s)

Road		Roadway Characteristic	No. of Lanes	Maintenance Agency	
Name	Limits			West of TPK	East of TPK
Kendall Drive	SW 88 <sup>th</sup> St. SR-94	Urban Arterial	6-lane Divided	FDOT	FDOT
Sunset Drive	(East of TPK) SW 72 <sup>nd</sup> St. SR-986	Urban Arterial	4-lane Divided	Miami-Dade	FDOT
	(West of TPK) SW 72 <sup>nd</sup> St.				

Construction activities should be performed in a manner that minimizes mainline, ramp or side street closures. When closures are deemed necessary, the Design-Build Firm (DBF) should detour traffic along nearby routes. The following activities are anticipated to require closures:

- Installation of mainline gantries NB and SB south of Kendall Drive.
- Installation of full span sign structures over the HEFT mainline.
- <Beam Erection/Demolition and deck pours over mainline as part of Killian Parkway Bridge Construction>.
- Beam Erection/Demolition and deck pours over NB on-Ramp, SB on-ramp and Kendall Drive.
- Beam Erection/Demolition and deck pours over Sunset Drive.
- Paving operations of all single lane ramps.
- Erection of overhead Toll Gantries at Kendall SB on-ramp and NB off-ramp.
- Erection of overhead Sign Structure Trusses at Kendall Drive.

Detour routes should avoid penalizing customers by avoiding routes that will create additional toll charges. Also, proposed detour routes should take into consideration FTE revenue loss.

Pacing Operations will only be permitted for beam erection in this Project.

Existing signs or messages in conflict with the proposed detour routes shall be covered to minimize confusion.

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

The Department has submitted permit applications to South Florida Water Management District and the United States Army Corps of Engineers for approval. These permits will be provided to the Design-Build Firms as Attachment Nos. 24 and 25. The Design-Build Firm shall adhere to the special conditions contained within the permit documents. The permit concept roadway plans depict full reconstruction of the HEFT over Kendall Drive. If the Design-Build Firm modifies the Kendall Drive overpass, a permit modification may be required.

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

1. Cultural Resources
2. Wetlands and Mitigation
3. Wildlife and Habitat
4. Contaminated Materials

There are species identified within the Project limits that must be protected. The Design-Build Firm shall be responsible for compliance with all Endangered Species Permit Requirements identified in the Federal Dredge & Fill Permit. The Design-Build Firm shall also be responsible for the assessment of potential impacts to federal and state listed species for any modifications as required.

The Design-Build Firm will comply with construction noise requirements of 23 C.F.R. 772.19 and Chapter 17 (Section 17-9) of the Florida Department of Transportation Project Development & Environment Manual (PD&E Manual). The 23 C.F.R. 772 and FDOT PD&E Manual requirements for traffic noise impact analysis and the permanent noise abatement measures have been investigated by the Department and are set forth in this RFP. Noise walls within the Project limits will be constructed as soon as practical.

This Project is bordered by a high density of residential property. Major sound generating activities, such as sheet pile installation and pile driving, will be limited to the hours of 6 am and 10 pm during allowable work days.

A Level II Contamination Impact Assessment was performed and a Report is included in Reference Document No. 30.

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

The Design-Build Firm shall prepare a component set of Signing and Pavement Marking Plans as part of the Plans Package for review and 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.

A Conceptual Signing Plan (see Reference Document No. 7) was prepared identifying potential signing locations. As part of the Conceptual Signing Plan, signing within the project limits of FPID 406096-1-52-01 and 427146-1-52-01 was also displayed. Signing within the Project limits of FPID 406096-1-52-01 is required to be installed as part of this Design-Build Project.

On concrete bridge decks all longitudinal markings (edge lines and skip lane lines) shall be high performance tape. Transverse lines (gore markings and chevrons), directional arrows and pavement messages shall be standard preformed tape. White skip lines, arrows and pavement messages shall all have a black preformed border.

On concrete pavement (non-bridge decks), high performance contrast tape is required for longitudinal skip pavement markings. Arrows and pavement messages shall be standard preformed tape with black preformed borders. All solid lines (longitudinal edge lines, lane lines and transverse lines) shall be paint.

See Standard Specification Sections 710 and 713.

Pavement markings on asphalt surfaces shall be paint (per Standard Specifications Section 710).

Regulatory sign R5-11 shall be placed at toll facility maintenance pull off area access points. It shall be barrier wall mounted 2 feet from the end and shall be located on the maintenance side of the barrier wall. EOR shall take responsibility for design and detail.

The express lane shall be striped using the "Express Lane Buffer and Transition Detail" (see Attachment No. 21, Express Lanes Access Locations) as well as coordination with the Department regarding acceptance of this striping at the time of design and implementation.

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.

All interchange guide signs for example (1 mile, ½ mile, and exit signs) on the HEFT shall be mounted overhead.

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

All guide signs on local roads with ramp access to the HEFT shall be mounted overhead per Section 2D.45 of the MUTCD. All sign installations on local roads shall be coordinated with the appropriate maintaining agencies. These other agencies include but are not limited to FDOT District 6 and Miami-Dade County.

The Design-Build Firm shall reference the Conceptual Signing Plan and use it as a guide as to where signs are to be placed and as a guide as to messages to be placed on each sign. All header panels for Express Lanes shall have a purple background with the legend "SunPass Only". All header panels on guide signs leading to an AET Facility (HEFT) shall have a white background with the legend "SunPass or Toll-By-Plate". All guide sign layouts shall be reviewed and approved by the Department.

All express lane signs are to be installed over the express lane and centered to the extent possible.

All overhead signs shall be lighted.

If the Design-Build Firm chooses to replace existing sign panels 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.G-3c of this document (Design Variations, Exceptions under the Roadway Plans section).

All sign installations on side streets shall be coordinated with the appropriate maintaining agencies. These other agencies can include FDOT District 6 and Miami-Dade County.

**O. Lighting Plans:**

The Design-Build Firm shall prepare lighting plans in accordance with Department criteria and as outlined in Reference Document No. 10 Lighting Concept Report, for work performed within the limits of FTE, District 6 and Miami Dade County.

**a. General Lighting Requirements**

The Design-Build Firm shall provide all of the professional services and complete all of the associated tasks necessary to prepare the lighting portion of the construction plans and documents for all work within the limits of the Project. Services shall include, but are not limited to: preparation of the lighting design analysis report, key sheet, general notes, legend, pole data, underdeck luminaire data, sign luminaire data, lighting plans for temporary and permanent facilities, underdeck lighting plan sheets, underdeck lighting section/detail sheets, 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. The lighting design

analysis report shall include:

The Design-Build Firm shall provide the lighting design prepared in accordance with section V.A of this RFP and instructions issued by the Department to the Design-Build Firm.

The Design-Build firm shall comply with the requirements of each jurisdictional authority within the Project limits. Included with compliance are meetings, field work and special deliverables to the jurisdictional authority. Jurisdictions include FTE, FDOT District 6 and Miami-Dade County. Refer to Reference Document No. 9 Lighting Concept Report for jurisdictional authorities of intersecting roads.

The Design-build firm shall submit to the Turnpike a Lighting Design Analysis Report and lighting plans 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. As a part of the lighting design analysis report the Design- build firm shall take into special consideration underpass lighting. Photometric analysis and lighting design (including underpass lighting) shall be analyzed on all intersecting streets, roads and pedestrian walkways/trails to meet the design criteria of the respective jurisdictional area. The results of this analysis shall also be included in the Lighting Design Analysis Report.

All proposed lighting equipment and materials shall be new.

The Design-Build firm shall provide sign lighting in accordance with applicable standards for all, new and existing, illuminated signs affected by the scope of this Project. The design analysis shall include photometric analysis of each sign panel. Special care shall be taken to avoid glare and to increase visibility on hybrid static and dynamic message signs. All new and modified installations for sign lighting shall comply with current electrical code and all design criteria identified in Attachment No. 35 and Section V.A. of this RFP.

Where daytime/nighttime underpass lighting is required, the average illumination level and uniformity ratios shall at a minimum match the required level of the adjacent roadways but shall not exceed twice that of the required levels of the adjacent roadways.

Review and evaluate all existing load centers. This review includes: conductors, conduit, distribution equipment, grounding, enclosure, voltage, height, pullboxes, etc. New and modified load centers shall comply with current code and all design criteria identified in Attachment No. 35 and Section V.A. of this RFP.

Where new electrical service is required, the Design-Build firm shall coordinate location of distribution transformer and service pole with local electrical utility to minimize service conductors/conduit lengths. Refer to Utility Electrical Section of this RFP, Section C.1, for additional requirements for new electrical services.

The Design-Build Firm shall perform a detail field review and identify all existing light poles, fixtures, electrical boxes, load centers, circuit routing, signs and sign structures and document these items for review by the Turnpike. This includes circuits outside the scope of work that originates or touches this Project's scope of work.

All new and modified sign structures shall comply with current code and all design criteria identified in Attachment No. 38 and Section V.A. of this RFP.

**b. Scope of Work**

▪ HEFT Mainline

The widening of the HEFT (SR 821) within the Project limits will require demolition of the existing lighting system and installation of new lighting. The Design-Build Firm shall provide new conventional lighting along the mainline from North of Killian Parkway to North of Sunset Drive. There is one load center that supplies power to luminaires located on the HEFT in this section. The load center located on Kendall Drive near Ramp L supplies power to luminaires on the HEFT from Killian to just North of the Kendall Drive intersection. The Design-Build Firm shall replace the load center at this location with a new load center. Additionally, a new load center shall be provided at the Sunset Drive intersection.

• Sunset Drive

The widening of the HEFT at Sunset Drive will require new underpass lighting. The Design-Build Firm shall provide new conventional lighting and daytime/nighttime underpass in the vicinity of the bridge. There are two load centers that supply power luminaires on Sunset Drive within the Project limits. The load center located at 112<sup>th</sup> Ave North supplies power to luminaires on Sunset Drive from SW 108<sup>th</sup> Ave to SW 119<sup>th</sup> Ave. The load center located at 123<sup>rd</sup> Ave supplies power to luminaires on Sunset Drive from SW 119<sup>th</sup> Ave. to SW 127<sup>th</sup> Ave. The Design-Build Firm shall replace the load centers at these existing locations with new load centers.

• Kendall Drive

The widening of the HEFT (SR821) within the Project limits will require modification to the existing lighting system at the interchange. The Design-build firm shall demolish existing lighting within the Project limits and provide new conventional lighting and nighttime underpass lighting. There are two load centers that supply power to luminaires on Kendall Drive within the Project limits. The load center located at SW 112 Pl North supplies power to luminaires on Kendall Drive from SW 110<sup>th</sup> Ave. to SW 118<sup>th</sup> Ave. The load center located at SW 125 Ave. North supplies power to luminaires on Kendall Drive from SR 821 to SW 132<sup>nd</sup> Ave. The Design-Build Firm shall replace the load centers at these existing locations with new load centers.

• Kendall Ramps

Modification of the on and off Ramps at Kendall Drive will require demolition of the existing lighting system and installation of new lighting. The Design-Build Firm shall provide new lighting at each ramp.

- <Killian Parkway>

<The widening of the HEFT within the Project limits will require improvements along Killian Parkway from SW 117<sup>th</sup> Ave. to SW 122<sup>nd</sup> Ave. Ingress and Egress ramps at the interchange will require special consideration so that pilasters are not installed in the clear zone. The Design-Build Firm shall install new conventional lighting and nighttime under pass lighting within the Project limits. There are two load centers that supply power luminaires on Killian Parkway within the Project limits. The Design-Build Firm shall replace these load centers with new load centers>.

**c. FTE-Specific Lighting Requirements**

**d. FTE-Specific Lighting Requirements**

Where new conventional roadway lighting is required, new lighting shall be continuous. Intermixing new and existing poles and luminaires in an area is not allowed.

Longer sections (greater than 4 poles affected) of roadway shall be reviewed for compliance with current lighting criteria. All deficiencies within the Project scope of work shall be addressed and corrected. Deficiencies outside the Project scope of work shall be brought to the attention of the FDOT's Design Project Manager and District Electrical Engineer.

Short sections (4 poles or less) of roadway shall maintain the same lighting level as the existing adjacent roadway.

The Design-Build Firm shall coordinate with Turnpike maintenance to identify existing equipment such as light poles, luminaires and other electrical equipment for salvage. Those items identified by Turnpike maintenance as salvage equipment shall be removed, transported and unloaded by the Design-Build Firm at a location determined by Turnpike maintenance. Existing electrical equipment that Turnpike maintenance elects not to salvage shall be removed and disposed of by the Design-Build Firm.

Work associated with the widening of the Mainline shall include, but is not limited to:

1. The Design-Build Firm shall provide all lighting necessary to meet the Turnpike requirements from the shoulder of the roadway. Median lighting shall only be allowed where approved by the Turnpike and pilasters within the shoulder or on ramps do not project into the vertical and horizontal clearances required by the PPM sections 2.10 and 2.11. The Design-Build Firm shall include all conduits, pull boxes, load centers and light pole pilasters required to achieve compliance with the TPPPH.
2. The Design-Build Firm shall perform detailed review of local ordinances to identify areas inside of the Project limits that require minimum light spillage onto adjacent properties. The Design-Build Firm shall provide a photometric analysis indicating compliance with all local ordinances for light spillage onto adjacent properties where required. Where no ordinances govern light spillage onto adjacent properties, the Design-Build Firm shall provide photometric analysis indicating illumination levels at the boundary of the adjacent property.
3. The Design-Build Firm shall perform a detailed analysis of lighting requirements necessary for

Maintenance of Traffic and temporary lighting in accordance with FDOT and Turnpike standards.

**a. Miami-Dade County – Specific Lighting Requirements**

1. The Design-Build Firm shall perform a detailed photometric study and analysis of Killian Parkway within the Project limits. The detail photometric analysis shall proposed new lighting layouts that show compliance with Miami-Dade County ordinance and lighting design criteria.
2. The Design-Build Firm shall include all conduits, pull boxes, load centers and light pole pilasters required to achieve compliance with Miami-Dade County criteria for lighting.
3. The Design-Build Firm shall coordinate separate load centers for all lighted circuits in the Miami-Dade jurisdiction and maintenance limits and shall be integrated with the corresponding lighting system assuring that the appropriate agency will not be in conflict with the jurisdiction of their maintenance agreements.
4. The Design-Build Firm shall conduct a lighting analysis to determine existing lighting levels and existing conditions for all side streets and under-passes. This analysis shall propose new lighting layouts for side streets and under-passes that are impacted by the HEFT widening.

**b. FDOT District 6 – Specific Lighting Requirements**

1. The Design-Build Firm shall include in the component plans all conduits, pull boxes, load centers and light pole pilasters required to achieve compliance with FDOT District 6 criteria for lighting.
2. The Design-Build Firm shall coordinate separate load centers for all lighted circuits in the FDOT District jurisdiction and maintenance limits and shall be integrated with the corresponding lighting system assuring that the appropriate agency will not be in conflict with the jurisdiction of their maintenance agreements.

The Design-Build Firm shall conduct a lighting analysis to determine existing lighting levels and existing conditions for all side streets and under-passes. This analysis shall propose new light layouts for side streets and under-passes that are impacted by the HEFT widening.

**P. Signalization Plans**

The Design-Build Firm shall prepare a component set of Signalization Plans as part of the Plans Package for review and in accordance with Department criteria. All plans are to be prepared in accordance with the criteria set forth 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 Signalization Plans included in Reference Document Nos. 8 and 9 were approved by Miami-Dade County, which is the maintaining agency. If the Design-Build Firm modifies the intersection geometrics then these plans will need to be updated. Plans shall include notes, plan sheets, and details. The Design-Build Firm shall coordinate with Miami-Dade County to include their required notes, details and other signalization conventions, and get written approval of the proposed signalization plans. The Design-Build Firm shall coordinate with Miami-Dade County for the placement of loops along the exit ramps that are being milled and resurfaced as part of this Project.

The following list is a compilation of the signalized intersections within the limits of this Project and impacted by changes proposed in this RFP:

1. <Killian Parkway (SW 104<sup>th</sup> Street) and SW 117<sup>th</sup> Ave>.
2. <Killian Parkway (SW 104<sup>th</sup> Street) and the HEFT AET express lanes>.
3. <Killian Parkway (SW 104<sup>th</sup> Street) and SW 122<sup>nd</sup> Ave>.
4. Kendall Drive (SW 88<sup>th</sup> Street) and the HEFT SB exit ramp.
5. Kendall Drive (SW 88<sup>th</sup> Street) and the HEFT NB exit ramp.
6. Sunset Drive (SW 72<sup>nd</sup> Street) and SW 117<sup>th</sup> Ave. (See Reference Document No.5)

## **Q. Intelligent Transportation System Plans**

### **1. General**

The Design-Build Firm shall prepare Intelligent Transportation System Plans in accordance with Department criteria and Attachment No. 29 Minimum Technical Requirements for Intelligent Transportation Systems.

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:

- Key Sheet
- General notes and legend
- Project Layout / Overview sheets outlying the locations of field elements
- Detail sheets on:
  - DMS structure, attachment, and display/layout
  - CCTV structure, attachment, and operation/layout
  - MVDS structure, attachment, and operation/layout
  - TTS structure, attachment, and operation/layout
  - HARB structure, attachment, and operation/layout
  - Wireless communication system
  - Fiber optic splice and conduit
  - Power service distribution and generator details
  - Wiring and connection details
  - Conduit, pull box, and splice box installations
  - Communication Hub and Field Cabinets
  - System-level block diagrams
  - Device-level block diagrams
  - Field hub/router cabinet configuration details
  - Fiber Optic Splicing Diagrams
  - System configuration/Wiring diagram/Equipment Interface for field equipment at individual locations and communications hubs
  - Maintenance of communications (MOC) plan.

The Design-Build Firm shall detail existing Intelligent Transportation System equipment and report which devices will be removed, replaced, or impacted by Project work.

## 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 the fiber optic network (FON) communications infrastructure within the Project limits. Refer to the concept plan for existing ITS equipment locations. In addition, 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 HEFT are owned, operated and maintained by the FTE. The majority of the ITS System components and also existing AET tolling facilities (mainline and ramp) 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 HEFT.

The ITS components shall be defined as follows:

1. Closed Circuit Television (CCTV) Camera System: The CCTV Camera System on the HEFT 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 installed 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 installed along the corridor.
3. Dynamic Message Sign System (DMS). The DMS consists of both mainline and arterial dynamic message signs (ADMS) and provide roadway information and travel times. The mainline DMS are located at select locations along the corridor. The ADMS are located on each approach of major arterials to SR 821. The mainline DMS are connected and communicate with the FTE Operations Center via the 96-count single mode FOC communications backbone installed along the corridor. The ADMS communicate with the FTE Operations Center via wireless radios to a hub site connected to the 96-count single mode FOC communications backbone installed along the corridor.
4. 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 located at approximately one-half (1/2) mile intervals. The detectors are installed on stand-alone concrete poles and/or attached to other ITS device structures in a side-

- fired configuration 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 installed along the corridor.
5. Highway Advisory Radio (HAR) System: The HAR System within the Project limits one Highway Advisory Radio Beacons (HARB). The HAR System uses a Federal Communications Commission (FCC) licensed radio frequency to broadcast messages on a designated radio frequency when activated by TMC from the FTE Operations Center. During activation, the HARB flashes to advise motorists to tune-in to the designated radio station. The HARB components are solar powered and communicate with the HART wirelessly.
  6. Fiber Optic Network (FON): The HEFT FON infrastructure provides communications for FTE's ITS and Tolls 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 and at existing toll plazas along SR 821 (HEFT).
  7. For clarification purposes, any reference in this RFP to the mainline fiber optic backbone that is installed along the corridor shall be defined as the "backbone". The fiber optic cable between the backbone and a building (ramp and mainline locations) shall be defined as the "Tolls lateral". The fiber optic cable between the backbone and ITS components shall be defined as the "ITS lateral".
  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 installed 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. The majority of ITS components are connected to the backbone through a lateral twelve (12) count single mode fiber optic cable inside two (2), 1.25-inch HDPE conduits of which one is a spare. 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 optic cable connection.
  10. The FTE Tolls Communications Network includes but is not limited to the fiber optic drops from the backbone to each toll plaza as well as fiber optic cable that interconnects ramp toll plazas within the various interchanges and all other associated communications elements. The lateral drops for the existing toll plaza consist of a twenty-four (24) count single mode fiber optic cable for ramp plazas and forty-eight (48) count single mode fiber optic cable for mainline toll plazas. The mainline and ramp toll plaza lateral drops typically consist of two (2), 2 inch underground conduits of which one is a spare. For additional details and requirements for Toll Plaza communications infrastructure, refer to the General Tolling Requirements (see Attachment 38).

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

The Design-Build Firm shall be responsible for all ITS design and engineering services relating to the Project. All ITS system components shall be new unless otherwise identified for relocation.

The design of the new system shall integrate with the existing devices where applicable. The design shall include the necessary infrastructure and components to ensure proper connection of the new sub-systems. This shall include but not be limited to all proposed sub-systems of this Project as well as existing sub-systems that remain or are re-deployed as the final Project.

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

- Replacement of any ITS System components that are impacted by the Design-Build Firm's scope of work as approved by the Department. All equipment shall be new unless otherwise specified.
- DMS – Includes sign support structures, static signs, and mounting brackets for lane control, lane status, toll amount, travel time and full size DMS.
- CCTV – Includes concrete poles, camera lowering devices and mountings to provide 100% CCTV coverage of the Project corridor. In addition, each express lane DMS shall have a dedicated verification CCTV.
- MVDS - Includes concrete poles and mountings to detect all general purpose and express lanes along the Project corridor. MVDS devices shall be spaced at ½ mile intervals on each side of the roadway.
- TTS – Includes concrete poles and mountings to detect toll transponders at the identified locations.
- Ensure the continuous operation of all existing ITS System components including the HEFT ITS fiber optic cable (FOC) communications backbone (backbone) and the FOC lateral drops (lateral drops) to all ITS System components and toll plazas within the Project limits until such time a similar replacement device is in place and operational as approved by the Department.
- Power Generator System and Power Report
- Removal of any ITS System components that are impacted by the Design-Build Firms scope of work as approved by the Department.
- Provision of lateral drops from the backbone to the new ITS Equipment, toll equipment buildings and Gantries. See the General Tolling Requirements (Attachment No. 35) for additional information.
- Removal of the existing lateral drops from the backbone to the existing mainline toll facilities and from the existing ramp toll facilities that will or may be removed as part of this Project. The lateral drops disconnected from the backbone shall be re-spliced “in-kind” to match respective fiber strand(s) and buffer tube(s) as approved by the Department. The existing lateral drop conduit(s), pull boxes and splice boxes shall be removed as described in Section C - Utility Coordination of this RFP and in the Tolling Infrastructure Requirements (see Attachment No. 35).
- Testing of fiber optic backbone and lateral drops furnished and installed or modified by the Design-Build Firm.
- Testing of the Intelligent Transportation System.
- Testing of the end-to-end express lanes system.
- Coordinate with the Design-Build Firm to avoid conflicts with landscape plans within the Department Right of Way. While procedures are being revised to facilitate this increased collaboration and cooperation, the Design-Build Firm is required to ensure that the design and construction of each ITS Project and each landscape Project is entirely coordinated with existing and proposed ITS facilities and landscapes. Both programs have been determined to be important components of the state transportation system.
- Refer to Section L.3.c for Temporary ITS requirements.
- See Attachment No. 29, ITS Minimum Technical Requirements for additional requirements.

## **R. Landscaping Plans**

### Landscape Design Intent:

The Final Landscape Opportunity Plan shall be prepared by a Florida Registered Landscape Architect and shall reflect the design intent of significant planting areas indicated on the Landscape Opportunity Roll Plots (Reference Document No. 28) based on the FDOT BOLD Vision Initiative (BOLD) and the Florida Turnpike Enterprise BRAND Guidelines. The Design-Build Firm's Landscape Architect (DBLA) shall coordinate directly with the Florida Turnpike Enterprise Landscape Architect (FTELA) and the Design Landscape Architect (DLA) for information regarding the design concepts and planting materials utilized along the Florida Turnpike right of way. The intent is to create a unified Landscape theme throughout the Turnpike Roadways to create a Bold Vision and Branding. The Landscape Opportunity Plan design is based on complying with the FDOT BOLD Vision (BOLD) and the Florida's Turnpike Enterprise BRAND Guidelines (BRAND) landscape concepts.

The website for BRAND document is at the following URL address:

[http://www.floridasturnpike.com/design/prod\\_design/tppph/2013/Turnpike%20Landscape%20Brand%20Guidelines\\_March%202013.pdf](http://www.floridasturnpike.com/design/prod_design/tppph/2013/Turnpike%20Landscape%20Brand%20Guidelines_March%202013.pdf)

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

In preparing their construction documents the Design-Build Firm shall consider other disciplines that have flexibility to accommodate to greatest extent the preservations of the landscape opportunity areas shown. Other disciplines shall include, but not limited to, roadway, environmental, drainage, utilities, signing, lighting and ITS.

The Design-Build Firm shall identify potential conflicts relating to preserving these landscape areas and provide suggested resolutions to preserve landscape opportunity areas. If conflicts exist, the Design-Build Firm and DBLA shall discuss with the Department's Project Manager and Florida's Turnpike Enterprise Landscape Architect (FTELA) for coordination and potential resolution.

As many existing trees and palms as possible should either remain in place or be relocated to areas that will not be impacted during construction. Some of these areas have been identified on the Landscape Analysis roll plots and are by no means exhaustive. The DBLA shall study existing conditions and roadway construction impacts, including maintenance of traffic plans and make every effort to retain as many existing trees and palms that are healthy and in good condition (minimum Florida #1 grade) as possible. Creative solutions in new construction methods and effective drainage designs are welcome.

It will be the responsibility of the Design-Build Firm for the removal of invasive exotic plant materials within the Project limits. These are defined by the *Florida Exotic Pest Plant Council* ([www.fleppc.org](http://www.fleppc.org)) as Category I invasive exotics. These invasive exotics shall also be removed as necessary until final Project acceptance.

The Design-Build Firm shall provide the necessary inventory, analysis and prepare a "Landscape Opportunity Plan" (Opportunity Plan) as part of the roadway plan. The Landscape Opportunity Plan shall consider the Design-Build Firm's all proposed improvements and indicate setbacks and clear zone dimensions in identifying future landscape planting areas. Confirmation analysis and Opportunity Plan shall accommodate, to the extent possible, the Department's desire to maintain landscape areas, as identified in the Conceptual Landscape Opportunity Plan.

The Opportunity Plan shall include the following:

1. Updated with all proposed improvements and existing elements to remain associated with the Project
2. Existing vegetation groupings that will remain. Include vegetation information as identified above
3. Wetland jurisdictional lines
4. Proposed drainage retention areas
5. Label all existing to remain and proposed utilities
6. Objectionable or desired views
7. Locations of landscape opportunity planting areas in a bubble format which identifies various vegetation groupings in a hatched or colorized manner.
8. Provide and label all 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. Indicate potential area for wildflower plantings.

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

The DBLA shall research and confirm any legally permitted outdoor advertising billboard (ODA) within 1000-ft. of the Project limits. The ODA sign(s) and 1000-ft. maximum vegetation protection zone limit shall be indicated on the plans. The DBLA shall register with the FDOT Central Office Landscape Architect intent of this Project. The DBLA shall provide copy of all correspondence and attachments to the FTELA. A preliminary review of the corridor is included for Reference.

The Design-Build Firm shall conduct a visual survey of existing vegetation within the entire Project limits. Refer to Analysis Plan. It is the intent to preserve existing trees and palms that do not conflict with proposed improvements to greatest extent possible. Continued coordination during the design process between the Design-Build Firm and other design disciplines are required to achieve this goal.

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 in a clear legible manner. It shall be determined by the Design-Build Firm how this information will be provided on the plans. This information shall be provided on 90%, Final component Plans and Construction set. A listing of trees/palms that may be subject to relocations, those that meet Fla. No. 1 quality and are in conflict to proposed improvements, shall be itemized as to location and species including height, spread and caliper dimensions. These shall be located on the Opportunity Plan for identification. Discuss and coordinate tree and palm disposition with FTELA prior to incorporation into Opportunity Plan and construction documents for concurrence.

All existing palm trees will be trimmed to remove all seed pods and dead, damaged or diseased fronds. Existing palms and trees shall be maintained as necessary until final acceptance.

Tree and palm protection of vegetation to remain shall comply with FDOT Standard Index 544 or other acceptable FTE method. Protection areas and methods shall be included on the roadway plans. These locations shall be coordinated with the DBLA.

The locations of noise walls adjacent right-of-ways shall consider area depth to accommodate future landscape opportunity planting strips to greatest extent possible. Discuss and coordinate noise wall placement intent with the Department's Project Manager and FTELA prior to incorporation into construction documents for concurrence.

The Design-Build Firm shall meet with the FTE Landscape Architect prior to beginning work for the purposes of coordination and discuss Landscape Opportunity plan and direction of the BRAND landscape design guidelines. As the Design-Build Firm progresses with the design, provide overlay of the roadway on the Opportunity Plan to identify changes to the planting areas as applicable. Discuss with the Department's Project Manager and FTELA. The Drainage Engineer shall participate in discussion with the DBLA

for the purposes of coordination and avoiding conflicts where possible between the preliminary and final drainage design efforts and the Conceptual Landscape Opportunity Plan areas.

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 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 FTE EMO office, The Turnpike Drainage Office and Department's Landscape Architect. Trees may not be planted within 10 feet of storm sewer pipes and utilities.

Documentation of all meetings and decisions are to be submitted to the Department's Project Manager and FTELA by the Design-Build Firm. These activities should be coordinated through the Department's Project Manager.

### **S. Existing Tolling**

The following list of Department-owned and -operated existing toll collection facilities which are "All- Electronic Tolling" (AET) gantries are either located within or in the proximity of the Project limits:

- a) **Kendall Drive (SW 88th Street) Eastbound to Southbound On-Ramp (Ramp C)**
- b) **Kendall Drive (SW 88th Street) HEFT Northbound Off-Ramp (Ramp E)**

It is the Department's requirement that these existing tolling points will remain in service throughout construction and that new facilities to be constructed will be activated prior to demolition of these tolling facilities. The Design-Build Firm may submit an Alternate Technical Concept (ATC) that incorporates the reuse of existing tolling infrastructure (gantry, equipment building, etc.) unless doing so is in conflict with design criteria requirements. Any ATC that incorporates the reuse of an existing tolling infrastructure shall not extend the contract duration as set forth in the existing RFP under any circumstances. The Department shall have sole authority to determine whether the reuse of tolling infrastructure on the Project is in the Department's best interest, and the Department reserves the right to reject the reuse of any toll facilities.

The Design-Build Firm shall disclose to the Department all tolling components to be reused. If a Design- Build Firm submits a Technical Proposal that incorporates the reuse of tolling infrastructure and the Design-Build Firm fails to discuss such a proposal with the Department as part of the ATC

process, then the Department shall not consider such aspects of the Proposal during the Evaluation process.

If the Design-Build Firm's Technical Proposal incorporates the reuse of tolling infrastructure, the Design-Build Firm shall be responsible for maintaining the existing facility fully operational until the new tolling point utilizing existing tolling infrastructure is fully constructed and accepted by the Department and until the tolling equipment is installed and tested by the Department's TEC and commissioned by the Department such that it's ready to collect tolls. If the Design-Build Firm's Technical Proposal requires a closure of a tolled ramp or a suspension of tolls at a tolled ramp, it must be identified during the ATC process, including anticipated duration. If a toll ramp closure or suspension of tolls is approved by the Department, the Department shall provide the Design-Build Firm an estimate of revenue loss, associated with the closure. At the time the Design-Build Firm returns the executed contract to the Department, the Department shall withhold the estimated revenue loss amount associated with a toll ramp closure or suspension from any monies due to the Design-Build Firm.

The Design-Build Firm shall be responsible for the design and construction of the new tolling point (s) in accordance with the GTR provided as Attachment No. 35 to this RFP. The Design-Build Firm shall also be responsible for construction of utilities and any required utility fees and permits needed to serve the new toll structure or facility. The Design-Build Firm will demolish the existing toll structure and/or facility after the new facility is operational such that it is collecting tolls and the Department has removed any items such as tolling equipment and other toll facility assets for salvage. Design-Build Firm is responsible for identifying in the Technical Proposal all structures to be demolished including existing, inoperable mainline gantries. The Design-Build Firm shall identify in the Technical Proposal, which toll facilities will be replaced and the replacement location of a the new toll facility

All costs, incurred by the Department for the installation and testing of toll equipment shall be borne solely by the Design-Build Firm. The Design-Build Firm shall bear all risk of delays in the removal, installation and testing of toll equipment, regardless of cause or source. The Department will provide to the Design-Build Firm an estimate of all costs related to the installation, testing and removal of toll equipment for the Project. At the time the Design-Build Firm returns the executed contract to the Department, the Department will withhold the estimated revenue loss amount associated with a toll ramp closure or suspension from any monies due to the Design-Build Firm.

#### **T. New Toll Equipment Structure (TES) Site Location**

The proposed location of each mainline express lane tolling point is indicated in Reference Document No. 1, the Composite Project Overview and Reference Document No. 11, the Concept Tolling Plans. Each tolling point shall have gantry as noted below and appropriate building installed. The tolling equipment will be placed over the lanes as noted below. The following is a list of the new tolling points.

- a) Gantry #1 (Non-Accessible ) Kendall Drive (SW 88<sup>th</sup> Street) Ramp C tolling single lane ramp and shoulders. Gantry #1 will also toll Kendall Drive westbound to southbound entry traffic.
- b) Gantry #2 (Non-Accessible) HEFT Kendall Mainline Express Lanes: tolling express lanes and adjacent shoulders.
- c) Gantry #3 (Non-Accessible) Kendall Drive (SW 88<sup>th</sup> Street) Ramp E tolling all ramp lanes and shoulders.

The proposed tolling point locations, represent locations that have been reviewed by and are acceptable to the Department. If the Design-Build Firm's Technical Proposal incorporates tolling point location (s) other than those depicted in the reference documents, the Design-Build Firm shall discuss such a proposal with the Department as part of the ATC process. If a Design-Build Firm submits a Technical Proposal with tolling point locations other than those indicated in the reference documents and the Design-Build Firm fails to discuss such a proposal with the Department as part of the ATC process, then the Department shall not consider such aspects of the Proposal during the Evaluation process.

Refer to Attachment 35 – GTR for additional information for locating gantries.

**U. Building Criteria:**

The Design-Build Firm shall prepare an Architectural Plans Package (plans and Technical Special Provisions for new, renovated, and demolition work). This work effort includes the architectural design, site adaptation of the Conceptual Tolling Plans (See Reference Document No. 11), site adaptation of any additional Department provided generic/standard documents, and structural analysis to complete the set of Site Civil Plans, Architectural Plans, Structural Plans, Electrical Plans, Mechanical/Plumbing Plans and other necessary documents to furnish complete turnkey and seamless toll facilities.

Refer to the GTR document (Attachment No. 35), included as part of this RFP, for information and architectural requirements regarding building criteria associated with the tolling point sites.

The Design-Build Firm shall meet the following architectural requirements, except where noted that another party is responsible. Refer to sample documents that are provided for information and design intent. Except as otherwise noted all new toll equipment buildings shall comply with the general design intent of the sample documents in their entirety. Modifications and upgrades shall be furnished where required for compliance with current codes and standards. In case of discrepancy, the GTR (Attachment No. 35) shall supersede the Concept Tolling Plans (See Reference Document No. 11), from an electrical/mechanical standpoint.

1. General Building Architectural Requirements

The architectural work for this Project includes preparation of a complete Architectural Plans package and Technical Special Provisions and the complete design of the tolling points specified in accordance with this RFP. The Design-Build Firm shall develop and prepare all design and construction documents in compliance with the latest adopted edition and supplements of the Florida Building Code (FBC) and other codes and standards having jurisdiction over this Project, submit all documents through the Department's representative to obtain all building permit approvals and State Fire Marshall approvals in compliance with all applicable codes, regulations, and/or standards, as well as other Department requirements as described in this RFP.

In some cases, more stringent standards for some products and/or systems are deemed necessary by the Department. Refer to GTR Building Architectural Requirements section for general new construction criteria.

2. General Building Demolition Requirements

- a) With exception of HVAC equipment, SPDs, UPSs, standby generators, and diesel fuel tanks, all items, fixtures and accessories noted to be demolished and removed shall become the property of

the Design-Build Firm unless otherwise noted. Coordinate with District Facilities Maintenance for specific equipment, components, and fixtures to be salvaged, transported, and delivered to the District Facilities Maintenance yard located on SR 91 at Milepost 254 (Orlando South) for future reuse. All materials capable of being recycled shall be recycled.

- b) All toll buildings identified to remain shall be protected from damage during construction. Any damage by the Design-Build Firm shall be repaired at their expense.
- c) All toll buildings identified to remain and be modified shall have climate control, proper water intrusion control and security control to maintain a fully functioning facility.
- d) All toll equipment shall be removed by the TEC. Removal of toll equipment from the tunnels and gantries shall be coordinated with the Department.
- e) The Design-Build Firm shall properly seal and secure (temporarily and permanently) all voids left by toll equipment removal or other penetrations into buildings to remain to control water intrusion, climate control and security of the building.
- f) This Project will require strict coordination and scheduling with the Department.
- g) Coordinate civil site plans with all other drawings.
- h) All exposed existing and proposed grade mounted equipment, such as generators, fuel tanks, air-conditioning (HVAC) equipment and other equipment that may be subject to damage from lawn mowers and other vehicular equipment shall be protected from damage. Equipment protection shall be in accordance with the GTR.
- i) Electric bug zappers, where they exist, shall be removed including support poles, all hardware and wires back to the source on buildings to remain, all other locations shall be demolished and removed.
- j) All disturbed finishes shall be repaired to match existing adjacent finishes. Where walls are demolished and floor finishes cannot be matched, similar materials of similar or contrasting colors and patterns as approved by the Department can be used. All floors must have level walking surfaces with no trip hazards. Ceiling tile systems shall be patched to match adjacent finishes or systems or ceiling system shall be removed when indicated.
- k) All surfaces worked on or areas with adjacent work shall be repainted or repaired as applicable to maintain a uniform painted or matching finish to match existing color texture and materials both on the interior and exterior of the facilities for floor, walls and ceilings.
- l) Access control and security door hardware shall be in accordance with the GTR.
- m) All total demolition, selective demolition, and renovation activities shall be coordinated with Building Demolition Requirements in the GTR and the Department provided asbestos and/or lead based paint reports in Reference Document No. 17.

3. Site Specific Architectural Requirements

**a. Kendall Ramp C and Ramp E**

FPID 417544-1 scope included the construction of the existing AET Phase 1 and Phase 2 ramp tolling points on Kendall Drive Ramp C (also identified as Ramp L in older projects) and Ramp E and demolition of above ground tolling point site components of the previous Ramp Plazas. Existing foundations and utilities for the Ramp Plazas were abandoned in place. The Design-

Build Firm shall demolish and completely remove all above and below grade foundations and utilities, including but not limited to potable water, irrigation systems, sanitary sewer piping and septic system, abandoned in place during AET Phase 1 and Phase 2 construction. The Design-Build Firm shall be responsible for all utility permits and local agency coordination associated with the removal of existing active or abandoned utilities. Refer to plans for State Project No. 97870-3349, plans for FPID 412274-2, plans for FPID 406096-1 and plans for FPID 417544-1. Kendall Drive Ramp C/Ramp L and Ramp E site specific civil demolition and complete removal includes the following:

- a) Ramp C /Ramp L water service from point of connection within the southerly right of way of Kendall Drive at approximate Kendall Sta. 380+16.00 to Ramp L approximate Sta. 58+83. (Reference State Project No 97870-3349 stationing)
- b) Ramp C/Ramp L sanitary piping and septic system components from Ramp L approximate Sta. 57+62 to approximate Sta. 59+02. (Reference State Project No 97870-3349 stationing)
- c) Ramp C/Ramp L treadle drains from Ramp L approximate Sta. 58+36 to approximate Sta. 58+62. (Reference State Project No 97870-3349 stationing)
- d) Ramp E water service from point of connection at the westerly right of way of S.W. 89th Street at Ramp E approximate Sta. 122+35.00 to approximate Sta. 117+18. (Reference State Project No 97870-3349 stationing)
- e) Ramp E sanitary piping and septic system components from Ramp E approximate Sta. 115+79 to approximate Sta. 117+26. (Reference State Project No 97870-3349 stationing)
- f) Ramp E treadle drains from Ramp E approximate Sta. 117+33 to approximate Sta. 117+67. (Reference State Project No 97870-3349 stationing)
- g) Ramp C/Ramp E demolish and remove toll canopy column foundations that were abandoned in place. Coordinate with profile grades.
- h) Kendall Ramps C and E are unmanned tolling points. Demolition must be conducted without interrupting FTE Toll Collection Operations.

**b. Existing Toll Equipment Buildings at: Kendall Drive Ramp C and Ramp E**

- 1) Demolish and Remove existing Toll Equipment Buildings. Demolish and remove existing Non-Accessible Gantries, and site improvements (including maintenance pull off, equipment pads, barrier wall and sidewalk) after new tolling points have been constructed, tested, and are operational.
- 2) All toll equipment, electrical equipment and HVAC equipment shall be removed, salvaged and delivered to the Department unless otherwise directed.
- 3) Existing Toll Equipment Buildings or Non-Accessible Gantries shall not be re-used unless approved through the ATC process.
- 4) Utility Permits

The Design/Build Firm shall be responsible for preparing and submitting any necessary permit applications and all documents required to obtain permits required for all utility work. All costs associated with utility permits shall be the responsibility of the Design/Build Firm. When a permit is required, the Design/Build Firm shall submit the permit applications and copies of all permit application required construction documentation to:

Mr. Dan Ekback  
Permit Engineer  
daniel.ekback@dot.state.fl.us  
(954) 934-1205

**V. Tolling Infrastructure Requirements**

The Design-Build Firm shall furnish and install tolling infrastructure per the Florida’s Turnpike Enterprise General Tolling Requirements (GTR), Attachment No. 35 which is by this reference hereby incorporated into and made a part of this RFP.

The GTR can be downloaded from the following link: <http://www.floridasturnpike.com/design/>

The table below is a complement to the GTR and contains infrastructure types and quantities that shall be furnished and installed by the Design-Build Firm.

Infrastructure Type & Quantity	Tolling Point		
	Ramp C	Kendall Mainline Express	Ramp E
Gantry Type	Non Accessible	Non Accessible	Non Accessible
Gantry Quantity	1	1	1
Pavement Type	Asphalt	Asphalt	Asphalt
Building Type	New	New	New
Building Quantity	1	1	1
E6 Reader Location	Inside Building	On truss, over shoulder	Inside Building
Building Communication Type	Fiber	Fiber	Fiber

In addition to the requirements in the GTR, the Design-Build Firm shall:

- Apply the Structures Design Bulletin 13-01 to dual and median barrier walls where PPM required offsets to structures or hazards cannot be met.
- Remove both mechanical louvers, condensate floor drain and the temporary portable HVAC unit dedicated power receptacle from the Toll Equipment Building design requirements currently shown in the GTR.
- Accessible gantry arm re-design (exact language under development).
- Accessible gantry latch re-design (exact language under development).

**W. Maintenance Requirements**

The intent of this Project is to replace, repair or rehabilitate all deficiencies within the Project limits such that maintenance work required upon final acceptance is limited to minor or routine work. Attachment No. 31, FTE Maintenance and Access Requirements Memorandum provides requirements that are based on interviews and field reviews with representatives of Florida’s Turnpike Enterprise (FTE) Maintenance Department. The memorandum details general comments from the interviews with FTE Maintenance, as well as an outline that identifies the maintenance and access issues for each location along the corridor.

**The following are FTE Maintenance Requirements:**

1. FTE Maintenance requires a slope of 1:2 maximum for the side slopes.
2. The mowing cycle during construction, shall be performed by the D/B Contractor.
3. Existing guardrail to remain shall be maintained. Portions of the guardrail that are damaged shall be replaced. Mostly all of the existing guardrail will be replaced in the widening.
4. Breaks in guardrail are the preferred method of maintenance access inside the corridor. For approximately every 1000' to 2000' of guardrail, a break is necessary for maintenance access behind the proposed guardrail. Because of proposed cross slopes and horizontal clearance to the R/W, FTE Maintenance has recognized the construction of the maintenance pull off area required for a break in guardrail may not be feasible in some areas along the corridor.
5. If existing cable barrier is to be removed due to widening, retain canal protection with guardrail along the shoulder.
6. Existing median cross over access should be maintained during construction.
7. If materials are not to be reused, FTE Maintenance will have the option to take back salvageable materials (light poles, crash attenuators, etc.). If FTE Maintenance does not wish to retain the salvageable materials, disposal of these materials will be the D/B Contractor's responsibility.
8. Any abandoned pipe should be grouted and capped, or removed.
9. If riprap underneath canal bridges is to be replaced or extended, do not mix and match replacement material.
10. FTE Maintenance requires that all existing fencing within Project limits be replaced with 6' Type B fencing with barbed wire attachments.
11. Areas underneath all bridge interchanges and overpasses must be fully enclosed with fencing in order to prevent trespassers from dwelling underneath the bridges. Fencing should run along the back of the sidewalk on the cross streets and up along the immediate edge of the slope pavement up to the bridge abutments.
12. Proposed gate access should only be utilized where there will be no maintenance access through proposed breaks in guardrail. When access gate locations are to be replicated, the gate design is to be replaced in kind.
13. Proposed noise wall along the R/W must be constructed offset 4' minimum from R/W. This offset can be reduced and the noise wall could be constructed directly on the R/W line, only if the existing properties affected by the proposed noise wall belong to an association or community that agrees to maintain the area behind the noise wall. FTE will approach these associations where noise walls are being proposed and secure the necessary agreements regarding any maintenance. When proposed noise wall is unable to be constructed directly on the R/W, L.A.

R/W fencing is to be replaced/constructed on the R/W line between neighboring properties and the proposed noise wall. The fencing should be 6' Type B fence with barbed wire attachments.

14. In order to maintain the area between the L.A. R/W fence and the noise wall, FTE Maintenance will require an access opening where feasible, if the noise wall exceeds 1000' in length.

15. All existing noise walls within the Project limits are to be pressure washed.

## 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

The minimum information to be included:

#### Section 1: Project Approach

- Paper size: 8½" x 11". The maximum number of pages shall be 15, 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.

Section 2: Plans and Technical Special Provisions

- Paper size: 11" x 17". Plan and Profile views of the proposed improvements may 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 prohibited and will not be considered by the Proposal Evaluators, if included. 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.
- Provide Technical Proposal Plans in accordance with the requirements of the Plans Preparation Manual.
- The Plans shall complement the Project Approach.
- Provide any Technical Special Provisions which apply to the proposed work. Paper Size: 8½" x 11".

In addition to the minimum information required to be submitted per PPM Volume II, Chapter 2 for Design-Build projects, submit the following:

**Roadway Plans**

- Express lane ingress/egress layout
- Pedestrian path along south side of Kendall Drive crossing the HEFT ROW
- Plan & Profile –Plan View Existing Utility disposition
- Major drainage infrastructure for interconnection of stormwater management facilities
- MOT Typical Sections included in Phasing Plan

**Signing and Pavement Marking Plans**

- Pavement Markings
- Plan View ingress/egress express lanes including tubular delineator limits
- All existing guide signs to remain
- DMS and express lane toll rate structure locations

**Lighting Plans**

- Pole Layout depicting agency responsibilities
- Under deck lighting

**ITS Plans**

- Preliminary ITS conduit layout
- ITS device locations
- Power generator locations

**Landscaping Plans**

- Opportunity Roll Plot

**Toll Facility Plans**

- Structural – including Gantry layout and dimensions

In addition to the minimum information required to be submitted per PPM Volume I, Chapter 26 for Design-Build projects, submit the following:

**Structures Plans**

- Foundation Submittal:
  - Show proximity of proposed to existing and proposed utilities

**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:

<b>Item</b>	<b>Value</b>
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 the quality and suitability of the following elements:

- Roadway design / and safety
- Structures design
- Drainage design that addresses treatment and collection systems, impaired outfalls
- Environmental design and Permitting clearly presenting an understanding of firm's expectation.
- Geotechnical design including investigation plan, ground improvement plan and test load programs.
- ITS Design
- Traffic Control Plan design which: provides shoulder to maximum extent practical to aid with incident management and disabled vehicles, provides for pedestrian and equestrian needs, provides for adequate temporary signing include guide and informational signs, that minimizes the impacts on the local streets, maintains preconstruction speeds,
- Signing and Marking design which is: well coordinated with the ITS design, well thought out with the phased opening of portions of the project, that clearly conveys message to motorists <on Killian Parkway>.
- Lighting Design which: is well integrated with other disciplines, identifies approach to under deck lighting, explains understanding of various stakeholder jurisdictions
- Toll facilities demonstrating an understanding of RFP
- Utility Coordination and Design to minimize impacts to utilities
- Landscaping design to embrace bold vision and ultimate needs for future landscaping program and coordination of design disciplines to keep landscaping areas free of other improvements or project needs
- Aesthetics

Credit will be given for quality of roadway geometrics including pavement design, overbuild and overlap details, cross sectional elements, roadside elements and coordination with other disciplines, express lane layout and pedestrian provisions.

Credit will be given for aesthetics features of the design including but not limited to the following: considerations in the geometry, 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, access to ITS system, access to drainage and ponds, and impacts to long term maintenance costs, access to maintain items with short service life should be achieved without lane closures to the maximum extent practical.

Credit will be given for ITS design and construction that:

- Minimize disruption to current ITS operations
- Improve system maintainability and reliability
- Consider provisions made to allow ITS integration to be concurrent with the completion of the roadway construction.

**2. Construction (\_30\_ points)**

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

- Safety
- Roadway construction
- Structures construction
- Drainage construction
- Minimizing impacts to adjacent properties and structures through construction
- Implementation of the Environmental design and Erosion/Sediment Control Plan
- ITS Construction
- ITS testing with a partially open roadway
- Coordination of ITS relocation/installation with adjacent construction projects relocation/installation
- Implementation of the Maintenance of Traffic that: minimizes disruptions to toll collections and operations, minimizes off system detours, minimizes reductions in lane widths and shoulders, maximize merges and transition distances, minimizes impacts to adjacent projects, minimizes impacts to adjacent businesses and property owners.
- 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.

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

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	5 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)

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.

**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 average 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 \$118,000 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 execute with original signatures and have delivered to the Department no later than one (1) week after the Short-List has been posted, 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. 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.