

*Florida Department of Transportation*  
*District 4*

**PHASED DESIGN-BUILD (PDB)**

**REQUEST FOR QUALIFICATIONS (RFQ)**

**for**

**SW 10<sup>th</sup> Street Connector and SR 9/I-95 from South of SW  
10<sup>th</sup> Street to North of Hillsboro Boulevard, Broward  
County**

**Financial Projects Number(s): 436964-2-52-01, 436964-2-52-02, 436964-2-56-  
02, 439891-1-52-01, 439891-1-56-02, 439891-1-56-03, 439891-5-52-01, and  
439891-5-52-02**

**Federal Aid Project Number(s): D422 005 B, D422 068 B, and D422 077 B  
Contract Number: E4V72**

**Addendum No. 2 – April 5, 2024**

**This revised RFQ constitutes Addendum No. 2 for the above referenced project**

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**Capitalized terms not defined in this Request for Qualifications (RFQ) utilize the definitions found in the Florida Department of Transportation Division I Design-Build Specifications. Unless otherwise noted, “days” shall refer to calendar days throughout this RFQ, and “work days” shall mean calendar days, excluding Saturdays, Sundays, and FDOT recognized Holidays.**

## ATTACHMENTS

The Attachments listed below are hereby incorporated into and made a part of this RFQ as though fully set forth herein. See herein this RFQ for clarifications for the application of Attachments and Governing Regulations to this Project.

- A. Project Advertisement
- B. Division I Design-Build Specifications (PENDING)
  - Award and Execution of Contract – Public Records (SP0030900DX)
  - Legal Requirements and Responsibility to the Public – Responsibility for Damages, Claims, Etc. (FGT Encroachment Agreements) (SP0071201)
  - Legal Requirements and Responsibilities to the Public – E-Verify (SP0072900)
  - Legal Requirements and Responsibilities to the Public – Scrutinized Companies (SP0073000)
  - Submission of Working Schedule (SP0080302A)
  - Prosecution and Progress – Prosecution of Work – Partnering (SP0080306)
  - Prosecution and Progress – Prosecution of Work – Project Specific Disputes Review Board (SP0080307DRB)
  - Contaminated Material - Mercury-Containing Devices and Lamps (SP0080409)
  - Liquidated Damages for Failure to Complete the Work (SP0081000)
  - Damage Recovery (SP0081200)
  - Incentive-Disincentive (SP0081300)
- C. Divisions II and III Special Provisions identified by the Department to be used on the Project:
  - Mobilization (SP1010000DB)
  - Contractor Quality Control General Requirements (SP1050813DB)
  - Structures Foundations (SP4550000DB)
- D. Value Added Developmental Specifications
  - Micropile Foundations (DEV455MP) (DRAFT)
  - Auger Cast Piles for Bridges (Dev455ACP, Dev346ACP and DevMM9.2ACP)
- E. Environmental Permits
  - i. C-1 Basin Conceptual SFWMD ERP
  - ii. C-2 Basin Conceptual SFWMD ERP
  - iii. C-3 Basin Conceptual SFWMD ERP (Pending)
  - iv. C-1 Basin FDEP 404 Permit
  - v. C-2 Basin FDEP 404 Permit
  - vi. C-3 Basin FDEP 404 Permit (Pending)
  - vii. Newport Center ERP Exemption
  - viii. SW 12<sup>th</sup> Ave ERP Exemption
- F. Not Used
- G. Not Used
- H. Not Used
- I. Not Used
- J. ITS Deployment Requirements
- K. Existing ITS Operations and Maintenance Requirements
- L. Smart Work Zone (SWZ) Deployment Requirements
- M. Connected Vehicle (CV) Deployment Requirements
- N. Geotechnical Data

- O. Not Used
- P. Not Used
- Q. Broward County Water and Wastewater Services (WWS) – Minimum Design and Construction Standards (as modified)
- R. City of Deerfield Beach – Engineering Department Manual of Standard Engineering Specifications (as modified)
- S. Not Used
- T. Florida Power and Light – Distribution Specifications
- U. AT&T Standards and Specifications
- V. TSP for T430 – Water Control System for C-1 Basin; Control Structures S-2 and S-3
- W. FDOT District 4 Drainage Practices and Guidance
- X. Railroad Permit and Construction Documents
  - a. SFRC Permitting Procedures
  - b. 2022 Temporary Right of Entry Agreement & Insurance Requirements
  - c. SFRC Design & Construction Standards – Pipelines
  - d. 2022 CSXT Public Projects Information For Construction and Improvement Projects That may Involve the Railroad
  - e. FDOT and SFRTA Railroad agreement change order for flagging services
  - f. FDOT and SFRTA Railroad Reimbursement agreement (Pending)
- Y. Survey Data
- Z. Project Commitment Records
- AA. Letter of Response – Section 2: Financial Forms – Staff Hour and Fee Estimation Worksheets

**Transportation Systems Management & Operations (TSM&O) SPECIFIC**

- BB. ITS Deployment Requirements
- CC. Connected Vehicle System Deployment Requirements
- DD. Connected Vehicle On-Board Units Minimum Technical Requirements
- EE. Broward County Adaptive Traffic Control System and Signal Fiber Interconnection Deployment Requirements
- FF. Design Variation (Lateral Offset)
- GG. Geotechnical Data
- HH. Survey Data
- II. FDOT Systems Engineering and ITS Architecture Procedure
- JJ. Maintenance Map Specific Purpose Survey
- KK. Florida East Coast Railroad (FEC) General Specifications
- LL. FEC Utility License Application
- MM. FEC Utility Submittal Checklist

**END TSM&O SPECIFIC**

**REFERENCE DOCUMENTS**

The following documents are being provided with this RFQ. Except as specifically set forth in the body of this RFQ, these documents are being provided for reference and general information only. They are not being incorporated into and are not being made part of the RFQ, 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 Proposer agrees that by accepting copies of the documents, any and all claims for damages, time, additional compensation, or any other impacts based on the documents are expressly waived.

The Department may, at its sole discretion, determine that reliance by the Design-Build Firm on certain

information included in these Reference Documents is in the Department's best interest. If the Design-Build Firm wants to rely on a specific Reference Document, the Reference Document(s), or components thereof, it shall be identified in a Work Package Proposal prepared by the Design-Build Firm. Each time a Reference Document, or component thereof, that is requested by the Design-Build Firm to be relied upon, it must be specifically approved by the Department and shall be documented in the associated task work order.

## 1. Concept Design

### CADD Files

#### Concept Plans

- Roadway Concept Plan
- Bridge Concept Plan
- ITS Concept Plan
- Signing and Pavement Marking Concept Plan
- Signalization Concept Plan
- Landscape Opportunity Concept Plan
- Utility Concept Plan
- Fencing and Gates Concept Plan
- C-1 Basin Drainage Concept Plan
- C-2 Basin Drainage Concept Plan
- C-3 Basin Drainage Concept Plan
- SW 12<sup>th</sup> Avenue Drainage Concept Plan
- Newport Center Drainage Concept Plan
- FAU Research Park Blvd Drainage Concept Design Roll Plot (DRAFT)
- Crystal Lake Pond Concept Plan (DRAFT)
- Temporary Traffic Control Concept Plans
  - Concept Plans
  - Typical Sections
- NE 48th Street Boat Ramp Access Concept Plan
- Emergency Use Access Concept Layout
- City of Deerfield Beach Concept Plan

#### Typical Section Package (DRAFT)

#### Pavement Design Package

#### Design Exceptions (DRAFT)

#### Design Variations (DRAFT)

#### Conceptual Drainage Reports and Analysis Files

- C-1 Basin
- C-2 Basin
- C-3 Basin
- SW 12<sup>th</sup> Avenue
- Newport Center Park
- FAU Research Park Blvd (DRAFT)
- ICPR Files

#### Lighting Design Analysis Report

#### Conceptual Tolling Line Diagrams

## 2. Environmental

### Bridge Asbestos Survey Reports

Deerfield Beach West Wellfield Testing and Rehabilitation Results  
Contamination Screening Evaluation Report (CSER) and Level II Contamination Assessment  
PD&E Studies

- 439891-1-22-02 SW 10<sup>th</sup> Street Connector PD&E Study from Florida's Turnpike /  
Sawgrass Expressway to West of I-95 (LDCA 6/21/21)
  - Contamination Screening Evaluation Report
  - Contamination Screening Evaluation Report – Appendices
  - Cultural Resources Assessment Survey Report
  - Location Hydraulic Report
  - Natural Resources Evaluation
  - Noise Study Report
  - PD&E Pond Siting Report Addenda
  - Preliminary Engineering Report
  - Preliminary Engineering Report – Appendices
  - Project Traffic Analysis Report
  - Type 2 Categorical Exclusion
  - Water Quality Impact Evaluation
  - Design Change, Construction Advertisement Re-evaluation
- 436964-1-22-02 I-95 PD&E Study from South of NE 48<sup>th</sup> Street to North of Hillsboro  
Boulevard (LDCA 10/1/21)
  - Type 2 Categorical Exclusion
  - Contamination Screening Evaluation Report
  - Natural Resources Evaluation Report
  - Noise Study Report
  - Location Hydraulics Report
  - Preliminary Engineering Report
  - Final Cultural Resource & Assessment Survey Report
  - Preliminary Engineering Report – Appendix A Concept Plans
  - Systems Interchange Modification Report
  - Design Change, ROW Phase, Construction Advertisement Re-evaluation

Noise Study Report Addenda

**3. Geotechnical**

Crystal Lake Pond Geotechnical-Structural Technical Memo (DRAFT)  
Miscellaneous Historic Geotechnical Data

**4. Plans**

Existing Plans

Adjoining Projects

- SR 9/I-95 From N of Sunrise to S of SW 10<sup>th</sup> Street (FPID No. 433108-7-52-01)
- FAU Research Park Blvd. (City of Deerfield Beach)
- Sawgrass Expressway PD&E Study
- Sawgrass Expressway Resurfacing

**5. Miscellaneous**

95 Express Operations During Construction Approval and Tech Memos

Bridge Pile Driving Records

C-1 Basin Pipe Diving and CCTV Inspection Reports

C-2 Basin Pipe Diving Inspection Reports

C-3 Basin Pipe Diving Inspection Reports



Community Awareness Plan  
Community Engagement Summary  
Concept of Operations  
Eastbound Exit Traffic Technical Memo  
Existing Bridge Inspection Reports  
Existing Bridge Load Ratings  
Existing Culvert/Storm Sewer Pipe Video Reports  
Existing Maintenance Agreements  
FAA Notification  
Incident Management Plan  
Maintenance Maps  
Project Systems Engineering Management Plan  
Proprietary Product Certification

- City of Deerfield Beach Utilities
- County Traffic Items
- District 4 ITS
- AT&T Utility Vaults

Ramp Signal Analysis Technical Memo  
Right of Way Use MOA  
Structures Aesthetics Guide  
Design Approval for Class 5 Finish (DRAFT)  
Technical Stakeholder Outreach Summary  
Traffic Operational Analysis  
Trees Suitable for Relocation Survey

**6. Utilities**

Utility Work by Highway Contractor Agreements  
Utility Marked Plans & Records  
Preliminary Utility Work Schedules  
FP&L Transmission Concept Plan  
FP&L Transmission Phased Relocation Plan & Temporary Pole and Wire Exhibit

**7. Right of Way**

Right of Way Maps (436964-1 and 439891-1)

**8. TSM&O SPECIFIC**

**a. Concept Design**

CADD files  
ITS Concept Plans  
Signalization Concept Plans  
Broward County Traffic Signal Interconnection Concept Plans  
Broward County Adaptive Traffic Control System (ATCS) Concept Plans

**b. Environmental**

Bridge Asbestos Survey Reports  
Level 2 Contamination Assessment Reports  
Type 1 Categorical Exclusion EFID Memorandum

**c. Miscellaneous**

BCTED Contractor Acceptance Form Letter

BCTED Cyberlock Electronic Key Release Form  
Community Awareness Plan  
Rail Coordination Memo  
Straight Line Diagrams  
Concept of Operations (ConOps)  
Project Systems Engineering Management Plan (PSEMP)  
Proprietary Product Form  
Project Risk Assessment and Regulation Compliance Checklist  
Systems Engineering Project Checklist  
Cost Schedule Risk Assessment

**d. Plans**

Adjacent Construction Projects  
Adjacent Project Utility Permits  
Existing Plans and As-Builts  
Permit Plans

**e. Right of Way and Survey**

Project Surveyors Report  
Right of Way Maps

**f. Utilities**

Base Utility Map CADD File  
UA/O Correspondence and Facility Markup Plans  
SUE data  
Utility Coordination Memo  
Utility Permits

**g. Permitting**

Meeting Minutes

**END TSM&O SPECIFIC**

## **I. Introduction**

The Florida Department of Transportation (Department) has issued this Request for Qualifications (RFQ) to solicit Letters of Response (“Responses”) from Proposers in accordance with Florida Statute 337.11(7) for the design and construction of the I-95/SW 10<sup>th</sup> Street Connector Interchange (FPID# 436964-2), the SW 10<sup>th</sup> Street Connector (FPID# 439891-1), and the SW 10<sup>th</sup> Street Connector Transportation Systems Management & Operations (TSM&O) (FPID# 439891-5), which combined comprise the SW 10<sup>th</sup> Street Connector Project (the “Project”). The Project scope features the new SW 10<sup>th</sup> St. Connector, the addition of a second northbound and southbound I-95 Express Lane, and new direct connections from northbound and southbound I-95 Express and General Purpose lanes to the SW 10<sup>th</sup> St. Connector to and from the west. The I-95 construction limits extend from south of NE 48<sup>th</sup> Street (MP 22.00) to north of SR 810 (Hillsboro Boulevard) (MP 25.10) in Broward County, for a total distance of approximately 3 miles along I-95. The construction limits within the SW 10<sup>th</sup> St. corridor extend from the Sawgrass Expressway to east of SW Natura Blvd., for a distance of approximately 3 miles.

The Project also includes deployment of permanent arterial Intelligent Transportation Systems (ITS) and Connected Vehicle (CV) infrastructure along the following six (6) corridors surrounding SW 10<sup>th</sup> Street and I-95, including US 1 (SR 5) from Sample Road (SR 834) to Hillsboro Boulevard (SR 810), Dixie Highway (SR 811) from SR 834 to SR 810, Powerline Road (SR 845) from SR 834 to SR 810, US 441 (SR 7) from SR 834 to SR 810, Hillsboro Boulevard (SR 810) from SR 7 to SR 5, and Sample Road (SR 834) from SR 7 to SR 5. This infrastructure, known as the SW 10<sup>th</sup> Street Connector TSM&O (“TSM&O”), is to be used as a smart work zone (SWZ) system during construction of the SW 10<sup>th</sup> Street Connector and I-95 improvements described above. The permanent deployments will remain after construction, which will expand the Department’s established Advanced Transportation Management System (ATMS) and Arterial Management Program (AMP) in Broward County to actively monitor, manage, and improve arterial operations in the region. As part of this infrastructure, the Adaptive Traffic Control System (ATCS) for Broward County will also be deployed on Hillsboro Boulevard (SR 810), Sample Road (SR 834), and US 441 (SR 7). A new fiber optic cable communications network will also be deployed along US 1 (SR 5), Dixie Highway (SR 811), Powerline Road (SR 845), Hillsboro Boulevard (SR 810), and Sample Road (SR 834) for Broward County traffic signal interconnection.

The Project completes the 95 Phase 3 4-lane express lanes corridor, and will provide the vital bi-directional free flow connection between the Sawgrass Expressway and I-95. The selected Proposer will serve as the Design-Build Firm to collaborate and coordinate with the Department, its representatives, and Project stakeholders to design and construct the Project in phases that are aligned with the Department’s goals and available funding.

### **A. Phased Design-Build Introduction**

The Project will be delivered through a collaborative project delivery method that combines the Planning Phase, Preconstruction Phase, and Construction Phase under one Contract. The selection of a Design-Build Firm will be based on the qualifications of the Proposers. The Department will evaluate the Proposers consistent with the criteria contained in this RFQ and select the highest scoring Proposer. After selection, the Design-Build Firm and the Department will negotiate the Planning Phase scope of services which is defined in this RFQ, and the associated staff hours. Upon successful negotiation, the Parties will enter into a Phased Design-Build Contract for the Planning Phase services. During the Planning Phase, the Design-Build Firm will collaborate and coordinate with the Department, its representatives, and its stakeholders to progress and optimize the design and prepare preliminary designs and project execution documents that meet the scope and goals of the Project. At the Department’s request, the Project will progress to the Preconstruction Phase where the Design-Build Firm will refine the design, prepare contract bid documents, solicit bids from subcontractors, and develop Work Package Proposals (WPPs) that include a Guaranteed

Maximum Price (GMP) for portions of the Project. These WPPs will include fees for final design of all Work contained within the Work Package. Preconstruction Phase services will be negotiated and executed via task work orders, modifying the overall Contract. If the Department accepts a WPP, the Design-Build Firm and the Department may enter into an agreement, via a task work order modifying the overall Contract, to perform Construction Phase (final design and construction) services for the Work Package. It is expected that the Project will be constructed in phases through multiple Work Packages aligned with the Department’s work program and available funding, which is subject to change.

**B. Description of Work**

The Project improvements include:

- Construction of the new SW 10<sup>th</sup> Street Connector Lanes, as well as the reconstruction of Local SW 10<sup>th</sup> Street from the Sawgrass Expressway to SW Natura Blvd.
- Reconfiguration of the existing 95 Express and I-95 General Use lanes from south of NE 48<sup>th</sup> Street to north of SR 810 (Hillsboro Boulevard), by widening, milling, resurfacing, overbuild, and/or reconstruction, to provide two tolled Express Lanes in each direction. The number of existing I-95 General Use Lanes and Auxiliary Lanes will remain the same.
- Reconfiguration and reconstruction of the I-95/SW 10<sup>th</sup> Street Interchange, with the inclusion of direct connection ramps from northbound and southbound I-95 Express and General-Purpose lanes to the SW 10<sup>th</sup> Street Connector to and from the west.
- Reconstruction of the NE/NW 48<sup>th</sup> St bridge over I-95 and the NE 48<sup>th</sup> St. roadway approaches.
- Ramp and terminal intersection improvements at the I-95/Hillsboro Blvd. Interchange, and the replacement of the I-95 bridges over Hillsboro Blvd.
- Improvements to the SW 10<sup>th</sup> St. corridor roadway network: milling/resurfacing/widening of Powerline Road, reconstruction of East and West Newport Center Drives, including a new roundabout, as well as reconstruction of SW 12<sup>th</sup> Avenue, FAU Research Park Blvd, and milling/resurfacing/overbuild and widening of Military Trail and SW Natura Blvd., and construction of a new access roadway to the Quiet Waters Business Park from westbound local SW 10<sup>th</sup> St.
- TSM&O ITS infrastructure and subsystems including: Communications, Electrical Power Distribution, Closed Circuit Television (CCTV) Camera, Vehicle Detection System (VDS), Dynamic Message Signs (DMS), and Connected Vehicle (CV). The TSM&O also includes the Broward County Adaptive Traffic Control System (ATCS) with Transit Signal Prioritization (TSP), Traffic Signal Interconnection via a separate SM FOC backbone, replacement of existing arterial DMS and supporting infrastructure along Hillsboro Boulevard and Sample Road, signal mast assembly replacement at the Hillsboro Boulevard intersections with Deerfield Plaza and NW 41 Way, and modifications and/or expansions of the existing FDOT RTMC central systems and equipment as needed.

The intent of this Project is to replace, repair or rehabilitate all deficiencies noted in the RFQ within the Project limits such that maintenance work required upon Final Acceptance is limited to routine maintenance activities.

Bridges and proposed bridge improvements are as described in the table below:

| <b>CONCEPT</b>   |                                       |                            |                              |
|------------------|---------------------------------------|----------------------------|------------------------------|
| <b>Bridge ID</b> | <b>Bridge Description</b>             | <b>Existing Bridge No.</b> | <b>Required Improvements</b> |
| B1               | System to System Flyover from I-95 NB | -                          | New Bridge                   |

|     |  |        |                               |
|-----|--|--------|-------------------------------|
|     | to WB SW 10 <sup>th</sup> Street Connector over E & W Newport Center Dr.   |        |                               |
| B1A | System to System Flyover on I-95 NB at braided ramp  | -      | New Bridge                    |
| B1B | System to System Bridge over SFRC Railroad & W Newport Center Dr.  | -      | New Bridge                    |
| B2  | Not Used   |        |                               |
| B3  | System to System Flyover from SW 10 <sup>th</sup> Street Connector EB to I-95 NB   | -      | New Bridge                    |
| B4  | System to System Flyover from SW 10 <sup>th</sup> Street Connector EB to I-95 SB   | -      | New Bridge                    |
| B5  | Manage Lane Braided off-ramp over I-95 SB  | -      | New Bridge                    |
| B6  | Manage Lane Braided on-ramp over I-95 NB   | -      | New Bridge                    |
| B7  | Manage Lane Braided on-ramp over I-95 SB   | -      | New Bridge                    |
| B8  | I-95 SB off-ramp to SW 10 <sup>th</sup> Street over Drainage Canal   | 860564 | New Bridge/Bridge Replacement |
| B8A | System to System Flyover from I-95 SB to WB SW 10 <sup>th</sup> Street Connector   | -      | New Bridge                    |
| B8B | System to System over W Newport Center Dr. & E Newport Center Dr.  | -      | New Bridge                    |
| B9  | Manage Lane Braided off-ramp over I-95 NB  | -      | New Bridge                    |
| B10 | I-95 NB on-ramp Braid over I-95 off-ramp   | -      | New Bridge                    |
| B11 | EB SW 10 <sup>th</sup> Street Connector over Local SW 10 <sup>th</sup> Street, Military Trail, SFRC Railroad W Newport Center Dr. & E Newport Center Dr. | -      | New Bridge                    |
| B12 | EB SW 10 <sup>th</sup> Street Connector Exit Ramp over Local 10 <sup>th</sup> Street & Military Trail  | -      | New Bridge                    |
| B13 | WB Local SW 10 <sup>th</sup> Street Braid over SW 10 <sup>th</sup> Street Connector Lanes  | -      | New Bridge                    |
| B14 | I-95 NB over Hillsboro Blvd.   | 860194 | Bridge Replacement            |
| B15 | I-95 SB over Hillsboro Blvd.   | 860124 | Bridge Replacement            |
| B16 | I-95 SB On-Ramp from Hillsboro Blvd.   | -      | New Bridge                    |

|     |   |        |                    |
|-----|---|--------|--------------------|
| B17 | Not Used  | -      | -                  |
| B18 | NE 48th St. over I-95   | 860122 | Bridge Replacement |
| B19 | SW 10 <sup>th</sup> Street over I-95  | 860123 | Bridge Replacement |
| B20 | SW 10 <sup>th</sup> Street EB Connector Lanes over SFRC Railroad & W Newport Center Dr. | 860557 | Bridge Replacement |
| B21 | SW 10 <sup>th</sup> Street WB Connector Lanes over SFRC Railroad & W Newport Center Dr. | 860553 | Bridge Replacement |
| B22 | EB SW 10 <sup>th</sup> Street to I-95 SB Ramp over Drainage Channel                     | -      | New Bridge         |
| B23 | SW 10 <sup>th</sup> Street WB Connector Lanes Over Military Trail                       | -      | New Bridge         |
| B24 | SW 10 <sup>th</sup> Street Connector Lanes over Powerline Road                          | -      | New Bridge         |
| B25 | SW 10 <sup>th</sup> Street Connector Lanes over Storage Driveway                        | -      | New Bridge         |

### C. Project Goals

Through a fully collaborative Department/Design-Build Firm project delivery approach, the Design-Build Firm shall progress, optimize, innovate, deliver, and construct the Project consistent with the Department's goals listed below:

- Develop designs and deliver phases of construction to enhance the safety and efficiency of the SW 10<sup>th</sup> St. and I-95 corridors to deliver congestion relief by improving accessibility, mobility, and travel times
- Add capacity and regional connectivity with the new SW 10<sup>th</sup> Street Connector lanes and addition of a second northbound and southbound 95 express lane to complete the 95 Express Phase 3 4-lane express lanes corridor
- Improve local street connectivity and mobility by enhancing the sidewalk and shared use path network
- Expedite the construction of ground mounted noise barrier walls and prioritize as the first phase of construction in any segment of SW 10<sup>th</sup> St where ground mounted noise barrier walls are required
- Minimize the duration of construction of work on local SW 10<sup>th</sup> St., through transition of all traffic to its permanent configuration on local SW 10<sup>th</sup> St.
- Implement utility relocation improvements on local SW 10<sup>th</sup> St., within the Newport Center Business Park, along SW 12<sup>th</sup> Avenue, adjacent to or below I-95, and along Hillsboro Blvd., as expeditiously as possible
- Expedite the TSM&O through early Work Package(s) to maximize its benefit in mitigating traffic congestion during the I-95 and SW 10<sup>th</sup> Street Connector construction phases.

- Minimize the duration of construction on all local or adjacent roadways
- Inclusion of aesthetic treatments to enhance the community
- Minimize disruption to Project stakeholders and the traveling public by use of innovative strategies and technologies throughout all phases of construction
- Proactively collaborate and coordinate with Project stakeholders and the public at large
- Align phased Project delivery and earned value with available Department funding, work program and environmental commitments
- Minimize impacts to the natural and built environments
- Ensure that all NEPA commitments are met and documented in the Project Commitment Record (PCR)
- Begin construction no later than 2025, and finish construction of the Project by 2030
- Construct the work in a logical and expeditious manner in accordance with the objectives described under Section IX.L Sequence of Construction
- Minimize impacts to and endeavor to avoid utilities and accommodate Utility/Agency Owner's (UAO) utility relocation schedules and plans, where not part of the anticipated Utility Work by Highway Contractor
- Maximize the Project scope within the programmed funding amounts through a commitment to innovation, design optimization and sharing of risk

## II. Phased Design-Build (PDB) Delivery Approach

### A. Definitions

Terms contained in this RFQ shall have the meanings set forth in the RFQ. If a word is not defined in the RFQ or a definition is not modified in this RFQ, it shall have the meaning as set forth in the Attachments (specifically the Division I Design-Build Specifications). The following terms, when used in the RFQ, have the meaning described below:

**Construction Phase.** The portion of the Project in which Work Packages are delivered through task work orders that authorize Construction Work according to the Contract Documents.

**Construction Sub-Package (CSP).** A portion of work contained within a Work Package to be performed by a single entity, either the Design-Build Firm or a subcontractor.

**Construction Work.** All labor, materials, equipment, incidentals, and services required to complete the requirements of the Contract Documents and scope of work described within a Work Package. Construction Work does not include final design or post-design services.

**Contract Documents.** Includes Advertisement, all Terms and Conditions negotiated for the Contract, the Request for Qualifications, the Design Build Firm's Letter of Response, Certification as to Publication and Notice of Advertisement for Proposal, Appointment of Agent by Nonresident Contractors, Noncollusion Affidavit, Warranty Concerning Solicitation of the Contract by Others, Resolution of Award of Contract, Executed Form of Contract, Performance Bond and Payment Bond, Design Liability Insurance, Specifications, Plans (including revisions thereto issued during construction), Standard Plans, Addenda, written statements or transcripts or minutes of oral representation by the Design-Build Firm made at oral presentations, or other information mailed or otherwise transmitted to the prospective Proposers prior to the receipt of Letters of Response, and task work orders, supplemental agreements, and Work Packages, all of which are to be treated as one instrument whether or not set forth at length in the form of contract. As

used in Section 2 of the Design-Build Specifications only, “Contract Documents” does not include Resolution of Award of Contract, Executed Form of Contract, and Performance and Payment Bond.

**Contractor Project Management.** The Design-Build Firm’s contractor project management staff engaging in all Planning and Preconstruction Phase activities, and ultimately construction management in the Construction Phase. Contractor Project Management staff involvement during the Planning Phase will be included in the Planning Phase services fee. Contractor Project Management staff involvement on the Project during the Preconstruction and Construction Phases will be negotiated and invoiced under a separate Construction Project Management task work order spanning the Project schedule rather than dispersed over multiple Preconstruction Phase and Work Package task work orders.

**Guaranteed Maximum Price (GMP).** A fixed maximum price for the work included in a WPP to complete the requirements and responsibilities of the Work Package including all costs for self-performed work, mobilization and setup, general account/overhead, labor, materials, equipment, maintenance, office, administration, safety, salaries, expenses, permits, insurance, licenses, bonds, fees, risks, indirects and incidentals, engineering, and subcontractor work.

**Independent Cost Estimator (ICE).** A representative of the Department that collaborates with the Design-Build Firm and provides independent quantity takeoffs, prepares independent OPCC estimates, prepares and conducts cost reconciliation meetings, prepares independent basis of cost estimates and schedules, provides constructability plan reviews, and assists the Department in managing project risks.

**Opinion of Probable Construction Cost (OPCC).** A cost estimate performed with preliminary construction documents showing description of pay items, units of measurements, quantity, unit prices, extended costs, overhead, salaries, safety administration, offices, yards, bonds, insurance, licenses, permits, fees, expenses, indirect, equipment, contingencies, risks, and other work to indicate the overall cost for the Project or individual Project elements and/or Work Packages. The OPCC will be continuously updated over the course of the Project as Work Package Proposals are negotiated and executed as task work orders.

**Phased Design-Build (PDB).** As authorized by Section 337.11(7), F.S., a Design-Build delivery method that allows the Department to combine the design and construction phases of a fully funded project in the work program into a single contract in which the Design-Build Firm is selected based on qualifications in the early stages of a project then collaborates with the owner to develop the design as part of a step-by-step progression. The Design-Build Firm competitively bids construction trade subcontractor packages and negotiates with the owner a Guaranteed Maximum Price that meets the project budget and scope as advertised in the Request for Qualifications. A Phased Design-Build project includes the Planning Phase, the Pre-construction Phase(s), and the Construction Phase(s).

**Phased Design-Build Mark-up (Mark-up).** Management fee (Construction Management and G&A Fee or CMGA Fee) to compensate the Design-Build Firm for all profit and home office overhead costs, and applied as a percentage to the direct costs associated with each Work Package as defined under RFQ Section II.G.5. The Mark-up shall not be applied to Planning Phase work or Preconstruction, Contractor Project Management and DRB task work orders. Under no situation may the cost of an item of Work be modified by both the Mark-up and the Design Mark-up simultaneously.

**Phased Design-Build Design Mark-up (Design Mark-up).** Management fee to compensate the Design-Build Firm for all oversight, profit, and home office overhead costs, and applied as a percentage to the design task work orders during the Planning and Preconstruction Phases of work. As defined under RFQ Section II.G.5. The Design Mark-up shall not be applied to Contractor Project Management task work orders, DRB task work orders, or Construction Work Packages. Under no situation may the cost of an item of Work be modified by both the Mark-up and the Design Mark-up simultaneously.

**Phased Design-Build Multiplier (Multiplier).** Multiplier applied to direct hourly rates for the Contractor Project Management staff to compensate the Design-Build Firm for their labor burden, such as insurance, taxes, employee benefits, and all expenses that relate directly to a Contractor Project Management



employee. Expenses that relate directly to a Contractor Project Management employee may include but not be limited to personal vehicle expenses, personal equipment such computer/phone/tablet, employee per-diem, home office overhead, and profit.

**Phasing Plan.** A document demonstrating an overall plan, strategy, and timeline for developing plans and constructing the Project in divided components of work, in accordance with available funding, with critical activities identified for review and authorization of work.

**Planning Phase.** The portion of time, services, and work prior to the authorization of the Preconstruction Phase that includes collaboration with the Department, its representatives, and its stakeholders to progress, refine, and optimize the design and to plan, schedule, and develop costs for construction of the Project. The Planning Phase includes the preparation of preliminary design plans, specifications, schedules, Phasing Plan, and other submittals as required by the Contract Documents. This work will be authorized with a notice to proceed (NTP) at initial contract execution.

**Preconstruction Phase.** The portion of time, services, and work after the Planning Phase that includes collaboration with the Department, its representatives, and its stakeholders to progress, refine, and optimize the design and to plan, schedule, and develop costs for construction of the Project in accordance with the Phasing Plan. The Preconstruction Phase includes the preparation of design plans, specifications, schedules, OPCCs, GMPs and the development of Work Package Proposals. This work will be directed through task work orders for preconstruction services.

**Proposer.** An individual, firm, corporation, company, or joint venture submitting a Letter of Response stating their qualifications to perform the Work.

**Request for Qualifications (RFQ).** This package and document, its associated attachments, references, and forms provided to the engineering and contracting industry that defines the scope of work, the procurement process, and the responsibilities of the Design-Build Firm and forms the foundation for the Contract between the Design-Build Firm and the Department.

**Risk Register.** A document identifying project risks, probabilities, risk mitigation strategies, cost impacts, schedule impacts, and ownership of the risk. Each line-item entry on the Risk Register is referred to as a Risk Register Event.

**Risk Reserve.** The aggregate amount of funding made part of each GMP for each Work Package to account for identified project risks. The Risk Reserve should be supported by the Risk Register.

**Subcontractor Plan.** A document demonstrating the overall plan and strategy of subdividing the Project into work that will be self-performed and work that will be subcontracted. The plan will detail the criteria the Design-Build Firm will use to select the best-value subcontractor to perform work which may include price, schedule, qualifications, capacity, performance, safety, and other factors. The plan will detail specific business development initiatives and work to be performed by minority, disadvantaged, woman, and small businesses.

**Task Work Order.** Letter or work order issued by the Department authorizing the Design-Build Firm to commence work on a specific task or Work Package in accordance with the Contract.

**Work Package.** A segment or component(s) of the Project with a specific scope of work, requirements, obligations, and responsibilities that can be documented with preliminary or final construction Contract Documents.

**Work Package Proposal (WPP).** The complete proposal prepared by the Design-Build Firm and presented to the Department for the completion of a Work Package, comprised of technical and price proposals, including plans, specifications, special provisions, schedule, GMP, etc., that has been collaboratively developed and mutually agreed to, or pending mutual agreement subject to continued negotiations, by the Department and Design-Build Firm during the Preconstruction Phase or related to

changes during the Construction Phase.

## **B. Clarifications of Attachments and Governing Regulations for Phased Design-Build**

Attachments and Governing Regulations referenced herein that are published by the Department may reference terminology that is not directly applicable to the PDB delivery method. The following terms are being clarified for interpretation and application of attachments and governing regulations. The following definitions shall have priority over definitions found in other Attachments to this RFQ. In no case, however, shall the Design-Build Firm be relieved of its duty to design and construct the Project in accordance with the Governing Regulations and the Design and Construction Criteria contained herein without approval by the Department and documentation of the approved deviation in a task work order. Deviations from the Governing Regulations and the Design and Construction Criteria contained herein may include but are not limited to a Design Exception, Design Variation or other modification of these requirements through written approval by the Department. If a provision contained in the Attachments and Governing Regulations is claimed to be ambiguous or unclear as to its applicability to the Project, the Department shall have the right to determine in its sole discretion how such ambiguity is resolved.

**Bid Proposal.** Refers to the GMP related to a unique Work Package.

**Design-Build Firm.** The individual, firm, corporation, company, or joint venture contracting with the Department to perform services and work to deliver this Project using the PDB delivery approach with the Department for the Planning Phase, Preconstruction Phases and the Construction Phases. The word “Contractor” is also deemed to include the Design-Build Firm contracting with the Department for performance of Work, including all engineering services, construction, and furnishing of materials. If the Design-Build Firm is made up of multiple firms, either through a joint venture or other mechanism to act as one entity, when the Contract Documents preclude the Design-Build Firm from taking an action, it also would preclude the members of a joint venture from taking the same action in an individual capacity. Members of the Design-Build Firm may not act as individual separate entities in order to accomplish something that the Design-Build Firm is not permitted to do.

**Proposal.** Refers to the complete WPP prepared by the Design-Build Firm and presented to the Department for the completion of a Work Package, comprised of technical and price proposals, including plans, specifications, special provisions, schedule, GMP, etc., that has been collaboratively developed and mutually agreed to, or pending mutual agreement subject to continued negotiations, by the Department and Design-Build Firm during the Preconstruction Phase or related to changes during the Construction Phase.

**Request for Proposal.** Refers to this RFQ including all attachments. It does not include the reference documents.

**Technical Proposal.** Refers to the scope of improvements, inclusive of plans, specifications, and special provisions, for a Work Package collaboratively developed and mutually agreed-to by the parties through a task work order.

## **C. Overview of Phased Design-Build Process**

The Work shall be performed by the Design-Build Firm in three phases: (a) the Planning Phase, (b) the Preconstruction Phase, and (c) the Construction Phase. Each phase may be authorized in segments or components of work upon the mutual agreement of the Department and the Design-Build Firm, as documented in an approved task work order as described in the submitted and Department approved Phasing Plan. The completion of all three phases will result in the completion of the Project.

The Planning Phase shall begin upon the Department issuing a NTP following acceptance and execution of the initial Contract and continue until the deliverables as described in the Planning Phase Section of this

RFQ are submitted and accepted by the Department, and the Department issues a task work order to begin the Preconstruction Phase of the Project, or the Department exercises its right to terminate the Design-Build Agreement. Planning Phase services will be paid for on an hourly rate basis to be negotiated following project award.

The Preconstruction Phase shall begin on the issuance of a task work order, and corresponding NTP, to commence the Work required by the Preconstruction Phase described herein. The Department may, at its sole discretion, authorize Preconstruction Phase services for specific areas of the Project prior to completion of the Planning Phase. The Preconstruction Phase will end at the Department's sole discretion either upon issuance of the task work order to begin work on the final Work Package or at another time as determined solely by the Department. The Construction Phase shall begin upon the earliest date a WPP is authorized to commence, via task work order and corresponding NTP, and continue until the end of the term of the Design-Build Agreement. Construction Phase services will be paid for on a guaranteed maximum price basis for each Work Package.

During the execution of the Contract, there will be several instances where task work orders are issued to allow the Design-Build Firm to move on to the next portion of Work. No task work order will be issued for this Project unless the Department has the funds encumbered to fund the Work associated with the task work order. The Department, in its sole discretion, may refuse to consider issuance of new task work orders on the Project during the month of June. No claims shall be permitted in relation to this election.

As part of this Design-Build Agreement, the Design-Build Firm shall work collaboratively as a team with the Department, its representatives, and Project stakeholders to maximize the Project scope, value, and quality of the Project.

#### **D. Task Work Orders**

Throughout the duration of the Project, multiple task work orders may be negotiated and issued with various payment structures during the Planning, Preconstruction and Construction Phases, all of which are subject to open book pricing as defined in this RFQ.

Contractor Project Management staff will be compensated under a task work order at the start of the Preconstruction Phase and continuing until the Project is completed (Contractor Project Management Task Work Order). This task work order shall be the sole source of compensation by the Department to the Design-Build Firm for these personnel. During the Planning Phase, the Design-Build Firm's contractor personnel will be compensated as a portion of the Planning Phase fee.

For the Planning Phase services and Preconstruction Phase task work orders, the fees shall be paid on a negotiated loaded rate basis with a not-to-exceed amount or as a lump sum amount, at the sole discretion of the Department.

The following is a potential list of the types of task work orders that may be issued, and the corresponding payment mechanism for each. The Planning Phase services will be negotiated as part of the initial Contract execution (not as a task work order), with a not-to-exceed cap of seventeen million dollars (\$17,000,000). The Planning Phase information below is provided to identify the negotiation parameters and method of compensation.

##### Planning Phase

- Designer: Compensated via negotiated loaded rates\*
  - A Design Mark-up is applied to this Design cost
- Contractor: Compensated via negotiated loaded rates (raw rates multiplied by the Phased Design-Build Multiplier)\*

- Expense Line: Negotiated lump sum expense line for Contractor expenses (any item of expense not specifically included in this expense line is considered to be contained in the Contractor's loaded rates)
  - Should only contain required Insurance (General Liability) costs during the Planning Phase.

\* Contract negotiations will be separated into two components, a professional services component for all design-related services and a Contractor Project Management component. Loaded rates for the professional services component shall be negotiated in accordance with the FDOT Negotiation Handbook. Loaded rates for the Contractor Project Management component shall be established by multiplying the Phased Design-Build Multiplier by the negotiated direct hourly rates for each contractor job classification.

The Design-Build Firm will complete a certified rate form including names of persons included in each classification. Any personnel change or additions, allowed by the Contract, must be provided to the Department prior to invoicing. By submitting the certified rate form, the Design-Build Firm certifies that all personnel are qualified for the classification that they are listed under. The Design-Build Firm shall provide personnel qualifications via resumes at the Department's request.

#### Project Office Task Work Order(s)

- Expense Line: Should only contain costs associated with establishing and maintaining the Project Office for the Key Personnel of the Design-Build Firm as well the assigned Department, Owner's Representative, ICE, and CEI personnel. The initial Project Office task work order is to be negotiated concurrently with Planning Phase services and executed concurrently with the NTP.

#### Contractor Project Management Task Work Order

- Contractor: Compensated via loaded rates (raw rates multiplied by the Phased Design- Build Multiplier)
- Expense Line: Negotiated lump sum expense line for Contractor expenses (any item of expense not specifically included in this expense line is considered to be contained in the Contractor's negotiated loaded rates)
  - Should only contain required Insurance (General Liability)

#### DRB (Dispute Review Board) Task Work Order(s)

- Actual cost compensated, as provided in the DRB Agreement

#### Preconstruction Task Work Order(s)

- Designer: Compensated via negotiated loaded rates
  - A Design Mark-up is applied to this Design cost
- Contractor: Compensated via loaded rates (raw rates multiplied by the Phased Design-Build Multiplier)
- Expense Line may not be applicable, as this task and the Contractor Project Management tasks overlap. Contractor expenses included here must not overlap with Contractor Project Management task expenses

#### Construction Task Work Order(s) (Work Packages or WPPs)

- GMP via schedule of values which consists of:
  - Direct Costs (Mark-up applied)
  - Indirect Costs, including WPP specific bonds
  - Risk Reserve (Mark-up will be included in the overall calculation when establishing this total)

- Allowances (Mark-up will be included in the overall calculation when establishing this total)

### **E. Planning Phase**

Upon execution of the Contract and issuance of the Planning Phase NTP, the Design-Build Firm shall commence the Planning Phase, and all deliverables described herein shall be submitted to the Department within 270 days of the Planning Phase NTP date. The Department's authorization to commence the Preconstruction Phase for any portion of the Project does not constitute an approval of or acceptance of Planning Phase deliverables.

During the Planning Phase, the Design-Build Firm shall develop a collaborative team environment that fosters communication, accountability, and trust with the Department, its representatives, and its stakeholders to progress, refine, and optimize the design and to plan, schedule, and develop costs for phased construction of the Project.

#### **Planning Phase Activities**

##### Project Management Services:

Establish a Project Office: The Design-Build Firm shall maintain a Project Office in the vicinity of the Project. This office shall, in addition to the space required for the Design-Build Firm Key Personnel and required support staff, also provide sufficient space and furnishings for the assigned Department, Owner's Representative, ICE, and CEI personnel. Upon Award of the Project, the Department will provide the Department's office space and furnishing needs for the Design-Build Firm's use in establishing the overall Project Office requirements. The Department's office space will be subject to approval by the Department. The Project Office shall be established and functional within the first thirty (30) calendar days following the NTP. Once established, the Project Office shall be maintained until the entire Project has received final acceptance by the Department.

Prepare and submit the Planning Phase Schedule.

Prepare and submit the Planning Phase Expenditure Projection.

Prepare and submit a Project Management Plan.

Prepare and submit a Quality Management Plan.

Prepare and submit a Phasing Plan.

Prepare and submit a Master Schedule.

Conduct regular risk and opportunity/innovation workshops and prepare minutes.

Initiate third-party coordination with Utility Agency Owner (to be led by the Design-Build Firm with oversight from the Department's Utility Coordination Liaison).

Initiate third-party coordination with SFRTA and FEC (to be led by the Design-Build Firm with oversight from the Department's Rail Coordinator).

Determine what Governmental Approvals and permits are required to complete the Project and recommend to the Department who will be responsible for obtaining each approval/permit.

##### Preliminary Design Services:

Implement an interactive design process to incorporate mitigation strategies for identified risks and innovations into the design.

Conduct weekly design meetings and prepare minutes.

Prepare presentations, engineering drawings, analysis, estimates, etc. to show work in progress or innovations.

Perform VISSIM traffic analysis on proposed geometric revisions. If necessary, prepare Systems Interchange Modification Report (SIMR) Re-evaluation.

Perform preliminary design, prepare plans and provide documentation pursuant to the FDOT applicable manuals, policies, and procedures and the requirements in this RFQ. The EB Connector Lanes direct connection to the SB I-95 Express and General Purpose lanes must be designed such that it has independent utility.

Prepare Roadway Geometrics Package.

Develop Conceptual Traffic Control Plans, Smart Work Zone Layouts, Detour schematics, and Detour Active Arterial Management operational concepts.

Develop Transportation Management Plan based on Conceptual Traffic Control Plans

Begin development of Project Special Provisions.

Perform utility coordination and prepare utility adjustment sheets.

Plan supplemental site investigations and surveys to be conducted in the Planning and/or Preconstruction Phases.

Ensure National Environmental Protection Act (NEPA) commitments are met and initiate Project Commitment Record tracking. If necessary, perform analysis, studies and prepare documentation necessary for a PD&E Re-evaluation.

#### Construction Planning Services:

Prepare and submit an Initial Risk Register for review and approval by the Department.

Conduct workshops to establish Work Packages based on the Phasing Plan.

Develop and implement mitigation plans for identified risks.

Identify, evaluate, optimize and propose alternatives to reduce schedule, reduce costs, or improvements that otherwise will improve the Project.

Perform constructability and maintainability reviews of designs, plans and specifications.

Prepare initial Opinion of Probable Construction Costs (OPCC)

Cooperate with the Department and its representatives in review of the OPCC during and at the conclusion of the Planning Phase.

If directed by the Department, continue to develop and evaluate innovations and design alternatives to reduce the Planning Phase OPCC.

#### **Planning Phase Deliverables**

The following documents are required deliverables that shall be submitted to the Department within 270 calendar days of the first NTP for the Department's review and approval. It is expected that these documents may require periodic and routine updates throughout the life of the Project to reflect evolving and changing circumstances and ongoing collaboration with the Department. The maintenance of and updates to these documents will be authorized and paid for under the rates established in Preconstruction Phase task work orders. The deliverables during the Planning Phase are flexible pending resolution on any outstanding innovative concepts that have not been accepted or rejected by the Department. The Department has sole discretion to make any changes to the deliverables during the Planning Phase based on the outcome

of the innovation process.

Project Execution Documents

| Document                | Description  |
|-------------------------|--|
| Project Management Plan | The Project Management Plan (PMP) shall describe the Design-Build Firm’s organization, personnel roles and responsibilities, and collaboration and communication protocols to implement a collaborative team environment supportive of the Project goals. The PMP should address design management and collaboration, approach to cost estimating and coordination with ICE, and management of construction. The PMP should establish the guiding principles for Subcontractor selection and management with the details being contained in the separate Subcontractor Management Plan.  |
| Quality Management Plan | The Quality Management Plan (QMP) shall be comprised of two parts: 1) Design Quality Management Plan (DQMP); 2) Construction Quality Management Plan (CQMP). The QMP shall state the processes and procedures for both quality control and quality assurance during the design and construction phases of the Project and identify specific individuals, roles and responsibilities that comprise the Design-Build Firms quality team, identify a quality audit process, and approach for tracking field changes and the causes thereof, and resolution of a non-conformance report (NCR), whether the NCR originates with the Department or internal to the Design-Build Firm’s organization. Further requirements of the QMP are provided in Section VIII.P of this RFQ. |
| Phasing Plan            | The Phasing Plan shall describe how the Project is to be segmented into Work Packages and potential further sub-segmented into Construction Sub-Packages, particularly as needed to differentiate between work the Design-Build Firm intends to self-perform. The Phasing Plan must be submitted for review and approval by the Department.  |
| Master Schedule         | The Master Schedule shall show Planning Phase, Preconstruction Phase and Construction Phase activities, including Work Package subdivision in accordance with the Phasing Plan, development of Work Package Proposals, and solicitation and Controlling Work Items. The schedule identifies mutually agreed-to durations for all review and approval periods for the Department, other agencies, and third-parties. The schedule shall identify the critical path, identify and account for long-lead procurement needs, and identify and account for the Department’s ROW acquisition dates.  |
| Initial Risk Register   | The Initial Risk Register shall identify and monetarily quantify project risks. It shall also document mitigation strategies and the status and outcomes of the implementation of those strategies. The main purpose   |

|  |   |
|--|---|
|  | of the Initial Risk Register is to identify risks and enable the Design-Build Firm, Department, and its representatives to collaboratively develop mitigation strategies that can be implemented during the Planning and Preconstruction Phases to reduce project risks and the value of the Risk Reserve for future Work Packages. |
|--|---|

### Planning Phase Preliminary Plans of Project

The following tables reference FDM plans development requirements, which in many cases have been modified to establish the intent of this submittal to be consistent with the level of detail and completeness of the Concept Plans provided by the Department.

| <b>Non-Structural Item (See FDM Table 901.3.1)</b>  | <b>PHASE I</b> | <b>PHASE II</b> | <b>Comments</b>  |
|---|----------------|-----------------|--|
| Key Sheet   |                |                 | Not Required   |
| Signature Sheet                                     |                |                 | Not Required   |
| Typical Section Package                             |                |                 | Deliverables as specified under Sections IX.E & F – Roadway Plans and Design   |
| Design Exceptions / Design Variations               |                |                 | Deliverables as specified under Sections IX.E & F – Roadway Plans and Design   |
| Pavement Design Package                             |                |                 | Deliverables as specified under Sections IX.E & F – Roadway Plans and Design   |
| Model Management                                    | C              |                 |  |
| Project Control                                     | P              |                 |  |
| Roadway Plan-Profile** (* + Cross Sections & Model) | P*             |                 | * Beyond Phase I: Include critical cross sections and sections at each physical ramp gore. Full cross section annotation is not required. Must show verifiable proof of concept. Submit preliminary model. Selected sections should depict construction packages in which construction occurs per Phasing Plan. Also, include proposed bridges, walls and major storm drain systems and culverts in Plan View and Profile View; high water elevations in Profile View. |
| Roadway Geometrics Package                          |                |                 | Deliverables as specified under Section IX.E – Roadway Plans - General   |
| Traffic Monitoring Site                             |                |                 | Not Required   |
| Drainage Structures**                               |                | P*              | * Reduced Phase II: only at critical locations that (i) have potential conflicts with utilities or other disciplines; (ii) affect constructability; or (iii) jack and bore/micro tunneling systems; defer other non-critical locations. Depict critical interim drainage conditions based on Phasing Plan.   |
| Stormwater Facility Plan**                          |                | P*              | * Reduced Phase II: only Plans and Details; defer Pond Cross Sections.   |



|   |  |    |   |
|---|--|----|---|
|   |  |    | Include Analysis Calculations and Model files.  |
| Drainage Map**                                  |  | P* | * Reduced Phase II: include proposed major storm drain systems, culverts, and ponds in Plan View.   |
| Roadway Soil Survey                             |  |    | Not Required  |
| Stormwater Pollution Prevention Plan            |  |    | Not Required  |
| Temporary Traffic Control Plans**               |  | P* | *TTCP should address phasing plan and include interim conditions / infrastructure. Critical Cross sections shall be included that account for the proposed Phasing Plan. Selected sections should depict interim conditions based on Phasing Plan. Where critical for MOT, locations of temporary walls, crane placements and erection towers shall be depicted. Include lane closures required for bridge erection activities. |
| Utility Adjustments**                           |  | P* | *Include Utilities Master Plan (UMP) only. Existing and proposed utilities are to be labeled on the UMP. Develop preliminary utility disposition and conflict matrix.   |
| Selective Clearing and Grubbing                 |  |    | Not Required  |
| Developmental Standard Plans                    |  |    | Not Required  |
| Mitigation Plans                                |  |    | Not Required  |
| Miscellaneous Structures Plans                  |  |    | Not Required  |
| Signing and Pavement Marking Plans**            |  | P* | *Reduced Phase II: Master Signing Plan (MSP) only. The MSP shall show: pavement markings and messages/shields, all guide signs (both overhead and ground mount, include DMS for reference), sign panel dimensions, sign structure types and locations.  |
| Signalization Plans**                           |  | P* | * Reduced Phase II. Include layout of proposed signal poles, signal heads, SOP, pedestrian signals, conduit, pull boxes, controller equipment locations, and service points. Utility locations shall be shown on the plans. Include a revised Ramp Signal Analysis Technical Memo if required.  |
| Intelligent Transportation System (ITS) Plans** |  | P* | * Reduced Phase II. Include layout of proposed ITS devices, field cabinets, service points, power and communication runs, generator sites, and communication hub sites. Perform initial constructability and MOC analysis for all ITS devices and   |

|  |                  |    |  |
|--|------------------|----|--|
|  |                  |    | field cabinets relative to the Phasing Plan. Include draft PSEMP and ConOps.   |
| Smart Work Zone System Diagram                     |                  |    | In accordance with the requirements defined under Section IX.N.4   |
| Smart Work Zone Test Approach                      |                  |    | Approach to the test requirements defined under Attachment L - SWZ Deployment Requirements   |
| TSM&O Plans  |                  |    | 90% phase submittal for TSM&O plans, including 11”X17” plans for all required components, design documentation, and Technical Special Provisions for ITS, Signalization, ATCS, and Signal Interconnection plans. Include ConOps and PSEMP.   |
| TSM&O Connected Vehicle (CV) Design Components     |                  |    | Include QMP, SEMP, POC Documentation and Demonstration, System Architecture Plan, Operational Development Plan, Security Management Plan, System Requirements Specification, and the Software Development, System Test, System Verification and System Validation Plans in accordance with the deliverables timeline and requirements in Attachment CC – CV System Deployment Requirements |
| Lighting Plans**                                   |                  | P* | * Reduced Phase II: Include Lighting Master Plan showing the layout of lighting poles with lighting symbol description legends. Utility locations shall be shown on the plans. Also include LDAR to justify lighting pole locations.   |
| Landscape Plans**                                  |                  | P* | * Reduced Phase I: Includes updates to Landscape Opportunity Concept Plan and Tree Disposition Charts, and development of Tree Disposition Concept Plans   |
| Utility Work by Highway Contractor Agreement Plans |                  | P* | *Include Utilities Master Plan (UMP) only that is specific to the Utility Agency/Owner (UAO) for which the UWHC plans are being prepared. Proposed utilities are to be labeled on the UMP.   |
| <b>Structures Item ( See FDM Table 121.14.1)</b>   | <b>30% Plans</b> |    | <b>Comments</b>  |
| Cover Sheet  | P                |    |  |
| Sheet Index  | P                |    |  |
| General Notes                                      | S                |    |  |

|   |    |  |
|---|----|--|
| Plan and Elevation  | S  |  |
| Typical Section   | S  |  |
| Hydraulics Recommendation   | P  |  |
| Structures Aesthetics Master Plan   | S  | Refer to requirements provided under Section IX.I.8  |
| Construction Sequence   | S* | * Effort will be limited to flyovers, locations with straddle bents and knee piers, and concrete superstructure bridges with unique constructability elements, such as bridges where lateral beam shifters are envisioned or phase constructed. Construction sequence and erection sequence will be depicted together. Traffic control plans will show overall bridge phasing (foundation construction, substructure and superstructure construction), and bridge plans will reference specific phase/ stage in the TC plans and scheme. |
| Owner Provided Borings, Draft Boring Plan and Pile Settlement and Monitoring Plan** | S* | *Reduced Phase 30%: Include owner provided borings in Plan Set. The Draft Geotechnical Boring Plan, outlining additional Geotechnical field work required, shall be submitted on a roll plot depicting proposed Roadway with bridge limits, substructure locations, wall limits and drainage pond locations as well as the location of owner provided borings.   |
| End Bent  | P  |  |
| Pier  | P  |  |
| Erection Sequence   | P* | *Addresses constructability of bridge (crane placement) in coordination with traffic control plans. Construction sequence and erection sequence will be depicted together. Traffic control plans will show overall bridge phasing including crane placement (foundation construction, substructure and superstructure construction) and bridge plans will reference specific phase/ stage in the TC plans and scheme.  |
| Wall Plan Roll plot**   | P* | *Reduced Phase 30%: Retaining Wall layout plan with approximate wall heights labeled at 200' intervals. A matrix of all  |

|                                     |    |   |
|-------------------------------------|----|---|
|                                     |    | walls shall be prepared that includes heights, wall lengths and wall type.  |
| Temporary Critical Wall Plan Limits | P* | See Temporary Traffic Control Plans requirements  |
| P/T Details                         | P  | Provide for Concrete Straddle Piers and C- Piers  |
| Design Calculations Geometry        | S* | * The planning phase effort is focused on performing concept design so that vertical and horizontal clearance requirements are met during construction and in the permanent condition.<br><br>Detailed geometry calculations, such as for girder haunches, deck elevations, camber, footing pedestal and bearing elevations will be completed in the Preconstruction / Construction Phases.   |
| Design Calculations Superstructure  | P* | * Effort will be limited to flyovers for steel structures, locations with straddle bents and FIB bridges where the chosen FIB size is at their limits or have unique constructability requirements. For most FIB bridges, simple beam capacity charts may be used.  |
| Design Calculations Substructure    | P* | * Calculations for each “family” of substructure units. Number of “families” will be limited to what is necessary for the Design-Build Firm to prepare the OPCC and with sufficient detail to provide geometric certainty for the structures within the Project, which may be significantly less than necessary in the final design. This would include substructure elements where significant size constraints are present such as pier columns in medians and foundations near right of way or located within constrained construction phases. |

**Status Key:**

P – Preliminary; S – Substantially Complete but subject to change; C- Complete

\* Indicates a Change to FDM Requirements

\*\* Item to be provided in roll plot format

Other Planning Phase Deliverables

| Deliverable                                  | Description  |
|--|--|
| Opinion of Probable Construction Cost (OPCC) | The OPCC shall present the total Project cost and be subdivided into Work Packages that align with the Phasing Plan. The Design-Build Firm shall share the details of its cost model with the Department and its representatives.  |
| Survey                                       | Perform all necessary updates and supplementary topographic field surveys of the Project area and update the FDOT provided digital terrain model (DTM) to reflect the existing condition.  |
| Technical Memorandums                        | Technical memorandums shall accompany the Planning Phase Preliminary Plans to further document compliance with or intent to comply with Project requirements. Technical memorandums shall include but not be limited to the following: <ol style="list-style-type: none"> <li>1. Right-of-Way acquisition needs and clearance plans (including what legacy foundations/structures will need to be removed by the Design-Build Firm in order to completely clear the parcel)</li> <li>2. NEPA commitments documented in the PCR</li> <li>3. Permits and governmental approvals</li> <li>4. Systems Interchange Modification Report (SIMR)</li> <li>5. Transportation Management Plan, including traffic control plan with detour routes, traffic operations plan and public outreach plans, lane closure analysis and proposed closure times.</li> <li>6. Proposed Exceptions and Variations</li> </ol> |

**Planning Phase Key Deliverables Timeline**

The following is a list of the key deliverable timeframes for the Planning Phase (in days after NTP 1). Those deliverables not included below will still follow the RFQ and need to be delivered on or before 270 days after NTP 1. The delivery timeframe of the below submittals is flexible pending resolution on any outstanding innovative concepts that have not been accepted or rejected by the Department. The Department has sole discretion to make any changes to the delivery schedule below.

30-days

Draft Planning Phase Schedule  
 Draft Planning Phase Expenditure Projection

60-days

Planning Phase Schedule  
 Planning Phase Expenditure Projection

120-days

Pre-30% Line & Grade Roadway Plan and Profile (with supporting bridge matrix of spans, depths, type, minimum vertical clearance location & height)  
Draft Initial Risk Register

180-days

90% TSM&O Plans

210-days

Draft Project Management Plan  
Draft Quality Management Plan  
Draft Phasing Plan  
Draft Master Schedule  
Draft Roadway Geometrics Package  
Draft Temporary Traffic Control Plan (in support of Phasing Plan)  
Draft Utilities Master Plan  
Draft 30% Bridge Plans  
Draft Geotechnical Boring Plan  
Draft Pile Settlement and Monitoring Plan

240-days

TSM&O Connected Vehicle (CV) Design Components  
OPCC for the entire Project based on 30% Design

270-days

All Planning Phase deliverables to be submitted (or resubmitted as final)

**Executive Review Board and Escalation**

During the Planning Phase, within the first 30 days after the initial NTP, the Department and the Design-Build Firm will establish an Executive Review Board. Each party will appoint three people to serve on the board, and members should have authority to make final and binding decisions on the Project. Members of the board should be at a higher level of authority than those assigned to day-to-day duties on the Project.

Any decision on the Project that cannot be resolved at the project level, may be elevated to the Executive Review Board for resolution. This escalation is a prerequisite to any other source of relief, including Dispute Resolution Board referral, or litigation.

The Executive Review Board shall meet at a minimum of every other month, or as needed to resolve any outstanding issues.

**F. Preconstruction Phase**

The following are tasks/deliverables that the Design-Build Firm shall perform/submit during the

Preconstruction Phase:

Management Services:

- Maintain a collaborative team environment that fosters communication, accountability, and trust.
- Implement an interactive design process to incorporate mitigation strategies for identified risks and innovations into the design.
- Update the Project Management Plan for submittal to and approval by the Department.
- Update the Quality Management Plan for submittal to and approval by the Department.
- Prepare the Safety Plan for submittal to and approval by the Department.
- Provide review and information required for periodic updates to the Community Awareness Plan and provide support to the PIC for the public involvement efforts.
- Develop Work Packages.
- Update the Transportation Management Plan and the Temporary Traffic Control Plan for submittal to and approval by the Department as needed.
- Conduct regular risk and opportunity/innovation workshops and prepare minutes.
- Hold Partnering meetings at a frequency specified in the Preconstruction task work order(s).
- Continue third-party coordination with Utility Agency/Owners (UAO's) (to be led by the Design-Build Firm with oversight from the Department's Utility Coordination Liaison).
- Continue third-party coordination with SFRTA and FEC (to be led by the Design-Build Firm with oversight from the Department's Rail Coordinator).
- Support and coordinate with Department on ROW matters, relative to schedules, construction impacts, maintenance of driveway access, cure improvements, etc.
- Prepare Governmental Approvals and permits required to complete the Project. When the Department is responsible for obtaining an approval/permit, provide supporting information and documentation when requested by the Department.
- Prepare a Hurricane Readiness Plan for submittal to and review and acceptance by the Department.

Design Services:

- Weekly design meetings and minutes, plus regular discipline-specific meetings, including but not limited to MOT/detours, structures, geotechnical, drainage, utilities, signing, ITS, hardscape/aesthetics, etc.
- Presentations and engineering drawings to show work in progress or innovations
- Develop designs to 90% for purposes of WPP development. The Design-Build Firm may request WPP approval based on 60% design. Approval to submit a WPP with 60% design shall be at the sole discretion of the Department.
- The Design-Build Firm shall design the entire Project to 90% within three years from the NTP of the first task work order of the Preconstruction Phase.
- Prepare and submit applications and/or modifications for permits and submit applicable fees required by authorities with jurisdiction
- Develop Project Technical Provisions
- Perform design and provide documentation pursuant to the FDOT applicable manuals, policies, and procedures and the requirements in this RFQ.

Perform utility coordination, surveys and prepare utility adjustment sheets.

Prepare designs and construction documents for utility adjustments and relocations

Prepare ROW plans and provide ROW acquisition support services for any proposed new ROW, if required by the Department.

Conduct any remaining site investigations and surveys

Ensure National Environmental Protection Act (NEPA) commitments are met and continue Project Commitment Record tracking. If necessary, perform analysis, studies and prepare documentation necessary for a PD&E Re-evaluation.

Preconstruction Services:

Risk Management

Update and maintain the Risk Register. Each modification to the Risk Register must be submitted to the Department for review and approval.

Develop and implement mitigation plans for identified risks.

Identify, evaluate optimize and propose alternatives to reduce schedule, reduce costs, or improvements that otherwise will improve the Project.

Perform constructability and maintainability reviews of designs, plans and specifications at major milestones as determined by the parties.

Cost Estimating:

Develop opinions of probable construction cost (“OPCC”) at the 60% and 90% plans phases, as defined by the FDM, or as requested by the Department, and the Design-Build Firm shall share the details of its cost model with the Department and its representatives.

Cooperate with the Department and its representatives in review of OPCC at 60% and 90% milestones, or as requested by the Department.

Develop a GMP and WPP for submittal to and review by the Department.

Open Book Negotiations: The development of all GMPs and Work Package Proposals and changes during Construction shall be on an open-book basis, and the Department and ICE shall have the right to access and copy all records, accounts, and other data used by the Design-Build Firm in connection with the preparation of any draft or final GMP and Work Package Proposal. Each GMP included in any WPP or for changes during Construction shall be developed in a cooperative manner in accordance with the guidelines and principles described in the Contract Documents.

If directed by the Department, continue to participate in value engineering services so that the Design-Build Firm can reduce the GMP. At the Department’s request the Design-Build Firm shall meet with the Department to review and discuss the WPP and make adjustments in response to comments from the Department.

Master Schedule:

Update the Master Schedule as needed.

Phasing Plan:

Update the Phasing Plan as needed.

Subcontractor Management:

Prepare and submit a Subcontractor Plan for Department review and approval, including identification of



the methodology of procurement and the selection processes for subcontractors. This approval must be made by the Executive Review Board.

Develop an on-the-job training (“OJT”) plan that complies with the requirements developed by the Department during the Preconstruction Phase. The requirements of the OJT plan will be provided by the Department prior to the Preconstruction Phase.

Solicit bids and select subcontractors in accordance with the Subcontractor Plan.

Work Package Proposals:

During the Preconstruction Phase, the Design-Build Firm shall develop WPPs in accordance with the Phasing Plan. No individual WPP for Major Items of Work can be finalized prior to the issuance and acceptance of the 60% OPCC. For this requirement, Major Items of Work means any WPP whose total value exceeds 5% of the 30% OPCC submittal.

The Department shall review each draft WPP and provide feedback at its discretion. Thereafter, the Department and the Design-Build Firm shall engage in good faith negotiations to finalize the Work Package on a timely basis. At the Department’s request, the Design-Build Firm shall meet with the Department to review and discuss the draft Work Package and make adjustments in response to comments from the Department.

In accordance with other requirements herein, throughout the Preconstruction Phase, the Department, ICE, and the Design-Build Firm shall work together to develop iterative versions of a budget for the Project and OPCCs at various milestones and for various phases of the Project. Based on such iterative process, upon approval by Department of an agreed to scope of work depicted in the Design Documents of a sufficient level of completeness, the Design-Build Firm shall prepare and submit a GMP in accordance with the GMP content requirements provided in RFQ Section II.G.2.

Each WPP shall be for a unique Work Package. Each Work Package may be comprised of one or more Construction Subcontractor Packages that shall be competitively bid to Subcontractors. Solicitation of bids and award of Construction Subcontractor Packages must be in accordance with the Subcontractor Plan approved by the Department, including compliance with minimum and maximum self-performance requirements.

The Department shall review the WPP and provide any feedback or direction it elects in its discretion including direction to the Design-Build Firm to continue to participate in value engineering exercises so that the Design-Build Firm can reduce the cost of the Work Package Proposal. At the Department’s request, the Design-Build Firm shall meet with the Department to review and discuss the GMP for the Work Package and make adjustments in response to comments from the Department.

If the Department and Design-Build Firm agree upon a GMP and other items comprising the WPP, then they shall execute and issue a task work order (subject to availability of funds), which shall set forth each of the items listed below to the extent they are relevant to the scope of the Construction Work authorized by the Work Package:

1. The GMP with backup documentation for ICE review;
2. The Schedule of Values;
3. The Work Package Schedule, including a total duration of the work in calendar days. The schedule shall identify the critical path, identify and account for long-lead procurement needs, and identify and account for the Department’s ROW acquisition dates for the Work Package. The Work Package Schedule shall be contained within the Master Schedule.;
4. The parties respective obligations for obtaining any required Governmental Approvals;
5. A list of the Design Documents, including all addenda thereto, used in preparation of the GMP,

including a list of clarifications and assumptions made to supplement the information contained in the Design Documents;

6. ROW acquisition responsibilities and schedule;
7. The studies, plans, and reports generated as part of the Preconstruction Phase, including any Site investigation reports, the Utility Map, ROW Plans, Hazardous Materials Report, Project Management Plan, Quality Management Plan, Safety Plan, and Disadvantaged Business Enterprise (DBE) Performance Plan.
8. Any changes to identified Key Personnel positions or the individuals serving in such positions;
9. The Technical Provisions;
10. Risk Register;
11. The Design-Build Firm's obligations to perform work under any Utility Agreements;
12. Any other documents or information required by the Department;
13. Any clarifications made by the Department under the provisions of this RFQ; and
14. Additional obligations or requirements agreed to by both parties.

### **G. Construction Phase**

The following are tasks/deliverables that the Design-Build Firm shall perform/submit during the Construction Phase:

#### Management Services:

Maintain a collaborative team environment that fosters communication, accountability, and trust.

Attend weekly progress meetings.

Update the Project Management Plan as needed.

Update the Quality Management Plan as needed.

Update the Safety Plan as needed.

Update the Master Schedule as needed.

Update the Phasing Plan as needed.

Update the Subcontractor Plan as needed.

Ensure compliance with the on-the-job training (OJT) plan.

Update and maintain the Risk Register. Implement mitigation plans for identified risks.

Continue third-party coordination with Utility Agency/Owners (UAO's) (to be led by the Design-Build Firm with oversight from the Department's Utility Coordination Liaison).

Continue third-party coordination with SFRTA and FEC (to be led by the Design-Build Firm with oversight from the Department's Rail Coordinator).

Provide review and information required for periodic updates to the Community Awareness Plan and provide support to the PIC for the public involvement efforts.

Ensure NEPA commitments are met and continue Project Commitment Record tracking.

#### Design Services:

Complete final design and post-design work for each Work Package.

Construction Services:

Construct Work Packages in accordance with the Contract requirements.

Perform Incident/Emergency Management and Maintenance responsibilities within the Project limits in accordance with the Contract requirements.

Cost Estimating:

Open Book Negotiations: Any required changes/innovations during the Construction Phase shall be developed in a cooperative manner in accordance with the guidelines and principles described in the Contract Documents.

Method of Compensation:

**1. Self-Performance and Subcontracting Requirements**

The Design-Build Firm shall self-perform at least thirty percent (30%) and not more than forty percent (40%) of the Construction Work. The Work that the Design-Build Firm will self-perform shall be defined in the Subcontractor and Phasing Plans. Only direct costs associated with Construction Work shall be considered in the calculation of the self-performance. The percentage of Construction Work subcontracted shall be determined by dividing the total direct costs dollar value of the Subcontracted Construction Sub-Packages for Construction Work by the total value of Construction Work direct costs in all Work Packages.

Selection of Subcontractors shall be in accordance with the approved Subcontractor Plan. The Subcontractor Plan shall establish the Subcontractor selection process and the parties shall agree on protocols for determining when the Design-Build Firm will self-perform Construction Work as opposed to retaining a Subcontractor.

Prior to awarding any Subcontract for the Construction Work, the Design-Build Firm shall be required to solicit a minimum of three competitive bids for all Construction Work (except such Work that is included in the Design-Build Firm's self-performance selection), including for any materials or equipment supplied in connection with the Work. After analyzing bids, the Design-Build Firm shall deliver the bids to the Department. The subcontracted Work shall be awarded to the bidder providing the best value or low-bid, as determined by the Design-Build Firm in accordance with its Subcontractor Plan. If three bids for the work are not received, the Department in its sole discretion, may require the received bids be submitted to the ICE for review before the Design-Build Firm includes the bid in its GMP. If the selection process does not meet the requirements of the Contract Documents or is otherwise unsatisfactory to the Department, the Department may, in its sole discretion, direct that no award be made and that a new selection process be undertaken. In all circumstances of subcontract selection, not made by a low bid selection, the Design-Build Firm must submit the selection to the Executive Review Board to ensure the Subcontractor Plan was followed and to approve the selection.

Subject to the Department's acceptance of the selection and confirmation that the requirements of the Contract Documents have been met, the Design-Build Firm may negotiate the most favorable price and terms of each Subcontract with the selected Subcontractor.

**2. Calculation of the GMP**

The GMP for each WPP shall be computed as the sum of the following and any other components agreed to by the Department and the Design-Build Firm:

1. The Design-Build Firm's reasonable, good faith estimate of the cost of the Work, to include both direct and field indirect costs, presented as the Schedule of Values. This shall include all values for self-performed work and subcontracted work that makes up the Work Package.

2. The Design-Build Firm's Mark-up.
3. Any Risk Reserve approved by the Department.
4. Any Allowances stipulated by the Department and a statement of their basis (e.g., quantities, unit prices).

The backup support for the calculation of the GMP shall be provided to the Department in a manner and format developed pursuant to the Open Book and Transparent Cost Estimating Requirements of the Design-Build Agreement.

The Design-Build Firm and the Department shall establish the backup support documentation required for a GMP. The Department retains the sole discretion to determine document requirements. The creation of the initial WPP GMP is not chargeable to the Department. The backup support for the GMP calculation is anticipated to include the following:

1. Pay Item list and associated quantities (Agreed Schedule of Values). ICE will follow the HCSS (or equivalent estimating software) software Bid Item numbering sequence that will be set up by the Design-Build Firm to simplify the comparison process.
2. Estimating instructions that provides all estimators with key guidelines to be followed during the development of the cost estimates including labor rates, waste and conversion factors, expenses to be carried in the direct costs vs the indirect costs, etc.
3. Final HCSS (or equivalent estimating software) file to support each GMP for each Work Package submitted to FDOT.
4. Detailed HCSS (or equivalent estimating software) cost report showing labor costs, manhours and associated work-week per activity (with assignment of overtime rates), worker's compensation rates by work discipline, equipment costs (generated by Equipment Watch), permanent material, expendable material (consumables) and subcontractors by Bid Item upon request.
5. Indirect Cost Groupings
6. Equipment rates separating the rental and each maintenance rate component.
7. Timely transmittal of all subcontractor and vendor quotes as submitted to the Design-Build Firm
8. Selected Subcontractors and Vendors report from HCSS (or equivalent estimating software) along with their final quote and detailed scope of work
9. A spreadsheet providing the overhead (indirect) staffing, time frame and associated quantities for each staff member (person-months, etc.)
10. Gantt charts of the construction schedule with appropriate WBS developed in P6 software. Request for the initial proposed WBS to be submitted to the ICE.
11. Request for the final .xer file to be provided to the ICE (and others under development upon request).
12. A narrative that describes the scope of work, general sequencing and crew sizes/equipment, critical path and construction schedule risks/opportunities.
13. A risk/opportunity matrix with associated estimated values/funding.
14. A suggested cost/pricing methodology to establish final unit pricing to be reviewed by the Department/ICE.

The Department and the Design-Build Firm may agree in any WPP that some or all of the pricing shall be expressed as a lump sum as opposed to a GMP amount. The Department and the Design-Build Firm may also agree in any WPP that elements of the pricing may be paid for on a unit-price basis in the interest of

risk-sharing.

### 3. Risk Reserve

Any risk reserve included in a GMP for a WPP shall be used to cover unanticipated construction costs that are properly reimbursable as a cost of the work. Such costs may include costs due to unanticipated market conditions; construction cost escalation for labor or materials; errors in estimating; delay or acceleration costs as directed by the Department, including overtime for acceleration; Subcontractor defaults or deficiencies; buyout overruns; interface omissions between Work Packages or Construction Sub-Packages; and any other reason not attributable to the Design-Build Firm's negligence or failure to mitigate. Unless approved by the Department in its sole discretion, utilization of the Risk Reserve shall only apply to items contained in the Work Package Risk Reserve as approved by the Department. The cost listed for each Risk Reserve item is to be considered an estimate of potential costs. These costs are utilized in creating the total value of the Risk Reserve. Requests for compensation from the Risk Reserve are drawn from the total amount of the Risk Reserve as a whole and not from independent items.

The Design-Build Firm's use of any risk reserve funds shall be subject to the same requirements for a claim set forth within the Design-Build Specifications, with the exception that claims which may not be allowed under the Design-Build Specifications are allowed to use Risk Reserve funds if they are included on the approved Risk Reserve of the Work Package or otherwise approved by the Department.

All claims allowed by the Design-Build Specifications must be allocated to the Risk Reserve or Allowances, and under no circumstances shall the total costs incurred by the Department exceed the GMP for a Work Package inclusive of the Risk Reserve and Allowance amounts, with the exception that the Department retains the sole right to make additional payments (either through increasing a GMP or any other method allowed) to the Design-Build Firm in the case of force majeure impacts to the Project and only upon proper documentation of the impact from the Design-Build Firm.

All claims for additional time and compensation on any Work Package must be submitted in accordance with the RFQ in the format and timeframe described in the Design-Build Specifications that are incorporated into the Contract. Notwithstanding any other provision of the Contract, all pricing and compensation for claims shall be calculated in accordance with the RFQ and not as provided in the Design-Build Specifications.

In order to facilitate a request for additional compensation to be paid out from either the Risk Reserve or the Allowance of a GMP, either as a specific allowable claim or as a general request for additional funding, the Design-Build Firm must provide the notice, as defined in the Design-Build Specifications, to the Department of the potential for the claim, in sufficient time for the Parties to discuss steps to minimize the utilization of the Risk Reserve and Allowance. The Design-Build Firm must also provide such supporting documentation as required by the Department. The Department has sole discretion to determine the amount of supporting documentation required based on each request. The amount of funds requested shall follow the same open-book pricing requirements as a GMP as defined in the RFQ.

Before each Work Package is considered complete, the Design-Build Firm must make a final certified claim for any requests for compensation from the Risk Reserve and Allowance. This final certified claim is considered the last and final opportunity to be compensated for Work completed under the Work Package. For allowable time, the Design-Build Specifications govern Delay in the Critical Path of the Project Master Schedule. For associated costs for claims, including indirect costs, the RFQ and all Terms and Conditions negotiated for the Contract will supersede all other described specific amounts defined in the Design-Build Specifications.

When Innovations are approved by the Department, after issuance of a task work order for an associated Work Package, and produce savings, the value of those savings shall be allocated to the Risk Reserve. Innovations are defined as any modification to a previously approved item and/or a deviation from a Contract Requirement, that require Department approval and that reduces the cost of the item as previously

defined in an approved GMP. All Innovations must not impair the essential functions and characteristics of an item of work such as safety, service, life, reliability, economy of operation, ease of maintenance, aesthetics, and necessary standard design features as decided by the Department in its sole discretion.

For individual Work Packages, the amount of any savings derived from Innovations approved by the Department and moved to the Risk Reserve that remains unspent after the Work Package is complete shall be documented as Shared Savings. Once the Project has been submitted to the Department for Final Acceptance and the Project has been completed within allowable Contract Time (adjusted per contract) and there is no outstanding or anticipated litigation (certified by the Design-Build Firm that none exist), the Department shall pay the Design-Build Firm 14% of the aggregated Shared Savings amount.

#### 4. Allowances

If provided for in any GMP for a Work Package Proposal, allowances shall cover any unexpected costs to the Design-Build Firm of materials and equipment delivered at the Project site, unloading and handling costs at the Project site, labor costs, installation costs, and all required taxes and permits, less applicable trade discounts, greater than indicated in the WPP establishing the allowance. The Allowance category is to allow the Design-Build Firm to make claims for items that are not included in the Risk Reserve.

#### 5. Open Book and Transparent Cost Estimating Requirements

**General.** Throughout the Preconstruction Phase, and as changes demand during the Construction Phase, the Design-Build Firm shall provide estimates of Project cost and/or cost of individual Project elements. The estimates shall be prepared in a transparent, detailed, open book format that allows the Department and their representatives to understand the basis of costs and cost development.

The estimates shall be prepared in the Design-Build Firm's cost estimating system as is customary use by the Design-Build Firm for other projects of similar nature. The estimates shall be developed using current pricing for wage and equipment rates (material pricing will depend on how the material was quoted and the amount of time for which the quote is fixed). Each Work Package is to include the Fuel and Bituminous adjustments as defined in Design-Build Specifications (9.2.1.1 and 9.2.1.2). For Contract Time, this shall be considered the Work Package duration, and the baseline index shall be independent for each Work Package. No other Fuel and Bituminous adjustments will be permitted. The Department retains the right to adjust the GMP on a Work Package due to Fuel and Bituminous adjustments following the Design-Build Specifications.

Submitted estimates shall clearly itemize the estimated costs of performing the Construction Work of the items in the mutually agreed schedule of values and also include the Contractor's field indirect items. A summary-level cost is requested for each of the items provided, supported by a detailed cost of each item. The detail shall provide crews with rates of production for each activity within the item of Construction Work.

Crews shall clearly show the numbers of equipment and personnel within each activity and work hours for overtime calculations. Estimates of cost for items of Construction Work shall be further divided into the Design-Build Firm's customary cost categories such as man-hours, labor, permanent materials, expendable materials, equipment ownership and operation, and subcontract cost, as appropriate.

The detail of the Construction Work breakdown may include several activities within a schedule of value line items that shall subtotal to a one-line entry for the summary report. The summary shall include the same cost categories along with the unit cost of the total. Further groupings of similar items of Construction Work can be agreed upon to further facilitate reconciliation of the Department and Design-Build Firm estimates. Costs and price for the Project shall be subdivided as follows:

- Total construction phase costs composed of direct costs attributed to item quantities appearing in the plans and field indirect costs
- Mark-up expressed as a percentage of total construction phase direct costs per the Contract

terms.

During the development of the Subcontractor Plan, the Department will determine what subcontractor estimates will also be subject to these Open Book Estimating requirements.

No WPP will be considered if the Open Book Estimating requirements are not followed.

### **Total Construction Cost Elements included in the Schedule of Values**

The schedule of values line items list will be developed in conjunction with the Department and required specifications including measurement and payment are as specified by the Division 1 Design-Build Specifications. The components of the schedule of values line items may include:

- A. *Direct Costs.* The Design-Build Firm shall enter the direct costs for performing the Construction Work in a format agreed to by the Department using the estimated quantities. The schedule of value line items shall include the direct cost of performing the Construction Work, Final Design (completing the design included in the WPP), and Post Design Services.

Direct costs are to also include any line items from the following list of jobsite and field office costs that are determined to be allowable direct costs as part of post-award negotiations:

- (1) *Job Supervision and Overhead:* Wages, including benefits, payroll insurance and taxes for onsite management, supervision, engineers, safety personnel, quality control staff, and administration staff.
- (2) *Survey:* Cost of construction survey including both Design-Build Firm hired and outside services.
- (3) *Site Office Expense:* Ownership or rental of building, maintenance, removal, utilities, office and engineering expendables, furniture, computers and infrastructure.
- (4) *Temporary Buildings:* Cost of ownership or rental, set up, maintenance and removal of such as warehouses, first aid building, and other miscellaneous.
- (5) *Personnel Expense:* Small tools and supplies (unless carried in the direct cost portion of the estimate), safety expendables, drug screen testing, training, physicals, hiring expense; include any per-diem costs for craft or indirect personnel.
- (6) *Project Utilities:* Site utilities such as temporary electric, water, and sanitation.
- (7) *Mobile Equipment:* Overhead vehicles, maintenance equipment and personnel (if not in Equipment Operating Expense), and general service equipment (e.g., flatbeds and forklifts) and personnel if not already included in the direct cost.
- (8) *Mobilization:* Cost of transportation of equipment and other items for move in, move out, set up, and take down, including cost of personnel moves and related expense.
- (9) *Construction Plant:* Site fences, parking areas, material yards, temporary access, haul road construction, maintenance, and other such special construction not already included in direct costs.
- (10) *Quality Control:* Cost of Quality Control labor, equipment, supplies, outside services, and Contractor-hired personnel and on-site quality supervision.
- (11) *Labor:* Wages and add-ons, including overtime, vacation pay, and all fringe payments such

as health and welfare, pensions, and any other that may be included in union agreement or as paid to both craft and staff employees; payroll insurance including Worker's Compensation and General Liability if based on labor amounts; payroll taxes including Federal Insurance Contributions Act (FICA) and State and Federal unemployment

(12) *Permanent Materials*: Cost of materials incorporated into the Construction Work, including estimated loss, waste, and non-pay overruns. Sales tax and any shipping for these materials will be a part of this category.

(13) *Construction Expendable Materials*: Non-permanent materials, temporary facilities, small tools, formwork, temporary construction, office supplies, services, insurance, and taxes

(14) *Equipment Ownership*: Rental or ownership charge of both company-owned and outside rentals, and tax on any rentals

(15) *Equipment Operating Expense*: Repair parts, tires and tracks, Contractor's repair labor, services and fuel, and oil and grease

(16) *Subcontract*: Cost of items of Construction Work subcontracted, including contracted trucking

Direct costs of the items of Construction Work shall not include:

- Any contingencies
- The spread of field indirect costs
- The Design-Build Firm's home office overhead, or profit. The Design-Build Firm is allowed a 14% Mark-up on the direct cost of the Work Package, before Risk Reserve and Allowance costs, for its home office overhead and profit. See Mark-up section below for additional information.

B. *Jobsite and Field Office Indirect Costs*

The Design-Build Firm's field indirect costs shall be included in the GMP for each Work Package. The list below shows a sample breakdown of indirect cost categories that are acceptable. However, it is also acceptable to use the Contractor's own customary indirect template with an explanation of the costs included within each item if the level of detail is similar to that shown below. Jobsite and Field Office Indirect Costs shall not include any profit or home office overhead, as defined in the Mark-up section below. Field indirect shall include costs for the following:

(1) *Insurance and Taxes*: Insurance other than that based on payroll, such as railroad protective, equipment insurance, and other specified or Design-Build Firm required insurances. No project specific professional liability insurance is required on this Project, and the Design-Build Firm may not include such a policy as an expense. Taxes, (excluding payroll taxes) such as property tax and any special local or State sales tax, should be included with the applicable item taxed.

(2) *Bonds*: Cost of payment and performance bond or other guarantees as specified or allowed, if any; also includes cost of subcontract or material bond. Each Work Package must include a separate Payment and Performance Bond for the amount of the GMP, on the form provided by the Department.

C. *Use of Construction Cost Estimate*. The detailed cost estimate will be the basis of developing



estimates during the Preconstruction Phase and for preparing the GMP(s). Total the direct and field indirect costs separately. The same cost estimating model, with the same transparency and level of detail, shall be used and submitted for cost proposals for the GMP(s) for each Work Package Proposal, and as construction changes, or additional work warrants for change proposals (Supplemental Agreements) during the Construction Phase.

### **Mark-up, Design Mark-up, and Phased Design-Build Multiplier**

The Design-Build Firm is allowed a 14% Mark-up (Construction Management and G&A Fee or CMGA Fee) on the direct cost of the work (both self-performed and subcontracted) of each Work Package before Risk Reserve and Allowance costs. The Mark-up is not subject to negotiation after project award. The Mark-up is to compensate the Design-Build Firm for all profit and home office overhead costs associated with the Project. Home office overhead is defined as all auditable costs that are allocated to all of the Contractor's ongoing projects, such as off-site supervision and travel expenses for off-site supervisors, accountants, attorney and counsel fees, and insurance that is maintained by the Contractor as a general cost of doing business.

The Mark-up will be used in the preliminary and final GMP(s) for each Work Package Proposal. The Mark-up shall be applied to all direct work compensated from either the Risk Reserve or the Allowance fund.

The Design-Build Firm is allowed a 5% mark-up to any Design task work order during the Planning and Preconstruction Phases of Work. The Design Mark-up is not subject to negotiation after project award. The Design-Build Firm may not add an additional 5% mark-up to the final design portions of a Work Package, as that item is already subject to the 14% Mark-up (above).

Under no situation may the cost of an item of Work be modified by both the Mark-up and the Design Mark-up simultaneously.

The Phased Design-Build Multiplier for this Project is 2.8. This Multiplier is not subject to negotiations after project award.

### **Summary Narrative of the Estimate**

Along with the estimate reports, provide a summary narrative of the estimate. Include a discussion of how specific items were developed in the estimate, such as, but not limited to, fuel pricing, material sources, labor rates, any craft labor agreements, and availability of skilled craftsman. Discuss approach to equipment availability and rental rates, including any equipment adjustments to hourly equipment rates used in the estimate based on schedule usage of equipment versus length of time equipment will be on the job, or if a buy-sell basis of ownership costs is applicable to the Project. Discuss temporary construction required such as haul roads, temporary pavement, temporary drainage, detours, any retained earth, and borrow or waste pit development. Discuss approach to schedule, including hours of Work, double or triple shifts, weather and season considerations, and the general duration of the estimated Work. All information provided by the Design-Build Firm will be subject to the review by the Department and ICE.

### **Final Payment on Work Packages**

At the completion of a Work Package, the final payment amount for that Work Package shall be the sum of the schedule of values, allowance expenditures authorized by the Department, and risk reserve expenditures authorized by the Department. In no event shall final payment exceed the GMP identified in the task work order for an associated Work Package, with the exception that the Department retains the sole right to make additional payments (either through increasing a GMP or any other method allowed) to the Design-Build Firm in the case of force majeure impacts to the Project and only upon proper documentation of the impact from the Design-Build Firm. Acceptance of a Work Package is independent of final acceptance of the Project and does not relieve the Design-Build Firm from the responsibility for the Work

or obligation to maintain the Work associated with the Work Package; it is solely a tool to make a final payment owed on a Work Package. The Project as a whole will not receive final acceptance until all Work Packages have been completed and accepted by the Department, and the Design-Build Firm will maintain responsibility, including maintenance, over the entire Project limits until final acceptance is granted by the Department.

The Department may, at its sole discretion, in addition to accepting a completed Work Package for the above payment reasons, issue a letter of Partial Project Acceptance. Issuance of the Partial Project Acceptance letter for a particular Work Package will start the warranty period for that Work and allow for that specific Work Package's bond to close after the warranty period has expired. As a precondition to a Partial Project Acceptance letter, the Department and the Design-Build Firm must enter into a separate Task Work Order for the maintenance of the limits of the Work Package. A letter of Partial Project Acceptance of a Work Package may only be issued by the Department if the Department members of the Executive Review Board determines that the Work in question is completed, has independent utility, and is not likely to be impacted by remaining Work on the Project.

### **Schedule of Values**

The Schedule of Values approved by the Department will be the basis for determining each monthly progress estimate and the final estimate for each Work Package. The quantities will be compared with the Project schedule to determine the percentage earned. The percentage shall be that portion of the work completed as compared to the total work contracted. The Design-Build Firm shall assign the Schedule of Values to the activities in the CPM schedule. The assignment of values to scheduled activities must be approved by the Department prior to the first monthly progress estimate and prior to any invoicing by the Design-Build Firm. The monthly progress estimates cut-off date will be as provided for on the Department's website currently at [Estimate Cut-Off Dates \(fdot.gov\)](#). If the Department no longer publishes the estimate cut-off dates the estimate cut-off date shall be the third Sunday of the month. The Design-Build Firm must submit the schedule of values to the Department for approval for each Work Package.

### **Combined Invoice for Work**

The Design-Build Firm is responsible for submitting invoices requesting payment. These invoices shall be submitted no later than twelve o'clock noon (12:00 P.M.), Monday, after the estimate cut-off date or as directed the Department and shall include all sums earned by the Design-Build Firm under the Contract and any task work order, including the estimates associated with each Schedule of Values associated with any ongoing Work Packages. The Schedule of Values estimates portion of the invoice shall be based on the completion or percentage of completion of tasks as defined in each schedule of values. No estimates requesting payment shall be submitted prior to Department approval of the schedule of values. Design-Build Firm DBE data reporting, including payments, shall be in accordance with the Construction Project Administration Manual requirements for Equal Opportunity Compliance.

If the Design-Build Firm earns any bonus payment associated with the bonus provisions defined in Section II.L, the Design-Build Firm should request in writing confirmation from the Department that the bonus was earned, and then may submit for payment of the bonus on the invoice in the month following confirmation from the Department that the bonus was earned.

Upon receipt of the estimate requesting payment, the Department's Project Manager will determine, at the Department's sole discretion, whether work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

### **Whole Project Contingency**

The Department shall establish a Whole Project Contingency (WPC) for potential resolution of any issues that exceed a GMPs total value throughout the life of the Project. This WPC shall be valued at \$30,000,000. This in lieu of requiring and compensating the Design-Build Firm for Project Specific Professional Liability

Insurance or CPPI. At any time, the Design-Build Firm may make an Errors and Omission claim to the Department. This claim will be evaluated by the Executive Review Board, and if approved by the Department members of the Executive Review Board, compensation for the E&O claim would come from the WPC. No other type of claim may be made to the ERB to be paid from the WPC, and as a precondition to making a E&O claim on a WPP, the GMP for the Work Package Proposal has to be met, with zero funds remaining in the Risk Reserve or Allowance fund.

Once the Project has been submitted to the Department for Final Acceptance and the Project has been completed within allowable Contract Time (adjusted per contract) and there is no outstanding or anticipated litigation (certified by the Design-Build Firm that none exist), and if no E&O claim has been made on the Project, the Department shall pay the Design-Build Firm \$10,000,000 of the WPC (\$5,000,000 earned by the Design-Build Firm's Contractor and \$5,000,000 earned by the Design-Build Firm's Designer).

#### **H. Coordination with the Independent Cost Estimator**

**General.** The Design-Build Firm shall develop a collaborative environment with the Department and its representatives, including ICE, in order to maximize Project Scope, value, and quality of the Project through open and transparent development of project costs, schedule, and risks. The requirements stated herein are minimums, and the Department may request additional meetings or documentation be shared by the Design-Build Firm to the Department or its representatives to enable those representatives to perform their services for the Department.

**Initial Cost Meetings.** Before any pricing begins on any Work Package Proposal, the Design-Build Firm, the Department, and the ICE shall meet to discuss and agree on how the ICE will evaluate the GMP for the Work Package Proposal. In addition to reviewing the overall fair price strategy, the Design-Build Firm, Department, and ICE will seek agreement with the Design-Build Firm on how certain elements of price will be handled. The following issues will be discussed:

1. Definition of fair market price;
2. Expectation of design-build cost versus low-bid cost;
3. Labor and equipment rates;
4. Subcontractor quotes and self-performed work;
5. Number of OPCCs and bid submittals.

#### **Risk and Opportunity Workshop, Constructability Review, and Quantity Reconciliation Meeting.**

The Design-Build Firm, the Department, and the ICE shall hold risk and opportunity workshops to continue risk management that began with the Planning Phase Risk Register and identify and prioritize risks, discuss possible risk mitigation strategies, and explore risk sharing concepts for each Work Package. The workshops shall seek to quantify risks and predict probability of occurrence in an effort to predict the total Project risk reserve figure. The meetings shall focus on risk mitigation and how risks would affect bid items. For the priority risks, associated bid items will be identified and the affected pricing components (production rates, labor, materials, equipment, etc.) summarized for each.

During the risk and opportunity workshops, the Design-Build Firm, the Department, and the ICE shall also discuss constructability review comments and quantities. The plans shall be reviewed to verify that the risk mitigation strategies and opportunities stemming from the risk and opportunity workshop have been incorporated. This review shall also include quantity takeoffs, verification, and reconciliation to verify all bidding parties have agreed to bid quantities. A key element of these reviews is identification of limitations to operations which will describe the segment and schedule requirements for the Project and will be helpful to the Design-Build Firm and ICE as they each prepare their separate master schedules.

**OPCCs.** After the completion of the risk and opportunity workshops for an individual WPP, the Design-

Build Firm and ICE each will prepare a production-based OPCC in a consistent format agreed-to by the Design-Build Firm, the Department, and ICE. The Design-Build Firm and ICE each will use its own master CPM schedule in developing its estimate. For this estimate, indirect items, profit, and risk will be broken out separately. Once the OPCC estimates are complete, the Design-Build Firm will submit its OPCC to the Department and ICE. ICE will then compare the costs for each item in the Design-Build Firm's OPCC and report the divergence percentage between the Design-Build Firm's OPCC and the ICE estimate for each line-item. The total cost of each OPCC will also be compared to ensure that the OPCCs are within the Project Budget. ICE will then return the OPCC to the Department.

**OPCC Meetings.** After the Department receives the OPCC comparison report from the ICE, the Department may elect to hold an OPCC Meeting. If the OPCC meeting is held, the Design-Build Firm, ICE, and the Department will all meet and discuss the assumptions for items identified by the Department for discussion. Costs will not be discussed. Rather, the factors that contribute to the costs are shared and discussed. The goal of these meetings is to clarify and resolve differences where possible between estimators. Each estimator determines for themselves if and how they might adjust their estimate. The goal is for the total Project cost to be at fair-market value at the time any GMP Proposal is determined with respect to a Work Package.

**OPCC Reviews and Actions.** After OPCCs are received at the 30%, 60%, and 90% Design completeness for the entire Project, the Department and the Design-Build Firm will take the following actions:

1. If the OPCC is equal to or less than the current programmed funding for the Project, the Department will move forward with step 3 below.
2. If the OPCC is greater than the current programmed funding for the Project, the following steps will be undertaken in order. Steps may be combined in order to seek resolution to an unacceptable OPCC.
  - i. The Design-Build Firm and the Department will evaluate the needs of the Project and ensure that the current level of Design correctly meets the goals of the Project. The Department and the Design-Build Firm will discuss and address any outlying risk that may be causing an increased OPCC. If after evaluating and resubmitting the OPCC it still exceeds the programmed funding, proceed to step ii.
  - ii. The Department with the Design-Build Firm will consider scope reduction in order to facilitate achieving an OPCC under the programmed funding. If after scope reductions and resubmitting the OPCC it still exceeds the programmed funding, proceed to step iii.
  - iii. The Department will address any programmed funding shortfall to meet the OPCC. If the Department is unable to ensure that programmed funding matches or exceeds the OPCC, proceed to step iv.
  - iv. If the Department does not approve the OPCC, the Department may take any other action allowed by the Contract, including choosing to not proceed with any new Construction Task Work Orders under the Contract.
3. Once the OPCC has been submitted and it is equal to or below the programmed funding for the Project, the Executive Review Board must review, and the Department at the Executive Review Board level must either approve the submitted OPCC or reject it. If the OPCC is approved by the Department at the Executive Review Board level, it becomes a binding portion of the Contract subject to the provisions concerning Shared Savings in this RFQ. If the Department at the Executive Review Board level does not approve the OPCC, the Department may take any other action allowed by the Contract, including choosing to not proceed with any new Construction Task Work Orders under the Contract.
4. If the Department chooses to not issue any further Construction Task Work Orders, any current Task Work Orders remain in effect. The Department retains the right to request an additional Task Work Order from the Design-Build Firm to take the remaining Design of

the Project to final Design. This Task Work Order shall be compensated the same as a Preconstruction Task Work Order.

5. If the Design-Build Firm's 90% OPCC is less than its 30% OPCC, then the difference between the OPCCs becomes part of the Shared Savings (as also described in Section II. G.3.) Once the Project has been submitted to the Department for Final Acceptance and the Project has been completed within allowable Contract Time (adjusted per contract) and there is no outstanding or anticipated litigation (certified by the Design-Build Firm that none exist), the Department shall pay the Design-Build Firm 14% of the aggregated Shared Savings amount.

### **I. The Department's Rights**

By entering into the Contract with the Design-Build Firm, the Department is not obligated to authorize Construction Work on any component of the Project, or once a task work order has been issued for a specific Work Package to continue to approve any additional Work Package Proposals. If the Department, in its sole discretion, determines that the parties, after good faith negotiations, are unable or unwilling to agree upon any Work Package Proposal, then the Department may, at its election, take one or more of the following actions:

- Enter into discussions with the Design-Build Firm to reconcile basis of costs differences.
- Direct the Design-Build Firm to value engineer or reexamine the scope of the Work Package and make modifications to the proposal to satisfy the Department's concerns, and then resubmit the proposal as a new Work Package Proposal.
- Enter into negotiations with the Design-Build Firm to remove portions of the Work Package Proposal and either create a new Work Package Proposal with a modified scope, or add those removed portions to previously approved Work Packages through amendments, modifying the previously agreed upon task work order for the associated Work Package accordingly.
- Take any other action allowed under the terms of the Contract.
- Reject the Work Package Proposal in its entirety.
- Issue a notice to the Design-Build Firm that the Department intends to terminate the agreement after current task work orders and Work Packages are completed and not to issue future task work orders or consider any future Work Package Proposals from the Design-Build Firm. If this election is chosen, it does not remove the obligations from the Design-Build Firm to complete any Work under existing task work orders. This election shall not be considered a termination for convenience and shall not be considered a violation or breach of the Contract by the Department. If the Department believes that utilization of this election is premised on a breach by the Design-Build Firm, the Department shall state that in its notice to the Design-Build Firm.

The Department's decision on approving or not approving a Work Package Proposal does not modify any other portion of the Contract without written agreement of the parties.

### **J. Department's Availability of Funds**

The Design-Build Firm shall align commitment/start of work on the Planning Phase, Preconstruction Phase, and Construction Phase for the Project to not exceed the Department's programmed funds, as described below, which are subject to change and contingent upon appropriation. These amounts are for the Design-Build Firms use in aligning work and do not represent a commitment of funds other than the \$17,000,000 currently available for the Planning Phase that will be made available upon execution of agreement and issuance of NTP. Additional funds required for the Planning Phase will reduce funds available for the Preconstruction and Construction Phases. Additional funds allocated to the Preconstruction Phase will also reduce funds available for the Construction Phase. Amounts may be increased if available and at the

Department’s sole discretion:

**Project Programmed Funding  
 Construction**

| FY 2024  | FY 2025                                       | FY 2027  |
|--|---|--|
| 436964-2-52-01 (I-95/Connector)<br>- \$582,933,199 |   | 436964-2-52-01 (I-95/Connector)<br>- \$319,956,891 |
| 436964-2-52-02 (I-95/Connector)<br>- \$178,510,354 |   |  |
| 439891-5-52-01 (TSM&O) -<br>\$26,513,724           |   |  |
| 439891-5-52-02 (TSM&O) -<br>\$9,822,728            |   |  |
|  | 439891-1-52-01 (Connector)<br>- \$179,547,409 |  |

**Project Programmed Funding  
 Utility Work by Highway Contractor**

| FY 2024  | FY 2025                                       |
|--|---|
| 436964-2-56-02 (I-95/Connector) - \$23,500,000 | 436964-2-56-02 (I-95/Connector) - \$2,858,010 |
| 439891-1-56-02 (Connector) - \$916,310         | 439891-1-56-02 (Connector) - \$6,000,000      |
| 439891-1-56-03 (Connector) - \$208,411         |   |

**K. Liquidated Damages (LDs)**

The Design-Build Firm will include a final completion date for the Project in their schedule provided to the Department during the Planning Phase. This final completion date shall not exceed 2562 calendar days from the first NTP. This final completion date will be subject to delay adjustments following the Design-Build Specifications (i.e., requiring Department approval). Liquidated Damages, as defined in the Design-Build Specifications, will begin to accrue after the final acceptance date of the Project has been exceeded. The Liquidated Damage formula, contained in the Design-Build Specifications, shall be modified such that instead of LDs for the overall Project being calculated on the initial amount of the Contract, the overall Project LDs shall be based on the total amount of the Contract (base amount plus all executed task work orders to the Contract). Individual Work Package LDs, if included, shall be handled as defined in each approved Work Package.

The Design-Build Firm and the Department shall determine liquidated damage provisions for each Work Package Proposal to be included in the individual task work orders.

**L. Contract Bonuses**

The Department, in collaboration with the Design-Build Firm, may consider establishing Contract Bonus provisions to meet the objectives of the Project. The definition of the bonus program structure (contract work items, terms and conditions, limits, durations and dollar amounts), if implemented, will be established before the completion of the Planning Phase. The Contract Bonus Structure shall be documented in writing, submitted to the Executive Review Board, and becomes binding on the Contract if approved by the Executive Review Board.

The Department has established the following priorities as potential contract work items for the bonus program:

- Final Acceptance of the Project
- Completion of Local SW 10<sup>th</sup> St., including all utility work and Local SW 10<sup>th</sup> St. connections with the I-95 Interchange
- Completion of the NE 48<sup>th</sup> St. bridge replacement and all associated roadway and bridge approach work
- Completion of all construction activities impacting SW 12<sup>th</sup> Ave. and East and West Newport Center Drives
- Completion of ground mounted noise barrier walls construction
- Minimizing total closures of Local SW 10<sup>th</sup> Street and I-95 (mainline and ramps)
- Minimizing the number of weekend lane reductions associated with utility relocations crossing SW 10<sup>th</sup> St. and Military Trail
- Completion of the TSM&O work.

The Department’s payment of any Bonus is specifically conditioned upon the Design-Build Firm’s compliance with Section VIII.L - Key Personnel. If the Design-Build Firm changes any of the key personnel required by this RFQ (the eight positions listed by name in Section VIII.L) without good cause/no fault of the Design-Build Firm, in the Department’s sole discretion, a deduction of \$500,000 shall be made against the Bonus subsequently earned by the Design-Build Firm for each change made without good cause/no fault of the Design-Build Firm. If the Design-Build Firm has already earned a Bonus, this deduction shall be made against its next monthly progress estimate or the final Contract payment as determined by the Department in its sole discretion.

**III. 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 date and time stated shall cause a Proposer to be disqualified.

| Date              | # of Days | Event  |
|-------------------|-----------|--|
| February 12, 2024 |           | Advertisement with Final RFQ   |
| March 29, 2024    |           | Letters of Response expressing statements of qualifications delivered electronically to District 4 Office by 5:00 pm local time.   |
| April 3, 2024     |           | Contracting Unit reviews Letters of Response to confirm the Proposer’s prequalification, responsiveness to RFQ, Proposer’s ability to self-perform in specific work classes, proof of ability to obtain the required payment and performance bond, and Proposer’s ability to not exceed their maximum capacity rating. |
| April 3, 2024     |           | Contracting Unit provides responsive list to Selection Committee 5:00 pm local time  |
| April 8, 2024     |           | Public Meeting of Selection Committee to review and confirm responsive Proposer list   |
| April 8, 2024     |           | Posting Date of List of Qualified and Responsive Design-Build Firms  |
| May 8, 2024       |           | Presentation with Questions and Answers  |

|                      |  |   |
|----------------------|--|---|
| <u>May 22, 2024</u>  |  | Evaluators (Technical Review Committee) submit qualification-based scores to Contracting Unit by 5:00 pm local time.  |
| <u>May 24, 2024</u>  |  | Contracting Unit provides qualification-based evaluation scores to Selection Committee to review and confirm scores by 5:00 pm local time                               |
| <u>June 3, 2024</u>  |  | Public Meeting Date of Selection Committee to review and confirm evaluation scores and determine intended award (selection) of Design-Build Firm by 5:00 pm local time. |
| <u>June 3, 2024</u>  |  | Posting of Evaluation Scores and intended award (selection) by 5:00 pm local time   |
| <u>June 3, 2024</u>  |  | Final Selection Posting Date  |
| <u>June 6, 2024</u>  |  | Notification of Award   |
| <u>June 11, 2024</u> |  | Pre-Negotiations Workshop   |
| <u>June 25, 2024</u> |  | Planning Phase Staff Hour Estimate and Audit Package delivered electronically to District 4 Office by 5:00 pm local time.   |
| <u>July 9, 2024</u>  |  | Initial Meeting for Planning Phase Scope of Services and Staff Hour Negotiations  |
| August 30, 2024      |  | Anticipated Execution Date for the Contract   |

**IV. 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.

Proposer shall be evaluated on their capacity to perform \$1,330,767,036 of work.

**B. Joint Venture Firm**

Two or more Firms submitting as a Joint Venture must meet the Joint Venture requirements of Section 14-22.007, F.A.C. 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 Response.

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. The Joint Venture shall provide an Affirmative Action Plan specifically for the Joint Venture.

**C. Protest Rights**

Any person who is adversely affected by the specifications contained in this RFQ must file a notice of intent (NOI) to protest in writing within seventy-two hours of the posting of this RFQ. Pursuant to Section 120.57(3) and Rule Chapter 28-110, F.A.C., any person adversely affected by the agency decision or intended decision shall file with the agency both a notice of protest in writing and bond within 72 hours after the posting of the notice of decision or intended decision, or posting of the solicitation with respect to a protest of the terms, conditions, and specifications contained in a solicitation and will file a formal written protest within 10 days after the filing of the notice of protest. The formal written protest shall be filed within 10 days after the date of the notice of protest if filed. The person filing the Protest must send the NOI and the formal written protest to:



Clerk of Agency Proceedings  
Department of Transportation  
605 Suwannee Street, MS 58  
Tallahassee, Florida 32399-0458

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

#### **D. Non-Responsive Letters of Response**

Letters of Response in response to this RFQ (“Responses”) found to be non-responsive shall not be considered. Responses may be rejected if found to be in nonconformance with the requirements and instructions herein contained. A Response may be found to be non-responsive by reasons, including, but not limited to, failure to utilize or complete prescribed forms, conditional responses, incomplete responses, indefinite or ambiguous responses, failure to meet deadlines, responses materially inconsistent with the Phased Design Build approach outlined in this RFQ, and improper and/or undated signatures.

Other conditions which may cause rejection of responses include evidence of collusion among Proposers, obvious lack of experience or expertise to perform the required work, submission of more than one response 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 responses wherein the same Engineer is identified in more than one response), 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 Department of Labor’s System for Award Management (SAM) excluded parties list.

Letters of Response shall not include, and the Department will not give consideration to tentative or qualified commitments in the responses. For example, the Department will not give consideration to phrases as “we may” or “we are considering” in the evaluation process for the reason that they do not indicate a firm commitment.

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

#### **E. Waiver of Irregularities**

The Department, in its sole discretion, shall have the right to waive minor informalities or irregularities in Letters of Response 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 by giving a Proposer an advantage or benefit not enjoyed by other Proposers.

1. Any design exhibits that are part of a Letter of Response shall be deemed preliminary only.
2. The Proposer who is selected for the Project will be required to fully comply with the Design and Construction Criteria, regardless that the Letter of Response may have been based on a variation from the Design and Construction Criteria.
3. Proposers shall identify separately all innovative aspects in the Letter of Response. 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 delivering the Project, use of new products, new uses for established products, etc.
4. The Proposer shall obtain any necessary permits or permit modifications not already provided by the Department.
5. Changes to the Design Concept may be considered together with innovative construction

techniques, as well as other areas, as the basis for grading the Letter of Responses and Presentation with Questions and Answers in the area of innovative measures.

#### **F. Department's Responsibilities**

This RFQ does not commit the Department to undertake studies, respond to the Proposers, nor to procure or contract for any articles, materials, or services.

The Department does not guarantee the details pertaining to borings, as shown on any documents supplied by the Department during this RFQ stage or during the Planning and Preconstruction Phases, to be more than a general indication of the materials likely to be found adjacent to holes bored at the site of the work.

### **V. Letter of Response Requirements:**

#### **A. General**

Each Proposer desiring to be considered for this Project is required to submit a Letter of Response demonstrating their qualifications and approach to perform the required scope of work, responsibilities, requirements, and approach to deliver the Project. The Letter of Response shall include sufficient information to enable the Department to evaluate the capability of the Proposer to provide the desired services. The data shall be significant to the Project and include innovative and practical processes, ideas and approaches.

#### **B. Submittal Requirements**

A Letter of Response will not be accepted by the Department after the due date and time listed on the advertisement in this RFQ.

The Letter of Response shall be submitted electronically with the information, paper size and page limitation requirements as listed.

The Letter of Response must also be submitted electronically in PDF format including bookmarks for each section. Bookmarks which provide links to content within the Letter of Responses are allowed. Bookmarks which provide links to information not included within the content of the Letter of Responses shall not be utilized. No macros will be allowed. The minimum width and height of the font shall be 10 points, with the exception of graphics where the minimum width and height of the font shall be 8 points. The font type shall be Times New Roman. A bold or italicized font may be used provided it complies with the aforementioned requirements for font type and size.

Submit the Letter of Response (LOR) package electronically in PDF format, including Financial Forms in both Excel and PDF format; and affidavit from a surety/bonding company in PDF format, to:

**Email LOR Package to:** [d4.designbuild@dot.state.fl.us](mailto:d4.designbuild@dot.state.fl.us)

**Attn:** Maria Velarde, Procurement Office

**Phone:** 954-777-4084

The total file size for the LOR, Financial Forms and affidavit shall not exceed 20MB.

General requirements are:

- Paper size: 8½" x 11". The maximum number of pages for Section 1 shall be twenty-five (25), single-sided, typed pages including text, graphics, tables, charts, and photographs. 11"x17" sheets are allowed to supplement if presenting specific ideas for the Project and will be counted as 2 pages.

Section 1 shall be submitted as a PDF document. Section 2 shall be submitted on the forms provided in Attachment AA, both in the native Excel format as well as PDF.

- Resumes for key personnel shall be limited to 2 pages per resume. Resumes do not count towards the page limit for Section 1. Resumes for the key personnel listed in Section VIII.L are required. Additional resumes for other key personnel are allowed. No more than fifteen (15) total resumes are permitted to be submitted.

The minimum information to be included in the Letter of Response:

**Section 1: Qualifications, Organization and Approach**

- Describe the qualifications and organization of the Proposer including teaming arrangements, structure, key leadership personnel, discipline leads, staff, roles/responsibilities, and location. Identify field staff and office staff on comparable scope of work and delivery method. The key personnel as required in Section VIII.L must be included.
- Describe Proposer’s similar experience in large complex urban highway and bridge interchange reconstruction projects. Describe experience with large scale alternative delivery projects or programs that are similar in size and scope. Include and describe examples of similar work/projects, status of work, and references.
- Provide evidence of Proposer’s capacity and ability to self-perform a minimum of 30% of the Project. Describe approach to self-performed work and subcontracting.
- Approach to Industry and Business Development Initiatives: Describe the Proposer’s approach to engage and encourage participation of subcontractors, suppliers, and other industry partners including DBE, SBE, WBE, and MBE firms during all phases of the Project.
- Safety Approach: Describe the Proposer’s approach to improving safety for the traveling public and field staff, including the approach to minimizing impacts to traffic during construction, and innovative ideas that would be employed during all phases of the Project. Report the Proposer’s safety history pertaining to fatalities, TRIR, DART, and EMR.
- Collaboration Approach: Describe the Proposer’s approach to develop a culture of collaboration with the Department, its representatives, Project stakeholders, and its own team including subcontractors and trades during all phases of the Project. The collaboration approach should address Project communications; understanding of, and outreach approach for stakeholder needs; progressing the design; developing and negotiating Work Package Proposals and GMPs (including approach to working with the ICE); issue escalation; and construction.
- Project Controls Approach: Describe the Proposer’s approach to cost control, transparency, schedule management, budget management, construction phasing, design quality management, and construction quality management during all phases of the Project.
- Risk Management Approach: Describe the Proposer’s understanding of the key project risks and approach to identifying, monitoring, mitigating, and managing risks during all phases of the Project, including the use of contingency, risk sharing, and shared savings.
- Innovation Approach: Describe the Proposer’s approach to developing, evaluating, and presenting innovations that improve the Project. Include relevant examples from projects listed in the

Qualifications sections and specific ideas for the Project. It is the Department's intent to promote the use of innovative design concepts, components, details, strategies for minimization of impacts to I-95 and Local SW 10<sup>th</sup> Street traffic during construction, and construction techniques for bridge structures as discussed in Part 1, Chapter 121 of the Florida Department of Transportation (FDOT) Design Manual (FDM). The Proposer may present ideas for innovative concepts in the Letter of Response, but it is not the intent of the Department that these ideas be fully developed. Innovative concepts will be discussed with the Department and approved in accordance with Part 1, Chapter 121 of the FDM during the Planning and Preconstruction Phases of the Project.

## Section 2: Financial Forms

Proposers shall provide the following information as required by the Financial Forms – Staff Hour and Fee Estimation Worksheets (Attachment AA) and not counted against the 25-page limit for the Letter of Response. This information will be evaluated as part of the Proposer's responsiveness (on whether the Proposer has completed the forms providing an adequate and reasonable level of understanding of the Work to be completed within the Planning Phase of the Project). The completion of the forms is required for the Proposer to be responsive to this RFQ. The Financial Forms will not be scored in the evaluation.

- Identify Labor Classifications that best correlate to the Planning Phase staffing plan. Designers shall use the FDOT Negotiation Handbook's list of AFP classifications, while Contractors will create classifications which best define roles.
- Input projected hours by task in Worksheets 1 through 4. Contractor hours are to be input into Worksheet 1; Designer hours are to be input into Worksheets 2 and 3; and Surveyor hours are to be input into Worksheet 4.
- The three Worksheets named "Staff Hour Summary" shall be completed to distribute the projected staff hours as a percentage to the classifications for Contractors, Designers and Surveyors, respectively.
- The three Worksheets named "Fee Sheet" shall be completed to indicate the proposed fee for Contractors, Designers and Surveyors, respectively.
- Identify and input a loaded hourly rate for each classification. The intent is to select an hourly loaded rate that reasonably estimates the "blended" loaded rate of each classification for all members of the Proposer team. Classifications or rates for individual Proposer team members are not to be provided.
- Loaded hourly rates shall include expenses for designers and surveyors. Contractor loaded hourly rates shall be calculated by multiplying the raw labor rate for each classification by the Phased Design-Build Multiplier.
- The "Fee Sheet- Contractors" shall include an estimated expenses amount for any expenses not covered in the Team's loaded billing rates. Potential expenses for the leasing and/or build-out of co-located Project Office space are to be excluded and will be negotiated after selection.
- The "Fee Sheet- Contractors" shall include a summation of the Proposer's entire Planning Phase estimate. The Proposer shall ensure costs are properly accounted for and the Financial Forms accurately depict the estimated Planning Phase efforts. The Planning Phase estimate shall not exceed seventeen million dollars (\$17,000,000).

- The Design-Build Firm shall also include an affidavit from a surety/bonding company that certifies the Design-Build Firm has the financial means and capacity to provide the Department with a payment and performance bond for the face amount of \$1,330,767,036 for the Project. (An executed bond shall be provided upon Contract execution for \$17,000,000 on the form provided by the Department.)

### C. Responsiveness Check

The Department will ensure that the Proposer has submitted a responsive LOR. The Letter must comply with all of the requirements of the RFQ, include both Section 1 and Section 2 in the proper form, provide an affidavit from a surety/bonding company, and be prequalified in all required areas of work. In addition, the Department will use its standard processes to determine whether the Proposer has sufficient capacity to perform \$1,330,767,036 of work. The Department will post the responsiveness decision as required by this RFQ.

### D. Presentation with Question-and-Answer Format

The Department will conduct presentations with question-and-answer sessions with each responsive Proposer. The format will be comprised of a presentation by the Proposer not to exceed 45 minutes in length followed immediately by a 60-minute question and answer period. The Department will ask questions of the Proposer. The Proposer is not permitted to ask questions of the Department during this period. The Proposer's presentation may address any requirement of the RFQ. Questions may be unique to each Proposer. The Proposer's presentation must be limited to no more than fifty (50) slides and shall not include any video components. The presentation must be left with the Department after the presentation in an electronic format (USB drive). The presentation will become part of the Proposer's proposal.

The Proposer is permitted to have no more than fifteen (15) persons in attendance. The specific key personnel listed in this RFQ are highly encouraged to attend in person. There will not be a virtual component to the presentation.

### E. Evaluation Criteria

The Department shall conduct an evaluation of the Letter of Response, Presentation, and presentation materials provided from each Proposer after the presentation along with the Questions-and-Answers. An overall score for each Proposer will be based on the following criteria:

| <b>Item</b>  | <b>Value</b> |
|--|--------------|
| 1. Qualifications, Similar Experience and Organization | 35           |
| 2. Business Development Initiatives                    | 5            |
| 3. Safety Approach                                     | 10           |
| 4. Collaboration and Innovation Approach               | 30           |
| 5. Risk Management and Project Controls Approach       | 20           |
| <b>Maximum Score</b>                                   | <b>100</b>   |

### F. Final Selection Formula

The Proposer selected will be the Proposer whose score is highest considering the qualifications and

approach from the Letter of Response, Presentation, presentation materials, and Question-and-Answer period.

The Department reserves the right to consider any response as non-responsive if any part of the Letter of Response does not meet the criteria established in this RFQ.

### **G. Final Selection Process**

After the evaluation scores are received, the Department’s contracting unit will open the scores and provide them to the Project Selection committee to review. At least five days after the scores have been received by the Project Selection committee, a public meeting will be held for the Project Selection committee to meet, review the evaluation of the Technical Review Committee of each Proposer and make a final determination of the highest score which shall determine the intended selection of the Proposer for the Department to enter into negotiations with. 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 responses. If the Selection Committee decides not to reject all responses, the contract will be awarded to the Proposer determined by the Selection Committee to have the highest score. In the case of a tie, between two or more firms, the Selection Committee may make a decision to award to any of the tied firms or may take any other action it deems appropriate for the procurement.

The Department will enter into negotiations with the highest scoring Proposer for the services, obligations, basis of payment, and performance of work described in this RFQ. The Department, at its sole discretion, shall have the right to negotiate and enter into a Contract with the next highest scoring Proposer if an agreement of terms is not reached with the highest scoring Proposer. The Department may continue this process, negotiating with each subsequently highest scoring Proposer, if an agreement with the previous Proposer is not achieved. The Department may, in its sole discretion, end negotiations with all Proposers and cancel this procurement, without hindering any future ability to start a new procurement for the same Work.

### **VI. Design-Build Introduction**

The remaining Sections of this RFQ will be used during the Planning and Preconstruction Phases and as a basis for the development of WPPs and the issuance of task work orders for specific Work Packages, that include final design, following the Phased Design-Build approach described in the previous Sections.

#### **Landscaping**

The Design-Build Firm shall include a Landscape Architect duly authorized to practice Landscape Architecture in the State of Florida consistent with State Statute 481 part II. The Design-Build Firm’s Landscape Architect (DBLA) shall review and identify future unencumbered landscape areas for this Project. This Project shall reserve landscape opportunities and implement the FDOT Highway Beautification Policy, in addition to the implementation of tree relocation activities as defined herein. Landscape construction will be performed by others and not included with this Project. Areas shall be identified in the Design-Build’s Plans as “future landscape areas to be constructed by others”.

The DBLA shall review the Landscape Opportunity Concept Plan and Trees Suitable for Relocation Survey provided in Reference Documents 1 and 5 respectively, which include recommended trees to be protected and/or relocated, future landscape levels, candidate plant species, and conceptual landscape design. These documents will serve as a basis for developing vegetation protection, tree relocations, and landscape opportunity areas for future landscape design and construction, developed in partnership with the City of Deerfield Beach.

It is the intent to always preserve existing vegetation including trees and palms that do not conflict with proposed improvements. Vegetation protection shall comply with FDOT Design Manual (FDM) Sections 229 and 944 as well as FDOT Standard Plans for Road and Bridge Construction (Standard Plans), Index 110-100. It will be the responsibility of the Design-Build Firm to identify and remove all Category 1 invasive exotics as defined by the Florida Exotic Pest Plant Council ([www.fleppc.org](http://www.fleppc.org)).

Coordination between the DBLA, the District Landscape Architect and Engineer will be required during the Design-Build plans development process to ensure landscape opportunities are accommodated within the Project limits. The DBLA shall be included in the Project kick-off meeting, subsequent progress meetings, and design review meetings.

### **Right-of-Way**

#### **1. Right of Way Furnished by the Department**

All Design-Build Firms who intend to submit Responses to this RFQ are restricted from discussing right of way (ROW) acquisition with owners of private property to be acquired by the Department. The limits of all anticipated ROW acquisitions and easements required for the Project are provided as part of Reference Document 7. All parcels that are acquired by the Department that have irrigation within the acquired ROW will be required to be cut and capped by the Design-Build Firm. Additionally, any wood post advertisement and real estate signs located within the acquired ROW shall be removed by the Design-Build Firm.

#### **2. Additional Right of Way**

It is the Department's intent that all Project construction activities be conducted within the existing ROW and the ROW acquisitions and easements to be cleared by October 1, 2024 for the I-95 corridor and SW 10<sup>th</sup> Street east of SW 24<sup>th</sup> Avenue (436964-1), and October 1, 2025 for SW 10<sup>th</sup> Street west of SW 24<sup>th</sup> Avenue (439891-1). If during the Planning or Preconstruction Phase the Design-Build Firm determines that the acquisition of additional ROW will be advantageous to the Project, this will be considered by the Department for incorporation into the Project Schedule and any future Work Package Proposals prepared by the Design-Build Firm. The Department will have sole authority to determine whether the acquisition of additional ROW on the Project is in the Department's best interest, and the Department reserves the right to reject the acquisition of additional ROW.

If the Department agrees that additional ROW is in the Department's best interest, the additional ROW will be required to be directly acquired by the Department. The Design-Build Firm shall submit ROW maps and legal descriptions, including area in square feet, of any proposed additional ROW parcels. The additional ROW will be acquired by the Department in accordance with all applicable state and federal laws, specifically including but not limited to the Uniform Relocation Assistance and Real Property Acquisition Policies for Federal and Federally Assisted Programs (42 USC Chapter 61) and its implementing regulations. The Department will have sole discretion with respect to the entire acquisition process of the additional ROW.

Any additional ROW acquisition will require a re-evaluation of the PD&E Study. The Design-Build Firm shall coordinate with the District Environmental Management Office and provide any required information so that the District can complete the re-evaluation for approval. ROW acquisition cannot begin until the PD&E re-evaluation has been completed and approved.

The additional ROW cannot be used for any construction activity or other purpose until the Department has issued an applicable parcel clear letter or a ROW Certification for Construction.

If the Department's attempt to acquire the additional ROW is unsuccessful, then the Design-Build Firm shall provide a design of the Project within existing ROW and be required to complete the Project solely for the GMP applicable to the WPP that included the additional ROW, with no further monetary or time

adjustments arising therefrom. Under no circumstances will the Department be liable for any increase in either time or money impacts the Design-Build Firm suffers due to the Design-Build Firm's proposed acquisition of additional ROW, whether or not the acquisition is successful.

### **Workforce Employment**

To support workforce development and inform job seekers of employment opportunities, the Design-Build Firm shall develop, host, and maintain a website that lists available local employment opportunities for both skilled and entry level positions for the Project. Information on the website shall include job listings for the prime contractor and subcontractors for the Project, job requirements, and local contact information to assist applicants. The webpage shall be maintained with up-to-date employment opportunities through the completion of the Project. The website shall be developed to provide the ability to easily link the web address to the information on existing webpages, to provide greater visibility for interested parties to view information.

#### **A. Design-Build Firm's Responsibility**

The Design-Build Firm shall be responsible for survey, completing the 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.

In the performance of professional services, the Design-Build Firm shall use that degree of care and skill ordinarily exercised by other similar professional in the field under similar conditions in similar localities. The Design-Build Firm will use due care in performing its services and will have due regard for acceptable engineering standards and principles. The Design-Build Firm's standard of care shall not be altered by the application, interpretation, or construction of any other provision of this Agreement.

The Design-Build Firm shall be responsible for compliance with Design and Construction Criteria which sets forth requirements regarding survey, design, construction, and maintenance of traffic during construction, requirements relative to Project management, master schedule, 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 Documents of the Project Development & Environment (PD&E) Studies, Technical Documents supporting the PD&E Studies, and subsequent re-evaluations included in the Reference Documents. The Design-Build Firm may propose changes which differ from the approved PD&E Studies and/or re-evaluation(s). An approved re-evaluation to document changes proposed by the Design-Build Firm is required prior to construction of the specific activity as required under 'Requirements to Begin Construction' in Section VIII.I.

The Design-Build Firm is responsible for coordinating with the District Environmental Office any engineering and environmental (e.g.- social, cultural, natural and physical) information required to complete any re-evaluations of the PD&E Studies. The Design-Build Firm will not be granted additional time nor compensated for any additional costs in excess of an agreed-to GMP or time associated with re-evaluation(s) resulting from proposed design changes.

The Design-Build Firm may propose changes which differ from the approved Interchange Access Request. 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 documentation required for the Department to analyze and satisfy requirements to obtain approval of the Department, and if applicable, the Office of Environmental Management (OEM) for the NEPA documents, or FHWA for the Interchange Access Request document. The Design-Build Firm will not be granted additional time nor compensated for any additional costs or time resulting from proposed changes in excess of an agreed-to GMP.



The Design-Build Firm shall be responsible for re-evaluation of the Noise Study for any proposed changes to the design that differ from the original design assumptions documented in the approved Noise Study Report and/or Noise Study Report Addendum(s). The Design-Build Firm shall coordinate the Noise Study Re-evaluation with the Department's District Noise Specialist or other designee as well as provide support for any Public Involvement outreach requirements. Final approval of the Noise Study Re-evaluation and the associated noise analysis shall be at the Department's sole discretion. The Design-Build Firm shall be responsible for design and construction of any increased noise wall requirements (i.e. additional length, height, or new walls) resulting from the Noise Study Re-evaluation with no additional compensation (cost or time) resulting from proposed changes in excess of an agreed-to GMP.

The Design-Build Firm shall examine the Contract Documents and the site of the proposed work carefully before submitting a WPP 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 Planning, Preconstruction or Construction Phases 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 design and WPPs on their own opinion of the conditions likely to be encountered. The submission of a proposal is prima facie evidence that the Design-Build Firm has made an examination as described in this provision.

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

#### **B. Department's 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, the Department shall have oversight, review, and approval authority of the permitting process for this Federal-aid project.

The Department will determine the environmental impacts and coordinate with the appropriate agencies during the preparation of NEPA or SEIR Re-evaluations. For federal projects, NEPA Re-evaluations will be processed by the District Environmental Management Office for approval by the Department's Office of Environmental Management pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated May 26, 2022, and executed by the FHWA and the Department.

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

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

The Department has an overall, race-neutral DBE goal. This means that the State's goal is to spend a portion of the highway dollars with Certified DBEs as prime Design-Build Firms or as subcontractors. Race-neutral means that the Department believes that the overall goal can be achieved through the normal competitive procurement process. The Department has reviewed this Project and assigned a DBE availability goal shown in the Project Advertisement. The Department has determined that this DBE percentage can be achieved on this Project based on the number of DBEs associated with the different types of work that will be required.

Under 49 Code of Federal Regulations Part 26, if the overall 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 Design-Build Firms to actively pursue obtaining bids and quotes from Certified DBEs.

The Department is reporting to the FHWA the planned commitments to use DBEs, as well as actual dollars paid to DBEs. This information is being collected through the Department's Equal Opportunity Compliance (EOC) system. Additional requirements of the Design-Build Firm may be found in Chapter 2 of the FDOT Equal Opportunity Construction Contract Compliance Manual.

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

The Department has contracted with consultants, one is referred to as DBE Supportive Services provider (DBE/SS), to provide managerial and technical assistance to DBEs. This consultant works with potential DBEs, certified DBEs and prime contractors and consultants in an effort to increase DBE utilization. The other consultant is referred to as the Specialized Development Program provider (SDP). This consultant works with short-listed Design-Build Firms prior to award, on projects over \$50 million dollars in an effort to identify DBEs with capacity to perform on the Project. The successful Design-Build Firm should meet with the DBE DBE/SS or SDP to discuss the DBEs that are available to work on this Project. The current Providers for the State of Florida can be found on the Equal Opportunity website at: <http://www.fdot.gov/equalopportunity/serviceproviders.shtm>

### **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 DBEs and Non-DBEs.

All Contractors must enter their bid opportunity information in the EOC system. The timing of entry shall be established in the Subcontractor Plan. The link to the EOC system is located in Chapter 1 Section 1.4, Directory of Compliance Websites & Addresses. Failure of bidders to enter Bid Opportunity List information is a violation of 49 C.F.R. 26.11 and grounds for compliance actions up to and including withholding of progress payments. Note: All registered primes submitting a bid will need to apply for EOC User ID and Password to gain access to the EOC system.

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

The following requirements and provisions shall be binding upon the Design-Build Firm unless the Department, in its sole discretion, explicitly waives a requirement or provision. In collaboration with the Department, the Design-Build Firm is encouraged suggest modifications to these requirements and provisions that may allow for alternatives to reduce schedule, reduce costs, or otherwise improve the accomplishment of goals identified for the Project.

If the Department issues a Department-wide change to ongoing projects via, including but not limited to, District Construction Engineer memoranda and modifications to Specifications, such changes will apply to this Project at the sole discretion of the Department. For changes that require no cost to be incurred by the Design-Build Firm, no adjustment to a GMP shall be made. If the implementation of the Department-wide change requires additional cost and the Department decides to implement the change on this Contract, the Department shall increase one or more Work Package GMPs to cover such costs.

All Terms and Conditions negotiated for the Contract, the RFQ, the Design-Build Specifications, the Plans, Special Provisions, and all supplementary documents are integral parts of the Contract; a requirement occurring in one is as binding as though occurring in all. In addition to the work and materials specifically called for in the Contract Documents and any additional incidental work, not specifically mentioned, when so shown in the Plans, or if indicated, or obvious and apparent, as being necessary for the proper completion of the Work is assumed to be included in the associated GMP.

In cases of discrepancy, the governing order of the documents is as follows:

1. Terms and Conditions Document
2. Request for Qualifications
3. Special Provisions
4. Technical Special Provisions
5. Plans
6. Standard Plans
7. Developmental Specifications
8. Supplemental Specifications
9. Design-Build Specifications

Computed dimensions govern over scaled dimensions.

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

The services performed by the Design-Build Firm in the Planning, Preconstruction and Construction Phases shall be in compliance with all applicable Specifications, 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 Specifications, 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. 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 specifications, manuals and guidelines that apply to the work required to complete this Project. The Department may, in its sole discretion, allow or require the use of more current versions of any of these governing regulations on any task work order entered into on this Project. The decision to use a more current version of a governing regulation shall be documented in the task work order with specifics as to what governing regulation applies. 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 Design Manual (FDM)  
<http://www.fdot.gov/roadway/FDM/>
2. Florida Department of Transportation Specifications Package Preparation Procedure  
<http://www.fdot.gov/programmanagement/PackagePreparation/Handbooks/630-010-005.pdf>
3. Florida Department of Transportation Standard Plans for Road and Bridge Construction  
<http://www.fdot.gov/design/standardplans/>
4. Standard Plans Instructions (Refer to Part I, Chapter 115, FDM)  
<http://www.fdot.gov/roadway/FDM/>
5. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications  
<https://www.fdot.gov/programmanagement/Implemented/SpecBooks/default.shtm>
6. Florida Department of Transportation Surveying Procedure 550-030-101

<http://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/FormsAndProcedures/ViewDocument?topicNum=550-030-101>

7. Florida Department of Transportation EFB User Handbook (Electronic Field Book)  
[http://www.fdot.gov/geospatial/doc\\_pubs.shtm](http://www.fdot.gov/geospatial/doc_pubs.shtm)
8. Florida Department of Transportation Drainage Manual  
<http://www.fdot.gov/roadway/Drainage/ManualsandHandbooks.shtm>
9. Florida Department of Transportation Soils and Foundations Handbook  
[Soils and Foundation Handbook \(windows.net\)](http://www.fdot.gov/roadway/SoilsandFoundations/SoilsandFoundationHandbook(windows.net))
10. Florida Department of Transportation Structures Manual  
<http://www.fdot.gov/structures/DocsandPubs.shtm>
11. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Manual  
<http://www.fdot.gov/cadd/downloads/publications/CADDManual/default.shtm>
12. AASHTO – A Policy on Geometric Design of Highways and Streets  
[https://bookstore.transportation.org/collection\\_detail.aspx?ID=110](https://bookstore.transportation.org/collection_detail.aspx?ID=110)
13. MUTCD - 2009  
<http://mutcd.fhwa.dot.gov/>
14. Safe Mobility for Life Program Policy Statement  
<http://www.fdot.gov/traffic/TrafficServices/PDFs/000-750-001.pdf>
15. Traffic Engineering and Operations Safe Mobility for Life Program  
<http://www.fdot.gov/traffic/TrafficServices/SafetyisGolden.shtm/>
16. Florida Department of Transportation American with Disabilities Act (ADA) Compliance – Facilities Access for Persons with Disabilities Procedure 625-020-015  
<https://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/?viewBy=0&procType=pr>
17. Florida Department of Transportation Florida Sampling and Testing Methods  
<http://www.fdot.gov/materials/administration/resources/library/publications/fstm/disclaimer.shtm>
18. Florida Department of Transportation Flexible Pavement Coring and Evaluation Procedure  
<http://www.fdot.gov/materials/administration/resources/library/publications/materialsmanual/documents/v1-section32-clean.pdf>
19. Florida Department of Transportation Design Bulletins and Update Memos  
<http://www.fdot.gov/roadway/Bulletin/Default.shtm>
20. Florida Department of Transportation Utility Accommodation Manual  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/programmanagement/utilities/docs/uam/uam2017.pdf?sfvrsn=d97fd3dd\\_0](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/programmanagement/utilities/docs/uam/uam2017.pdf?sfvrsn=d97fd3dd_0)
21. AASHTO LRFD Bridge Design Specifications  
[https://bookstore.transportation.org/category\\_item.aspx?id=BR](https://bookstore.transportation.org/category_item.aspx?id=BR)
22. Florida Department of Transportation Flexible Pavement Design Manual  
<http://www.fdot.gov/roadway/PM/publicationS.shtm>

23. Florida Department of Transportation Rigid Pavement Design Manual  
<http://www.fdot.gov/roadway/PM/publicationS.shtm>
24. Florida Department of Transportation Pavement Type Selection Manual  
<http://www.fdot.gov/roadway/PM/publicationS.shtm>
25. Florida Department of Transportation Right of Way Manual  
<http://www.fdot.gov/rightofway/Documents.shtm>
26. Florida Department of Transportation Traffic Engineering Manual  
<http://www.fdot.gov/traffic/TrafficServices/Studies/TEM/tem.shtm>
27. Florida Department of Transportation Intelligent Transportation System Guide Book  
[http://www.fdot.gov/traffic/Doc\\_Library/Doc\\_Library.shtm](http://www.fdot.gov/traffic/Doc_Library/Doc_Library.shtm)
28. 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>
29. 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)
30. 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)
31. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways  
<http://www.fdot.gov/roadway/FloridaGreenbook/FGB.shtm>
32. Florida Department of Transportation Project Development and Environment Manual, Parts 1 and 2  
<http://www.fdot.gov/environment/pubs/pdeman/pdeman1.shtm>
33. Florida Department of Transportation Driveway Information Guide  
<http://www.fdot.gov/planning/systems/programs/sm/accman/pdfs/driveway2008.pdf>
34. AASHTO Highway Safety Manual  
<http://www.highwaysafetymanual.org/>
35. Florida Statutes  
<http://www.leg.state.fl.us/Statutes/index.cfm?Mode=View%20Statutes&Submenu=1&Tab=statutes&CFID=14677574&CFTOKEN=80981948>
36. Florida Department of Transportation Equal Opportunity Construction Contract Compliance Manual  
<http://www.fdot.gov/equalopportunity/contractcomplianceworkbook.shtm>
37. Florida Interchange Access Request Users Guide  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/systems/systems-management/document-repository/iar/2020-interchange-access-request-users-guide.pdf?sfvrsn=7814243\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/systems/systems-management/document-repository/iar/2020-interchange-access-request-users-guide.pdf?sfvrsn=7814243_2)
38. Developmental Specifications  
<https://www.fdot.gov/programmanagement/otherfdotlinks/developmental/default.shtm>
39. Florida Administrative Code, Chapter 14.51 (Florida's Highway Guide Sign Program)  
<http://florida.eregulations.us/rule/14-51>

40. Florida Department of Environmental Protection (FDEP)  
<https://floridadep.gov/southeast/se-permitting>
41. Broward County Water & Wastewater Services  
<https://www.broward.org/WaterServices/Engineering/Pages/Default.aspx>
42. South Florida Water Management District Environmental Resources Permit Applicant's Handbook Volumes I and II  
<https://www.sfwmd.gov/document/applicants-handbook-vol-i>  
<https://www.sfwmd.gov/document/archived-swerp-applicants-handbook-vol-ii-1012013-revised-8102014>
43. City of Deerfield Beach Environmental Services / Engineering  
<https://www.deerfield-beach.com/238/Environmental-Services-Engineering>
44. Florida Department of Transportation Maintenance Rating Program (MRP) Handbook  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/maintenance/rdw/mrp/mrphandbook2022.pdf?sfvrsn=76b579ca\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/maintenance/rdw/mrp/mrphandbook2022.pdf?sfvrsn=76b579ca_2)
45. Construction Project Administration Manual CPAM – Procedure 700-000-000  
[Construction Project Administration Manual \(fdot.gov\)](https://www.fdot.gov/construction-project-administration-manual)

#### **B. Innovative Aspects**

The Department seeks to solicit innovative aspects from the Design-Build Firm during the Planning, Preconstruction, and Construction Phases of the Project.

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

##### **General Conditions:**

The Design-Build Firm shall be responsible for identifying and completing the 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 responsible for completing the geotechnical aspects of the Project.

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

The Design-Build Firm will be responsible for adhering to the Project commitments identified in the Project Commitment Records provided in Attachment Z as well as any additional commitments identified as the Project progresses through the Planning, Preconstruction and Construction Phases. Any design change shall be evaluated by the Department to determine any associated additional environmental impacts and required actions and/or commitments as described in Section VI.A of this RFQ. The Design-Build Firm will be responsible for tracking the commitments throughout the Project duration for the Department's use in updating the Commitments Module in PSEE.

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

##### **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.).

**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, F.A.C.; 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. An electronic 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 will be required to pay all permit and public notice fees. Any fines levied by permitting agencies shall be the responsibility of the Design-Build Firm. The Design-Build Firm shall be responsible for complying with all permit conditions.

The Department is responsible for providing mitigation of all wetland impacts identified in the permits. If any design modifications by the Design-Build Firm propose to have wetland impacts where mitigation is required, the Design-Build Firm shall be responsible for providing the Department information on the amount and type of wetland impacts as soon as the impacts are identified (including temporary impacts and/or any anticipated impacts due to construction staging or construction methods). Prior to submitting a permit modification to a regulatory agency, the Design-Build Firm shall provide the Department a draft of all supporting information. The Department will have up to 15 calendar days (excluding Saturdays, Sundays, and Holidays) to review and comment on the draft permit application package. The Design-Build Firm will address all comments by the Department and obtain Department approval, prior to submittal of the draft permit application package. The Design-Build Firm shall be solely responsible for all time and costs associated with providing the required information to the Department, as well as the time required by the Department to perform its review of the permit application package, prior to submittal of the permit application(s) by the Design-Build Firm to the regulatory agency(ies).

Any additional mitigation not identified in the permits but required due to design modifications proposed by the Design-Build Firm shall be the responsibility of the Design-Build Firm and shall be satisfied through the purchase of mitigation bank credits. The Design-Build Firm shall purchase credits directly from a permitted mitigation bank. In the event that permitted mitigation bank credits are unavailable or insufficient to meet the Project needs, the Design-Build Firm will be responsible for providing alternative mitigation consistent with the provisions of section 373.-4137, Florida Statutes, and acceptable to the permitting agency(ies). The Design-Build Firm shall be responsible for all costs associated with permitting activities

and shall include all necessary permitting activities in their schedule and the associated WPP.

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. Notwithstanding the above section, the Department, in its sole discretion, may allow the Design-Build Firm the ability to include these mitigation costs in the WPP and/or seek reimbursement for these costs as an appropriate expenditure of the Risk Reserve or Allowance.

#### **F. Railroad Coordination**

Railroad coordination is required with the South Florida Regional Transportation Authority (SFRTA) who operates trains, performs maintenance, and provides dispatch within the Department owned South Florida Rail Corridor (SFRC) Right of Way for construction activities at the following locations:

- Replacement of the local SW 10<sup>th</sup> Street Bridge over the SFRC railroad tracks.
- Construction of new SW 10<sup>th</sup> Street Connector Bridges over the SFRC railroad tracks
- Trenchless utility crossings under the SFRC railroad tracks and switches.
- Utility, manhole, and handhole construction adjacent to the SFRC right-of-way.

These activities may impact railroad operations due to construction work. The contact person is Ms. Yanique Kelly (Rail Coordinator - District Four). Ms. Kelly can be reached by phone at 954-777-4561 or email [yanique.kelly@dot.state.fl.us](mailto:yanique.kelly@dot.state.fl.us).

The Department will conduct any required contract negotiations and will assist the Design-Build Firm during plans review coordination with SFRTA. The Railroad Agreement Change Order for Flagging Services has been executed between SFRTA and the Department and made available to the Design-Build Firm herein. The Design-Build Firm shall comply with the terms of these and any other existing agreements. The Design-Build Firm must make the necessary arrangements with SFRTA at least 45 days prior to encroachments into the railroad corridor right-of-way.

The Design-Build Firm shall submit schedule and schedule changes to the Engineer so the Department can coordinate with SFRTA for the scheduling of protective services (i.e., watchman or flagging services).

The following documents pertaining to SFRTA requirements for work within SFRC right-of-way are provided in Attachment X:

1. *SFRC Permitting Procedures* – Instructions for SFRTA Utility/Right of Entry Applications.
2. *2022 Temporary Right of Entry Agreement & Insurance Requirements*: Agreement to be signed between Design-Build Firm and SFRTA.
3. *SFRC Design & Construction Standards - Pipelines*. Design and construction standards for pipelines carrying flammable or non-flammable substances and casings containing wires, cables and carrier pipes, across and upon property owned by FDOT for the SFRC.
4. *2022 CSXT Public Projects Information For Construction and Improvement Projects That may*



*Involve the Railroad.* Includes overhead bridge criteria and construction submission criteria stipulating the specifications, clearances & expected construction submittals.

5. *FDOT and SFRTA Railroad and Reimbursement Agreement.* PENDING
6. *FDOT and SFRTA Railroad Agreement Change Order for Flagging Services.* Project specific to I-95/SW 10<sup>th</sup> St.

For the proposed local SW 10<sup>th</sup> Street and SW 10<sup>th</sup> St Connector bridges over the SFRC, the Design-Build Firm shall provide for a minimum permanent vertical overhead clearance of 24.25 feet above top of rail over a potential future 4-track configuration centered within the existing SFRC R/W.

For the six (6) utility crossings under the SFRC right-of-way, the casing must remain at a steady grade a minimum of fifteen (15) feet below the bottom of rail/track throughout the entirety of the SFRC right of way.

Settlement and undermining of track, embankment, and soil is not permitted within SFRC right of way. The Design-Build Firm shall coordinate with SFRTA regarding the implementation of an undermined track contingency plan developed by SFRTA prior to construction within SFRC right of way. If track inspection or monitoring/survey results indicate track disturbance or infrastructure concern, work shall stop, a track remediation meeting will be scheduled/conducted, and track remediation will be performed by SFRTA.

The Design-Build Firm shall be responsible for verifying and obtaining the policies, operating procedures and stand down time related to working adjacent to a railroad as it relates to and affects the work in this Project. Refer to RFQ Sections IX.L and N for sequence of construction and traffic control/work restrictions.

This track is in use and will be in continuous operation during the performance of the work. It is anticipated that the work under this Contract will, except as hereinafter expressly provided, be done without interruption of or change in the regular schedule of operations of trains on the railroad. No work shall be done on or affecting the railroad until the Design-Build Firm has secured written permission to proceed from the SFRTA Engineer or Representative. The Design-Build Firm shall conduct its work in such a manner, and at such times and with such precautions and safeguards as the SFRTA Engineer or Representative may require, for the purpose of avoiding interference with the safe and continuous operations of the railroad, and of avoiding interference with or injury to passengers and employees or other persons. The Design-Build Firm shall at all times comply with the requirements of the SFRTA Engineer or Representative with respect to the disposal and handling of materials, placing of lights, use of scaffolding, shields and other structures, erection and operation of cranes, and with all other reasonable requirements to that end, such that interference with the safe and continuous operation of the existing facilities and interference with or injury to passengers, employees and other persons, and damage to their property or that of the Department may be avoided.

The Design-Build Firm shall be responsible for any costs associated with the tracks being out of service resulting from movement above and beyond that caused by required construction activities.

The Design-Build Firm's Work Package Proposal(s) shall account for downtime resulting from train traffic passing by the Project's working limits. Notwithstanding any other provision in the contract documents to the contrary, no additional time will be granted, nor compensation will be paid in excess of the GMP for such downtime. In the event that SFRTA stops providing flagmen due to safety related reasons or due to violations of SFRTA work policies by the Design-Build Firm, the Department will not be responsible for the Design-Build Firm's downtime and any associated costs, regardless of the fact that the Department is responsible for providing flagging. If the Design-Build Firm believes that a situation will arise where

Department policies and SFRTA policies will conflict, the Design-Build Firm shall notify the Department for guidance on the issue.

If the installation of temporary crossings and/or temporary access roads is necessary during construction, the Design-Build Firm shall be responsible for providing the necessary survey, plans, details, and sketches and submit to SFRTA for review and approval. The Design-Build Firm shall be responsible for all fees of temporary private crossings and/or access roads. The Design-Build Firm shall be responsible for the cost and expense of construction work and materials to install and remove any temporary access roads, and any SFRTA associated cost. The Design-Build Firm shall pay SFRTA for construction of any required temporary private crossings.

If any permits are required by SFRTA, the Design-Build Firm shall provide the necessary application, survey, plans, details, and sketches. The Design-Build Firm shall be responsible for all fees for any permit application. Should a permit be denied, it is the Design-Build Firm's responsibility to make the changes necessary to obtain approval at no cost to the Department. Information pertaining to SFRTA's requirements for South Florida Rail Corridor utility permits and right of entry permits is included in Attachment X.

For any excavations within SFRC R/W, the Design-Build Firm shall give SFRTA no less than 72 hours notice to locate railroad utilities on SFRC R/W. Railroad utilities are not a part of the 811 locate system.

Trenchless construction below the SFRC shall be performed using microtunneling technology, unless otherwise approved by the Department.

Barrier wall fencing requirements over the railroad right of way are provided in RFQ Section IX.I.3.

The existing access from SW 12<sup>th</sup> Ave to the SFRC R/W via a fence gate on the south side of SW 10<sup>th</sup> St is being impacted by the proposed improvements. The access gate shall be relocated to the north side of all of the proposed bridges and shall have a concrete driveway from SW 12<sup>th</sup> Ave. The fencing along the east and west sides of the SFRC shall be replaced within the limits of the SW 10<sup>th</sup> St R/W.

### **Documents Review**

Plans and details for any work performed within, above, below or affecting railroad property, facilities or Right of Way must be submitted to the Department and approved by SFRTA prior to any work being performed affecting the railroad property or facilities. Electronic documents at each submittal phase shall be made available to the District Rail Coordinator.

The Design-Build Firm is advised that SFRTA requires 30 calendar days, excluding weekends and holidays, to review any plans, and shall plan accordingly.

### **Construction and Railroad Flagging Services**

Two (2) weeks prior to the Pre-Construction meeting, the Design-Build Firm shall contact the Department of Transportation:

Ms. Yanique Kelly  
Railroad Coordinator  
Office of Modal Development  
3400 West Commercial Boulevard  
Fort Lauderdale, Florida 33309-3421  
Telephone: 954-777-4561

Fax: 954-777-4095  
[yanique.kelly@dot.state.fl.us](mailto:yanique.kelly@dot.state.fl.us)

In addition, the following individual shall be notified and invited to the Pre-Construction meeting by the Construction Engineering and Inspection (CEI) Project Manager:

Mr. Dan Tessoﬀ  
Permit Coordination  
South Florida Regional Transportation Authority  
801 NW 33<sup>rd</sup> Street  
Pompano Beach, Florida 32064  
Telephone: 954-788-7927  
Cell: 248-470-4680  
[tessoﬀd@sfrta.fl.gov](mailto:tessoﬀd@sfrta.fl.gov)

The Design-Build Firms pursuing this Project are advised that SFRTA has historically declined to answer any requests made by the Design-Build Firms and shall plan accordingly. SFRTA will begin coordination with the Design-Build Firm once under contract with the Department.

Costs associated with flagging services will be compensated directly to SFRTA by the Department as per the Flagging Agreement for the amount up to 570 days. The Design-Build Firm shall be responsible for the costs of any additional days of flagging services utilized in excess of 570 days. These costs will be reduced from the Design-Build Firm's Contract amount as the costs are incurred. The flagging services will be available for day or night work.

The Design-Build Firm shall be responsible for coordinating and scheduling all necessary flagging operations with SFRTA.

### **Insurance Requirements**

The Design-Build Firm shall obtain all required insurance as described in Exhibit 1 of the SFRTA Temporary Right-Of-Entry Agreement provided in Attachment X.

Proof of insurance shall also be forwarded to Mr. Dan Tessoﬀ at SFRTA: [tessoﬀd@sfrta.fl.gov](mailto:tessoﬀd@sfrta.fl.gov)

### **TSM&O SPECIFIC FEC (Florida East Coast Railway)**

Railroad coordination is anticipated with Florida East Coast Railway, LLC (FEC) for construction activities at the following locations:

- TSM&O Network crossing FEC at Sample Road SR 834 and West Hillsboro BLVD under the FEC railroad tracks
- TSM&O Network along S. Dixie HYWY SR 811 adjacent to FEC right-of-way between Sample Road SR 834 and West Hillsboro BLVD.

The Department will conduct the required contract negotiations and assist the Design-Build Firm during plans review coordination with FEC. The corresponding Flagging Agreement, Preliminary Engineering Agreement, Change Order and/or Railroad Reimbursement Agreement will be executed between FEC, Broward County and the Department. Copies of the approved Agreements will be made available to the Design-Build Firm. The Design-Build Firm must comply with the terms of these and any other existing

agreements. The Design-Build Firm must make the necessary arrangements with FEC at least 15 days prior to encroachments into the railroad corridor right-of-way.

### **Construction and Railroad Flagging Services**

These activities may impact railroad operations due to construction work. Two weeks prior to the construction meeting, the Design-Build Firm shall contact Ms. Yanique Kelly (Rail Coordinator - District Four). Ms. Kelly can be reached by phone at 954-777-4561 or email [yanique.kelly@dot.state.fl.us](mailto:yanique.kelly@dot.state.fl.us).

In addition, the following individuals shall be notified and invited to the Pre-Construction meeting by the Construction Engineering and Inspection (CEI) firm:

Mr. Daniel Fetahovic  
Public Projects Engineer  
Florida East Coast Railway, LLC  
7150 Philips Highway  
Jacksonville, Florida 32256  
Telephone: 904-279-3196  
[Daniel.fetahovic@fecrwy.com](mailto:Daniel.fetahovic@fecrwy.com)

The Design-Build Firms pursuing this Project shall be aware that FEC in the past has declined to answer any requests made by the Design-Build Firms and shall plan accordingly. FEC will work with the Design-Build Firm once under contract with the Department.

The Design-Build Firm will be required to have a railroad flagman or watchman any time work is being done:

- a. On or above the railroad corridor right-of-way
- b. Within reach or potential to foul (Equipment with extendable, or fixed boom lengths that by distance from the ROW could enter into) the railroad right-of-way
- c. If excavations that could impact the stability of the tracks is required
- d. Maintenance of Traffic impacts a crossing
- e. As required by the railroad.

Costs associated with flagging services will be compensated directly to FEC by the Department as per a Flagging Agreement for the amount up to 5 days. The Design-Build Firm shall be responsible for the costs of any additional hours of flagging services utilized in excess of 5 days. These costs will be reduced from the Design-Build Firm's Contract amount as the costs are incurred. For scheduling flagging services, the Design-Build Firm shall contact the FEC's Construction Engineer or Representative and the Department's CEI Senior Project Engineer. The flagman or watchman will have to be scheduled 45 calendar days in advance of the start date for the work. The flagging services will be available for day or night work subject to availability.

The Design-Build Firm shall be responsible for coordinating and scheduling all necessary flagging operations with FEC.

### **Railroad Protective Insurance**

#### **I. Liability Insurance**

- Commercial General Liability: \$1,000,000 per occurrence \$2,000,000 aggregate for bodily injury and/or property damage combined, for damages arising out of bodily injuries to or death of all persons in each occurrence and for damage to or destruction of property, including the loss of use

thereof, in each occurrence, including Federal Employers Liability Act claims (“FELA”) against the FECR, or other liability arising out of or incidental to railroad operations.

- Automobile Liability: \$1,000,000 combined single limit, bodily injury and/or property damage combined, for damages to or destruction of property including the loss of use thereof, in any one occurrence.
- Worker’s Compensation and Employer’s Liability: \$1,000,000 each accident, \$1,000,000 disease policy limit, \$1,000,000 disease each employee. \$1,000,000 Employers Liability.
- Railroad Protective Liability: \$2,000,000 per accident, \$6,000,000 aggregate with FECR as the only named insured.
- Umbrella Liability: Excess of General Liability, Automobile Liability and Workers Compensation and Employers Liability: \$1,000,000 per occurrence \$2,000,000 aggregate.
- Professional Liability Coverage: If professional services are being rendered by the Design-Build Firm, Professional Liability coverage in an amount not less than \$1,000,000.

## II. Policy Requirements

- Design-Build Firm’s liability insurance policies shall name FECR, its parent, affiliates (FEC ROW LLC) and subsidiaries as additional insureds and will not have any exclusion for liability relating to railroad operations or contractual liability for construction demolition within fifty (50) feet of FECR’s tracks by endorsement.
- The workers’ compensation policy and property insurance shall include waivers of subrogation rights endorsements in favor of FECR
- All policies shall contain a provision for thirty (30) days’ written notice to FECR prior to any expiration or termination or any change in, the coverage provided. Design-Build Firm shall provide FECR with at least thirty (30) days’ written notice to FECR prior to any expiration, termination or any change in any insurance coverage.
- Insurance Company must be issued by a casualty company/insurance company authorized to do business in the State of Florida that has a “Best’s” rating of A or A+ and a financial category size of Class XII or higher.
- Prior to any entry upon FECR property pursuant to this Contract and upon FECR’s request, thereafter, Contract shall provide or shall cause its insurer or insurance agent to provide FECR with a certificate of insurance certifying the liability insurance policies in effect for the Term of Contract.
- The liability assumed by the Design-Build Firm under this Contract, including, but not limited to, Design-Build Firm’s indemnification obligations, shall not be limited to the insurance coverage stipulated therein.

Proof of insurance shall be forwarded to the FEC:

Mr. Daniel Fetahovic

Telephone: 904-279-3196

[Daniel.Fetahovic@fcrwy.com](mailto:Daniel.Fetahovic@fcrwy.com)

The Design-Build Firm shall be responsible for complying with all applicable provisions of the FEC “Special Provisions” when working on, over, under or adjacent to the FEC Corridor.

The Design-Build Firm shall be responsible for verifying and obtaining the policies, operating procedures and stand down time related to working adjacent to a railroad as it relates to and affects the work in this Project. Refer to Section IX.N of this RFP for Construction Time Restrictions.

This track is in use and will be in continuous operation during the performance of the work. It is anticipated that the work under this Contract will, except as hereinafter expressly provided, be done without

interruption of or change in the regular schedule of operations of trains on the railroad. No work shall be done on or affecting the railroad until the Design-Build Firm has secured written permission to proceed from the FEC Engineer or Representative. The Design-Build Firm shall conduct its work in such a manner, and at such times and with such precautions and safeguards as the FEC Engineer or Representative may require, for the purpose of avoiding interference with the safe and continuous operations of the railroad, and of avoiding interference with or injury to passengers and employees or other persons. The Design-Build Firm shall at all times comply with the requirements of the FEC Engineer or Representative with respect to the disposal and handling of materials, placing of lights, use of scaffolding, shields and other structures, and with all other reasonable requirements to that end, such that interference with the safe and continuous operation of the existing facilities and interference with or injury to passengers, employees and other persons, and damage to their property or that of the Department may be avoided.

The Design-Build Firm shall be responsible for any costs associated with the tracks being out of service resulting from movement above and beyond that caused by required construction activities.

The Design-Build Firm's Work Package Proposal(s) shall account for downtime resulting from train traffic passing by the Project's working limits. Notwithstanding any other provision in the contract documents to the contrary, no additional time will be granted, nor compensation will be paid in excess of the GMP for such downtime. In the event that FEC stops providing flagmen due to safety related reasons or due to violations of FEC work policies by the Design-Build Firm, the Department will not be responsible for the Design-Build Firm's downtime and any associated costs, regardless of the fact that the Department is responsible for providing flagging. If the Design-Build Firm believes that a situation will arise where Department policies and FEC policies will conflict, the Design-Build Firm shall notify the Department for guidance on the issue.

If the installation of temporary crossings and/or temporary access roads is necessary during construction, the Design-Build Firm shall be responsible for providing the necessary survey, plans, details, and sketches. The Design-Build Firm shall be responsible for all fees of temporary private crossings and/or access roads. The Design-Build Firm shall be responsible for the cost and expense of construction work and materials to install and remove any temporary access roads, and any FEC associated cost. The Design-Build Firm shall pay FEC for construction of any required temporary private crossings.

If any permits are required by the railroad company, the Design-Build Firm will be responsible for providing the necessary application, survey, plans, details, and sketches. The Design-Build Firm will be responsible for all fees for any permit application. Should a permit be denied, it is the Design-Build Firm's responsibility to make the changes necessary to obtain approval at no cost to the Department.

## **Railroad Requirements**

The Design-Build Firm shall comply with the FEC "Construction Submission Criteria" requirement including, but not limited to, the following requirements:

1. Demolition Procedure
  - a. The Design-Build Firm shall submit a detailed procedure for demolition of any structure over or within the railroad corridor right-of-way.
  - b. Furnish demolition plans for all demolition affecting the railroad corridor right-of-way. A copy of the submittal, crane charts, and load calculations for 150% crane broom and swing capacity shall be submitted for review and approval by the railroad.
  - c. Debris which collects on the ballast protective cover to be placed over the track ballast shall be removed daily or as directed by the Railroad Field representative.
  - d. All demolition debris on the railroad corridor right-of-way shall be removed daily or more

- often as directed by the Railroad Field representative.
- e. If demolition removal of the existing structure will consist of water jet cutting or similar method, the Design-Build Firm must provide and submit the method and collection system that will be put in place and the disposal method to prevent any of the dispensed/discarded water or used substance from infiltrating or entering into the railroad corridor right-of-way. The Railroad Company's accepted collection system and disposal of discarded material will be at the Design-Build Firm's sole expense.
2. Excavation and Shoring
    - a. Shoring may not be required if all of the following conditions are satisfied:
      - i. Excavation does not encroach upon a 1½ horizontal: 1 vertical theoretical slope line starting 1'-6" below top of rail and at 12'-0" minimum from centerline of the track (live load influence zone).
      - ii. Track is on level ground or in a cut section and on stable soil.
      - iii. Excavation does not adversely impact the stability of an FEC facility.
      - iv. Shoring is not required by any governing construction code.
    - b. If shoring is required: excavation plans shall be furnished showing sheeting and/or shoring prepared and sealed by a Professional Engineer Registered in the State of Florida and submitted to and approved by Railroad prior to construction of the sheeting.
    - c. Trench boxes are prohibited for use on FEC within the theoretical railroad live influence zone.
    - d. All excavations and fall hazards on railroad corridor right-of-way shall be protected by handrail in conformance with American Railway Engineering and Maintenance-of-Way Association (AREMA) Specifications and pre-approved by Railroad.
  3. Erection Procedure
    - a. Furnish girder erection plans with load calculations for 150% crane broom and swing capacity, and provide plan of crane setup locations shown for loads over the railroad corridor right-of-way.
  4. Design-Build Firm to provide a detailed method to protect the railroad during painting/coating work. Include method to protect ballast and train traffic from over spray.
  5. If demolition removal of the existing structure or construction of the new structure will consist of pile-driving, hydraulic hammer, or similar methods that may cause excessive or undue vibration or movement affecting the Railroad facilities, property, or track structure, at the Railroad's determinations, may require that a sufficient vibration monitoring system be put in place for the specific work task or possibly the duration of the Project. The Railroad Company's accepted vibration monitoring system installation, monitoring, and reporting will be the Design-Build Firm's sole expense.

### **Compliance with Railroad Safety and Roadway Worker Protection Program**

All personnel performing work on FEC Right-of-Way will be required to conform to the federal regulation covering On-Track Worker Safety. This includes the use of Personal Protection Equipment (PPE). PPE includes the following items:

1. Orange Hard hat with reflective band
2. Safety glasses with side protection
3. Orange High visibility safety vest with reflective band
4. Steel toed boots with minimum 6" cuff and non-slip tread

5. Hearing protection as needed

The Design-Build Firm shall be solely responsible for having all workers entering the Project site certified under the Contractor Safety and Roadway Worker Protection Training.

All personnel entering the railroad corridor right-of-way are required to comply with the requirements of the Federal Railroad Administration (FRA), Roadway Worker Protection, 49 Code of Regulation (CFR), Part 214, including, without limitations, the training and qualification requirements, and with the FRA's On-Track Safety Program. The Design-Build Firm shall comply with FRA's rule regarding Roadway worker protection and shall also comply with any revisions to Railroads On-Track Worker Safety Program. As required by the Regulation, the Design-Build Firm shall certify that all of the Design-Build Firm's personnel (and Subcontractors) working under this contract have received On-Track Contractor Roadway Worker Safety training through an approved course. The program must comply with the FRA Regulation, and the content of the course must be approved by the FEC Safety Program Administrator. Required safety training may be accomplished by either of the following two methods:

1. FEC authorized outside contractors may provide the training. FEC's Safety Program Administrator will approve all training courses for compliance with the regulation and FEC safety requirements. The Design-Build Firm is responsible for quality of the required On-Track Worker Safety Training if it chooses to teach their company safety course.
2. The FEC Safety Program Administrator will provide the Design-Build Firm a list of the sources and the availability of FEC's approved safety-training programs.

The Design-Build Firm is also responsible for maintaining the worker's certification up to date. Such certification shall be renewed annually.

The Design-Build Firm shall be responsible for making all necessary arrangements prior to any encroachments into the railroad corridor right-of-way.

**SFRTA (South Florida Rail Transportation Authority)**

Railroad coordination is required with SFRTA within the Department owned SFRC Right of Way for construction activities at the following locations:

- SMART Work Zone Network crossing SFRTA at Sample Road SR 834 and West Hillsboro BLVD under the SFRTA railroad tracks.

**Construction and Railroad Flagging Services**

Costs associated with flagging services will be compensated directly to SFRTA by the Department as per a Flagging Agreement for the amount up to 50 days. The Design-Build Firm shall be responsible for the costs of any additional hours of flagging services utilized in excess of 50 days. These costs will be reduced from the Design-Build Firm's Contract amount as the costs are incurred. The flagging services will be available for day or night work.

**END TSM&O SPECIFIC**

**G. Survey**

The Design-Build Firm shall perform all surveying (Terrestrial, Mobile and/or Aerial) and mapping services necessary to complete the Project. Survey services must also comply with all pertinent Florida



Statutes (Chapters 177 and 472, F.S.) and applicable rules in the Florida Administrative Code (Rule Chapter 5J-17, F.A.C.). 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 and Mapping Procedure, Topic Nos. 550-030-101, and the Surveying and Mapping Handbook.

For any Design-Build Firm proposed new ROW, as approved by the DEPARTMENT, the Design-Build Firm shall provide final ROW survey and mapping services. These maps and any associated sketches, legal descriptions and all associated necessary documentation, field data collection and any other supporting documentation shall be included as part of the Construction Set of plans submitted by the Design-Build Firm.

#### **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 time will be granted, nor compensation will be paid in excess of the GMP in the event of any inaccuracies in the preliminary information.

#### **I. Submittals**

If the Design-Build Firm is required to submit a deliverable to the Department, and the Department has the right to review and approve the deliverable, the Department is under no obligation to approve the deliverable until it is satisfied that the deliverable is acceptable. Failure of the Department to approve the deliverable does not entitle the Design-Build Firm to additional compensation and shall not be a basis for a claim or dispute.

Unless otherwise stated herein or agreed to during the development of the Master Schedule and/or subsequent Work Package schedules, the Department shall have 15 calendar days, excluding Saturdays, Sundays, and Holidays, for each review. Unless otherwise stated herein or otherwise agreed to in writing by both Parties, any deliverable not accepted or approved by the Department, as required by the submittal type, within the time required is deemed to be rejected.

The Department will perform an Independent Department Review (IDR) of all Category 2 bridge structures contained in each Work Package. The Design-Build Firm shall submit 60% structures plans for the Department to begin developing the modeling for the design review of each Work Package. The 60% Structures Plans shall contain sufficient information for each structure to begin developing the model for the Category 2 element(s) under consideration. For Category 2 bridges, each structure submission (60%, 90%, Final) can be broken down into "units" (defined as a stand-alone set of foundation, substructure and superstructure sheets) with each unit containing sufficient information to develop the models for the Category 2 element under consideration. The 60% Structures Plans submittal is not intended to be an ERC design review by the Department and formal review comments will not be provided at this stage. Lack of formal review comments at this stage should not be construed as acceptance or approval. When 90% plans are submitted, the Department's reviewer will verify that the information contained in the 90% plans is consistent with the models that were developed based upon 60% plans and the model will be updated, as required, and the actual design review performed. The results of the review will be forwarded to the Design-Build Firm for review and response. The Department will resolve all conflicts arising between the Design-Build Firm and Department's IDR reviewer during the IDR process. The Department's disposition of any such conflicts will be final.

### **Component Submittals:**

The Design-Build Firm may submit applicable components of Work Package plans set instead of submitting an entire Work Package plan set; however, sufficient information from other components must be provided to allow for a complete review. In accordance with the FDM, components of the Work Package plans set are roadway, signing and pavement marking, signalization, Intelligent Transportation Systems (ITS), lighting, landscape/irrigation, hardscape/aesthetics, and structural.

The Design-Build Firm may divide the Project into separate areas and submit components for each area; however, sufficient information on adjoining areas must be provided to allow for a complete review. Submittals for Category 1 bridges are limited to foundation, substructure, and superstructure.

For Category 2 structures, submittals for bridges are limited to "units" as previously described, or a complete bridge submittal.

For projects involving Category 2 structures, the Design-Build Firm shall submit a Category 2 Submittal Report summarizing the Category 2 elements included in the Project as part of the Work Package Proposal. Within fifteen (15) calendar days, excluding Saturdays, Sundays, and Holidays, following Notice to Proceed, submit a prioritized preliminary submittal schedule for the plans including Category 2 structure elements. This submittal shall take place prior to the Independent Department Review Kickoff Meeting.

Category 1 and 2 bridge submittals shall contain the following:

- Plan sheets for the submittal under review developed to the specified level of detail (i.e. 90% plans, Final plans, etc.) as outlined in the FDM. Note for the 60% submittal on Category 2 Structures, provide the relevant sheets in accordance with the "Summary of 60% Structures Plans Submittals" table below. For the 90% and Final Submittals on Category 2 Structures, combine the required sheets for Foundation, Substructure, and Superstructure listed in FDM Table 121.14.3 to form the "unit" submittal.
- 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.

### **Phase Submittals:**

For each Work Package, the Design-Build Firm shall provide the documents for each phase submittal listed below to the Department's Project Manager. The particular phase shall be clearly indicated on the documents. The Department's Project Manager will send the documents to the appropriate office for review and comment. Once all comments requiring a response from the Design-Build Firm have been satisfactorily resolved as determined by the Department, the plans shall be digitally signed using Department approved software (such as IdenTrust) by the Engineer of Record (EOR). The plans are then digitally signed by the Design Review Coordinator (DRC) from the Corridor Design Consultant (CDC) and by the FDOT Project Manager as "Released for Construction" (RFC). The submittal of RFC component plans shall not be comprised of a combination of stamped plans and digitally signed plans.

All comments shall be resolved to the Department's satisfaction prior to making the next phase submittal.

Department review comments for the 60%, 90%, and 100% phase submittals will generally be provided through the Department's Electronic Review Comments (ERC) system. For each phase submittal, it shall be the Design-Build Firm's responsibility to proactively and satisfactorily resolve all comments requiring a response from the Design-Build Firm with the Department's reviewers prior to making a subsequent phase

submittal of the same component. The Department will designate in the review comments if the next submittal will be a resubmittal of the 90% phase submittal or if the plans and supporting calculations are significantly developed to proceed to the Final Submittal. If the Department requires more than 2 resubmittals, a submittal workshop between the Department and the Design-Build Firm must be held to resolve any outstanding issues or comments. Department acceptance of a subsequent phase submittal will not be conditioned on resolution of comments marked “For Information Only” by the reviewer.

**60% Phase Submittal (Required for Category 2 structures)**

- 1 copy of 11” x 17” Structures plans meeting the requirements of the “60% Structures Plans Submittal” as previously defined.
- 1 copy of draft geotechnical report that, at a minimum, includes the FB MultiPier Input Parameters, as well as FBDeep Pile Capacity Curves
- 1 copy of draft Bridge Hydraulic Report
- 1 copy of design documentation (calculations not required)
- 1 copy of draft Technical Special Provisions
- 1 copy of Roadway Project Layout and TTCP plans
- Any other information required for the Department to perform an Independent Department Review as discussed in the Independent Department Review Kickoff Meeting Report of Core Boring sheets

**Table: Summary of 60% Structures Plans Submittals**

**Provide the sheets listed as applicable based on the structure type.**

| ITEM                                     | 60% Structures Plans |
|--|----------------------|
| Cover Sheet                              | S                    |
| Key Sheet                                | S                    |
| Sheet Index                              | P                    |
| General Notes                            | S                    |
| Plan and Elevation                       | C                    |
| Typical Section                          | C                    |
| Hydraulics Recommendation                | S                    |
| Construction Sequence                    | C                    |
| Report of Core Borings                   | S                    |
| Foundation Layout                        | S                    |
| Pile/Shaft Data Table                    | P                    |
| End Bent                                 | S                    |
| End Bent Details                         | P                    |
| Wing Wall Details                        | P                    |
| Pier                                     | S                    |
| Pier Details                             | P                    |
| Footing                                  | S                    |
| Drilled Shaft and Augercast Pile Details | S                    |
| Framing Plan                             | S                    |
| Superstructure Plan                      | S                    |

| ITEM                           | 60% Structures Plans |
|--------------------------------|----------------------|
| Superstructure Details         | P                    |
| Erection Sequence              | S                    |
| Cross Frames/Diaphragm Details | S                    |
| Steel Girder Details           | S                    |
| P/T Systems                    | S                    |
| Bearing Details                | P                    |
| Post Tensioning Layout         | C                    |
| P/T Details                    | S                    |

**Status Key:**

**P** – Preliminary: Basic shapes, geometry and layout of specified members are shown. Rebar and elevations are not required for Preliminary submittals. For example, the outline drawing of an end bent with complete dimensions including stationing, beam and pedestal layout but without pile layout dimensions or rebar.

**S** – Substantially Complete: Shapes, geometry and layout have been finalized. Design is 90% complete with most rebar, plate sizes, bolt patterns, concrete strengths finalized and incorporated into the plans. For example, an end bent drawing with rebar, complete dimensions, pile and beam layout but without elevations.

**C** – Complete but Subject to Change: The design, drawings and details are complete for the specified component. Only reviewer-initiated changes should be expected at this level. For example, an end bent drawing would be complete, including all rebar callouts, elevations, and dimensions.

**Prerequisites to 90% Phase Submittal (Required for ITS Submittals)**

Approval required for below components prior to submitting the 90% phase submittals

- Concept of Operations (ConOps)
- Project Systems Engineering Management Plan (PSEMP)

**TSM&O SPECIFIC**

The Design-Build Firm shall prepare plan submittals based on the following packages:

1. For work under FPID 439891-5-52-01: Package A – ITS Plans and documents for work described in Attachment BB – ITS Deployment Requirements, Attachment CC - Connected Vehicle System Deployment Requirements, and Attachment DD - Connected Vehicle On-Board Units Minimum Technical Requirements, and signal mast assembly replacement at Hillsboro Boulevard and Deerfield Plaza intersection and Hillsboro Boulevard and NW 41 Way intersection.
2. For work under FPID 439891-5-52-02: Package B - Broward County Traffic Signal Interconnection and Adaptive Traffic Control System (ATCS) plans for work described in Attachment EE - Broward County Adaptive Traffic Control System and Signal Fiber Interconnection Deployment Requirements

**END TSM&O SPECIFIC**

**90% Phase Submittal**

- 1 copy of 11” X 17” plans (all required components)
- 1 copy of signed and sealed geotechnical report
- 1 copy of Settlement and Vibration Monitoring Plan (SVMP) for Department acceptance and update throughout the construction period
- 1 copy of signed and sealed Bridge Hydraulic Report
- 1 copy of Drainage Report

- 1 copy of design documentation
- 1 copy of Technical Special Provisions
- 1 copy of Landscape Opportunity Plans
- 1 copy of Bridge Load Rating Calculations
- 1 copy of Completed Bridge Load Rating Summary Detail Sheet
- 1 copy of Load Rating Summary Form
- 1 copy of all design changes introduced since the 60% plan submittal that affect the modeling or component design of various bridge components
- Listing of all selected ITS technologies/products, reasons for selection, selected device locations, and mounting types
- 1 copy of Maintenance of Communication (MOC) Plan
- Ramp Signal Analysis Technical Memo if concept changes are proposed from the Ramp Signal Analysis Technical Memo included as a reference document
- ITS Maintenance Accessibility Plan
- ITS Downtime Transition Plan
- Fiber and ITS Device Transition Plan

All QC plans and documentation for each component submittal shall be electronic in .pdf format

### **Final Submittal**

- 1 set of signed and sealed 11" X 17" plans (all required documents)
- 1 copy of signed and sealed 11" X 17" plans
- 1 copy of signed and sealed Drainage Report
- 1 copy of signed and sealed design documentation
- 2 Copies of Settlement and Vibration Monitoring Plan (SVMP)
- 1 copy of Landscape Opportunity Plans
- 1 set of final documentation

- 1 signed and sealed copy of the Bridge Load Rating Summary Detail Sheet with supporting calculations
- 1 signed and sealed copy of the Load Rating Summary Form with supporting calculations
- Ramp Signal Analysis Technical Memo if concept changes are proposed from the Ramp Signal Analysis Technical Memo included as a reference document
- ITS Maintenance Accessibility Plan
- ITS Downtime Transition Plan
- Fiber and ITS Device Transition Plan
- 1 signed and sealed Construction Specifications Package or Supplemental Specifications Package
- 1 of electronic copy of Technical Special Provisions in .pdf format

- 1 copy of all major design changes introduced since the 90% plan submittal that affect the modeling or component design of various bridge components
- 1 copy of all the IDR comments and the Engineer of Record's (EOR) response along with a statement that all comments have been addressed and resolved

All of the information above shall be submitted electronically in .pdf format.  
All QC plans and documentation for each component submittal shall be electronic in .pdf format

The Design-Build Firm shall coordinate with the District Maintenance Office to obtain bridge numbers for all new bridges prior to the RFC of bridge components

The Design-Build Firm shall provide the District Planning and Environmental Management Office the information required to update the Department's Roadway Characteristics Inventory (RCI) reflecting the final configuration of the Project.

The Design-Build Firm shall provide a list of all changes made to the plans or specifications that were not directly related to the 90% plans review comments. Significant changes (as determined by the Department) made as a part of the Final submittal, that were not reviewed or provided in response to the 90% submittal comments, may require an additional review phase prior to stamping the plans or specifications "Released for Construction." The Design-Build Firm shall provide a signed certification that all Electronic Review Comments (ERC) and/or ProjectSolve comments have been resolved to the Department's satisfaction as a requirement before obtaining "Released for Construction" plans.

#### **Requirements to Begin Construction:**

Following the issuance of a task work order, the Department's indication that the signed and sealed plans and specifications are "Released for Construction" authorizes the Design Build Firm to proceed with construction of an approved Work Package based on the contract plans and specifications. The Department's review of submittals and subsequent Release for Construction is to assure that the Design-Build Firm's EOR has approved and signed the submittal, the submittal has been independently reviewed and is in general conformance with the contract documents. The Department's review is not meant to be a complete and detailed review. No failure by the Department in discovering details in the submittal that are released for construction and subsequently found not to be in compliance with the requirements of the contract shall constitute a basis for the Design-Build Firm's entitlement to additional monetary compensation, time, or other adjustments to the contract. The Design-Build Firm shall cause the EOR to resolve the items not in compliance with the contract, errors or omissions at no additional cost to the Department and all revisions are subject to the Department's approval.

The Design-Build Firm may choose to begin construction prior to completion of the Phase Submittals and the Department stamping the plans and specifications Released for Construction except for bridge construction. No permanent structures work, including fabrication of bridge members, may begin without signed and sealed plans or shop drawings (whichever controls the design and details utilized to construct/erect the specific structural component) that have been Released for construction. To begin construction the Design-Build Firm shall submit signed and sealed plans for the specific activity; submit a signed and sealed Construction Specifications Package or Supplemental Specifications Package; obtain regulatory permits as required for the specific activity; obtain a PD&E Study re-evaluation when required for the specific activity; obtain utility agreements and permits, if applicable; have an approved temporary construction dewatering plan; and provide five (5) days notice before starting the specific activity. The plans to begin construction may be in any format including report with details, 8 1/2" X 11" sheets, or 11" X 17" sheets, and only the information needed by the Design-Build Firm to construct the specific activity needs to be shown. Beginning construction prior to the Department stamping the plans and specifications Released for Construction does not reduce or eliminate the Phase Submittal requirements.

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

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

Design-Build Firm shall complete the As-Built Plans as the Project is being constructed. All changes made subsequent to the “Released for Construction” Plans shall be signed/sealed by the EOR. The As-Built Plans shall reflect all changes initiated by the Design-Build Firm or the Department in the form of revisions. As-Built Plans shall be submitted for each Work Package as it is finished. If the Work Package does not have completed As-Built Plans (due to the item of work needing more than one Work Package to be completed), the Design-Build Firm will notify the Department of the reasoning. The As-Built Plans shall be submitted prior to Project completion for Department review and acceptance as a condition precedent to the Departments issuance of final acceptance.

The Department shall review, certify, and accept the As-Built Plans prior to issuing final acceptance of the Project in order to complete the As-Built Plans.

The Department shall accept the As-Built Plans and related documents when in compliance with Design-Build Division I Specification 7-2.3, As-Built Drawings and Certified Surveys, and the As-Built Requirements.

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

- 1 set of 11” X 17” signed and sealed As-Built plans, drawings and Certified Surveys
- 1 set of 11 "X 17” copies of the signed and sealed As-Built plans, drawings and Certified Surveys (including as-built channel survey)
- All As-Built plans required to be submitted based on environmental permit conditions
- 1 set of Landscape Opportunity Plans
- 1 signed and sealed copy of the Bridge Load Rating Summary Form and Calculations based on as-built conditions
- 1 set of final documentation (if different from final component submittal)
- 1 set of survey information, including electronic files and field books
- Deliver the final CADD.zip in accordance with the CADD Manual
- 1 Final Project submittal containing the information above shall be electronic in .pdf format

#### **J. Contract Duration**

The Department has established a Contract Duration of 2562 calendar days for the overall Project following the first NTP. The TSM&O (excluding the Connected Vehicle components of the Construction Work) shall be completed within 871 calendar days following the first NTP.

#### **K. Project Schedule**

The Design-Build Firm shall submit a Schedule, in accordance with Subarticle 8-3.2 (Design-Build Division I Specifications), during the Planning Phase. The Design-Build Firm’s Schedule shall allow for up to fifteen (15) calendar days (excluding weekends and Department observed Holidays) review time for the Department’s review of all submittals with the exception of Category 2 structures submittals. The review of Category 2 structures submittals requires Central Office SDO and Independent Department Reviews (IDR). Durations for Department review of Category 2 structures shall be 60/30 calendar days for the 90% and Final Submittals, respectively. An Independent Department Review Package (60%) shall be submitted as soon as practical but not less than 30 calendar days prior to the submittal of the 90% Plan submittal.

IDR durations are subject to change based on the Design-Build Firm’s Planning Phase deliverables. Upon review of the Planning Phase deliverables, new IDR review times may be provided to the Design-Build

Firm. For the review of all additional Category 2 structures resubmittals, the Schedule shall allow for up to 20 calendar days (excluding weekends and Department observed Holidays) for these reviews. Category 2 structure resubmittals must include all required submittal documentation per Section VIII.I (Submittals). The IDR of Category 2 structures will be performed concurrently with the normal Department review of submittals. Review will not begin until submittals are deemed complete by the Department.

The Department will perform the review of Foundation Construction submittals in accordance with Section 455.

The minimum number of activities included in the Schedule shall be those listed in the Schedule of Values and those listed below. These minimums shall be provided for each planned Work Package the Design-Build Firm anticipates releasing:

- Anticipated Award Date and NTP
- Kickoff meeting with the Department's Independent Review consultant
- Design Submittals
- Utility Coordination and Relocation(s)
- Railroad Coordination and Approval(s)
- Completed Category 2 bridge design for IDR
- Shop Drawing Submittals
- Other Contractor-Initiated Submittals including RFI's, RFM's, RFC's, and NCR's
- Design Survey
- Submittal Reviews by the Department and FHWA
- Design Review / Acceptance Milestones
- Comment Resolution
- Materials Quality Tracking
- Geotechnical Investigation
- Pile Settlement and Monitoring Plan
- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Embankment/Excavation
- PD&E Study re-evaluation documentation
- Permit Submittals
- Permit Acquisition
- Foundation Design (60% IDR Package, 90%, Final, RFC)
- Foundation Construction
- Substructure Design (60% IDR Package, 90%, Final, RFC)
- Substructure Construction
- Superstructure Design (60% IDR Package, 90%, Final, RFC)
- Superstructure Construction
- Walls Design
- Walls Construction
- Roadway Design
- Roadway Construction
- Signing and Pavement Marking Design
- Signing and Pavement Marking Construction
- Signalization Design
- Signalization Construction
- Intelligent Transportation System Design



- Intelligent Transportation System Construction
- Intelligent Transportation System Testing
- Lighting Design
- Lighting Construction
- Maintenance of Traffic Design
- Landscape Opportunity Plans
- Maintenance of Traffic Set-Up (per duration)
- Erosion Control
- As-Built Preparation and Review Coordination
- 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

**L. Key Personnel/Staffing**

The Design-Build Firm’s work shall be performed and directed by key personnel identified in the Letter of Response by the Design-Build Firm. Key personnel must include the following positions and minimum requirements:

| Key Personnel Position   | Minimum Qualifications and Experience   |
|--------------------------|---|
| Project Manager          | The Project Manager (PM) must possess a minimum of 15 years’ experience, including a minimum of five years’ design-build experience, in construction and management of design and construction on highway projects that included work of a similar scope, nature, and complexity as required for the Project. The PM is designated as the Department’s point of contact throughout the Project and must be delegated with the authority to make decisions affecting any aspect of the Project. Professional Engineer preferred. |
| Construction Manager     | The Construction Manager (CM) must possess a minimum of 15 years’ experience, including a minimum of five years’ design-build experience, in construction and management of construction on highway projects with similar scope, nature, and complexity as required for the Project. The CM experience should include an emphasis on design-build construction and experience with interstate highways, interstate bridges, and system to system interchanges.  |
| Project Controls Manager | The Project Controls Manager (PCM) must possess a minimum of 10 years’ experience in project controls, estimating, and scheduling of transportation projects using Primavera software, including at least three years on design-build projects of a similar scope, nature, and complexity as this Project.  |
| Design Manager           | Must be a Professional Engineer. The Design Manager (DM) must possess a minimum of 15 years’ experience in managing design for multidisciplinary highway projects with similar scope, nature, and complexity as required for the Project. The DM experience should include an emphasis on design experience in the design-build context and experience with interstate highways, interstate bridges, and system to system interchanges.   |
| Roadway Design Manager   | Must be a Professional Engineer. The Roadway Design Manager must possess a minimum of 10 years’ experience in roadway design of highway projects that include work of a similar scope, nature, and complexity as this   |

|                                     |   |
|-------------------------------------|---|
|                                     | Project.  |
| Structures Design Manager           | Must be a Professional Engineer. The Structures Design Manager must possess a minimum of 10 years' experience in bridge design including steel and concrete superstructures, continuous multi-span bridges, and curved bridges that include work of a similar scope, nature, and complexity as this Project.  |
| Utility Coordination/Design Manager | The Utility Coordination/Design Manager (UCDM) must possess a minimum of 10 years' experience performing utility coordination for projects with similar scope, nature, and complexity as this Project. The UCM experience should include an emphasis on experience in the design-build context, knowledge of the Department plans production process and utility coordination practices, and knowledge of Department agreements, standards, policies, and procedures. |
| ITS/Technology Manager              | The ITS/Technology Manager must possess a minimum of 10 years' experience in ITS and smart mobility deployment projects, including experience in the design and deployment of similar ITS, Advanced Transportation Management System (ATMS), Adaptive Traffic Control System (ATCS), and Connected Vehicle (both hardware and software) projects. Professional Engineer preferred.  |

In the event a change in key personnel is requested, the Design-Build Firm shall submit the qualifications of the proposed key personnel and include the reason for the proposed change. The proposed substituted key personnel must meet the requirements contained in the table above for the relevant position and must have comparable experience to the key personnel they are replacing. For key personnel not listed above, the proposed substituted personnel must have similar experience as the person they are replacing. Any proposed change to key personnel shall be subject to review and approval by the District Construction Engineer. The Department shall have sole discretion in determining whether or not the proposed substitutions in key personnel are comparable to the key personnel identified in the Letter of Response and whether the proposed personnel meet the requirements contained in the table above if applicable. When allowing substitutions for the eight (8) positions in the chart above, the Department in its sole discretion, will determine if the substitution is in good faith and no fault of the Design-Build Firm or alternatively based solely on a business decision of the Design-Build Firm. The Design-Build Firm shall have available professional staff meeting the minimum training and experience set forth in Florida Statute Chapter 455.

#### **M. Partner/Teaming Arrangement**

Partner/Teaming Arrangements of the Design-Build Firm (i.e., Prime Contractor or Lead Design Firm) cannot be changed after submittal of the Letter of Response without written consent of the Department. In the event a change in the Partner/Teaming Arrangement is requested, the Design-Build Firm shall submit the reason for the proposed change. Any changes in the Partner/Teaming Arrangement shall be subject to review and approval by the Department's Chief Engineer. The Department shall have sole discretion in determining whether or not the proposed substitutions in Partner/Teaming Arrangements are comparable to the Partner/Teaming Arrangements identified in the Letter of Response.

#### **N. 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
- Local government agency coordination
- Transportation Management Plan/Maintenance of Traffic Workshops
- Pavement Design Meeting
- Permit agency coordination
- PD&E Re-evaluation Meetings
- Phasing Meetings
- Scoping Meetings
- System Integration Meetings
- Design Workshops
- Progress Meetings
- Aesthetic Design Review Meetings
- Comment Resolution Meetings
- Adjacent Project Coordination Meetings
- Utility Meetings
- Public Meetings
- Project/Stakeholder Coordination Meetings
- Pre-activity Meetings
- DBE, OJT, DBRA, EEO Compliance Meetings
- Dispute Review Board Meetings

During design, the Design-Build Firm shall meet with the Department's Project Manager on a bi-weekly basis at a minimum 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 two-week look ahead for activities to be performed during the coming two weeks.

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.

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 systems and 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.

## **O. Public Involvement**

### **General:**

Public involvement is an important aspect of the Project. Public involvement includes effectively communicating to all interested persons, groups, and government organizations information regarding the planning, development and construction of the Project. The FDOT District Four Public Information Office and the Public Involvement Consultant (PIC) will be charged with continuing the public information program currently underway. The PIC will be the point of contact during the planning, pre-construction (design) and construction phases of the Project. The Design-Build Firm shall identify a Public Involvement Liaison (DBF PI Liaison) and provide support for the public involvement efforts including the ongoing coordination and relationships with FDOT, the PIC, CEI and others as described below. The DBF PI Liaison shall be the point of contact for FDOT and the PIC and provide timely and accurate construction information.

#### **Community Awareness:**

The Design-Build Firm shall review and provide comment on the Project Community Awareness Plan (CAP) developed by FDOT and the PIC in order to assist the PIC with key details of the Project. The CAP is a living document that will undergo continual updates. The Design-Build Firm shall be responsible for providing FDOT the information necessary to periodically update the CAP relating to Project issues, impacts, schedule and activities.

#### **Public Meetings:**

The Design-Build Firm shall provide all supporting materials and staffing necessary for various public meetings, which may be in person and virtual (hybrid), and include:

- Kick-off or introductory meeting(s)
- Metropolitan Planning Organizations (MPO) Citizens Advisory Committee (CAC) Meetings
- MPO Transportation Technical Committee Meetings
- MPO Meetings
- City and/or County Elected Official/Board Meetings
- Public Information Meetings
- Elected and appointed officials
- Special interest groups (private groups, homeowners associations, environmental groups, minority groups, business groups and individuals)
- Open Houses
- Public Hearings - based on the current guidance on the FDOT Public Involvement website: <https://www.fdot.gov/planning/policy/publicinvolvement/index>

The Design-Build Firm shall include attendance at bi-weekly meetings for the term of the contract to support the public involvement program. The DBF PI Liaison will be responsible for preparing and documenting the meeting minutes as well as engaging other Design-Build Firm team members as needed.

For any of the above type meetings the Design-Build Firm shall provide all technical assistance, data and information, display boards, printed material, video graphics, computerized graphics, etc., and information necessary for the day-to-day exchange of information, including collateral materials for detours and diversions, 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 stakeholder presentations, workshops, information meetings, open houses, and public hearings.

The Design-Build Firm shall, as determined by the Department, attend the meetings with an appropriate number of personnel to assist the Department, PIC and CEI. The Design-Build Firm shall forward all

requests for group meetings to the Department and PIC. The Design-Build Firm shall inform the Department and PIC of any meetings with individuals that occur without prior notice.

**Public Workshops, Information Meetings:**

The Design-Build Firm shall provide all the support services for the meetings listed above.

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

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

**Public Involvement Data:**

The Design-Build Firm is responsible for the following:

- Coordinating with the Department and PIC.
- Providing information to the PIC for Community Awareness Plan (CAP) updates
- Identifying possible permit and review agencies and providing names and contact information for these agencies to the Department and PIC.
- Providing required expertise (staff members) to assist the Department on an as-needed basis.
- Preparing color graphic renderings and/or computer-generated graphics to depict the proposed improvements for coordination with the Department, PIC, local governments, other agencies, and the public.
- Providing up-to-date information, including lane, ramp, and street closures, to the PIC to keep the Department website current.
- Incorporating a communication plan using Smart Work Zone (SWZ) strategies and technologies to inform the traveling public about the intent, features, and duration of the SWZ strategies included in the Project.

The collection of public input occurs throughout the life of the Project and requires maintaining files, newspaper clippings, letters, and records of direct contacts before, during and after any of the public meetings. The PIC will maintain the public involvement binder for the Project. The Design-Build Firm shall provide records of all public correspondence, written or verbal, to the Department throughout the life of the Project.

The Design-Build Firm may be asked by the Department or PIC to prepare draft responses to any public inquiries as a result of the public involvement process. FDOT shall review and approve all responses prior to responding.

**Media Relations:**

Media relations and media engagement strategies will be developed and led by FDOT and the PIC. The FDOT and PIC will establish the protocol and schedule in providing information to the media, as well as receiving and responding to media inquiries. To ensure the accuracy and consistency of all information to be provided, all correspondence and communication with the media will be coordinated through the PIC and the FDOT's District Four Public Information Office and reviewed by FDOT as necessary prior to release. The Design-Build Firm shall serve as a resource to FDOT in providing information and/or supporting responses to media inquiries.

## **P. Quality Management Plan (QMP)**

### **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 (DQMP), 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 shall 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 two hundred ten (210) calendar days, excluding Saturdays, Sundays, and Holidays, days following issuance of the written Notice to Proceed for the Planning Phase. 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.

### **Construction:**

The Design-Build Firm shall be responsible for developing and maintaining a Construction Quality Control Plan (CQMP) for each Work Package, 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 State Materials Office website for instructions on gaining access to the Department's databases: <http://www.fdot.gov/materials/quality/programs/qualitycontrol/contractor.shtm>

Prepare and submit to the Engineer a Job Guide Schedule (JGS) using the Department database in accordance with Section 105 of Standard Specifications. For each Work Package, update the JGS monthly or at a frequency as required by the Department in its sole discretion.

The Department, and FHWA, as necessary, 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.

## **Q. 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.

## **R. Computer Automation**

The Project shall be developed utilizing computer automation systems in order to facilitate the development of the contract plans. Various software and operating systems were developed to aid in assuring quality

and conformance with Department policies and procedures. The Department supports Bentley's OpenRoads Designer ORD and/or Autodesk's AutoCAD Civil 3D as an alternate platform. Seed Files, Cell Libraries, User Commands, MDL Applications and related programs developed for roadway design and drafting are in the FDOT CADD Software [Current Supported Versions \(fdot.gov\)](https://www.fdot.gov/Current-Supported-Versions). Furnish As-Built documents for all building related components of the Project in AutoCAD format. It is the responsibility of the Design-Build Firm to obtain and utilize current Department releases of all CADD applications.

The Design-Build Firm will be required to furnish the Project's CADD files as defined in the Department's CADD Manual after the plans have been Released for Construction. 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 Bentley's OpenRoads Designer ORD and/or Autodesk's AutoCAD Civil 3D design files format.

As part of the As-Built Set deliverables, field conditions shall be incorporated into Bentley's OpenRoads Designer ORD and/or Autodesk's AutoCAD Civil 3D- design files. Use the cloud revision utility as well as an "AB" revision triangle to denote field conditions on plan sheets.

#### **S. Construction Engineering and Inspection (CEI)**

The Department is responsible for providing CEI and Quality Assurance Engineering.

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

#### **T. 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, powder coating, etc. in accordance with the Specifications. Additional testing requirements specific to Project elements may be specified in other Sections of this RFQ or stipulated by the Department in task work orders for a Work Package.

#### **U. Value Added**

The Design-Build Firm may provide Value Added Project Features, in accordance with Article 5-14 of the Specifications for the features determined to be acceptable to the Department during the Preconstruction Phase of the Project. An initial list of potential Value-Added Project Features that would be considered includes:

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

The Design-Build Firm shall develop the Value-Added criteria, measurable standards, and remedial work plans during the Preconstruction Phase for features proposed by the Design-Build Firm.

#### **V. Adjoining Construction Projects**

The Design-Build Firm shall be responsible for coordinating all design, permitting, and 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, other regional and state agencies, or private entities. Adjoining construction projects include, but are not limited to:

- I-95 Express Lanes – Phase 3A-1 Project (FPID No. 433108-4-52-01)
- I-95 Express Lanes – Phase 3B-2 Project (FPID No. 433109-5-52-01)
- SR 810/Hillsboro Boulevard Project (FPID No. 430602-1-52-01)
- SR 9/I-95 From N of Sunrise to S of SW 10th Street (FPID No. 433108-7-52-01)
- SR 9/I-95 @ SR-834/Sample Rd FR S of NB Exit Ramp to N of NB Ent. Ramp (FPID No. 436958-1-52-01)
- SR 9/I-95 @ Sample Rd (FPID No. 444404-1-52-01)
- FAU Research Park Blvd. (City of Deerfield Beach) reconstruction, beginning at NE 48th St and terminating approximately 800' south of SW 10th St
- Resurfacing of Sawgrass Expressway (SR 869) from west of US 441 (SR 7) to Florida's Turnpike (MP 18 – 20.8) (FPID No. 442062-1)
- Resurfacing & Safety Improvements of the Florida's Turnpike Mainline (MP 65.2 to MP 71.0), and Extension of Turnpike SB Ramp Auxiliary Lane from Sawgrass Expressway (MP 70.7 to 71.2) (FPID Nos. 446024-1-52-01, 446024-2-52-01, and 446024-2-52-02)

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- SR-9/I-95 from N Of Sunrise to S of SW 10th Street Landscaping Project (FPID 433108-7-52-01)
- SR-9/I-95 @ SR-834/Sample Rd Fr S of NB Exit Ramp to N of NB Ent. Ramp Interchange Modification (FPID 436958-1-52-01)
- SR-9/I-95 @ Sample Rd Landscaping (FPID 444404-1-52-01)
- SR-869/SW 10th St from FL Turnpike/Sawgrass Expressway to W of I-95 Add Lanes and Reconstruct (FPID 439891-1-52-01)
- A1A Mobility Improvements Fr S Town Limit of Hillsboro Bch to SE 3rd S Bike Lane/Sidewalk (FPID 441360-1-52-01)
- SR-5/US-1 at SE 10th Street Lighting (FPID 443797-1-52-01)
- SR-845/Powerline Rd from the South of NW 30 Place to S of American Way Resurfacing (FPID 446096-1-52-01)
- SR-834/Sample Rd from West of Sr-845/Powerline Rd to Military Trail Resurfacing (FPID 446195-1-52-01)
- Intersection Lighting Retrofit Improvement (FPID 447000-1-52-01)
- SR-810/Hillsboro Blvd from SR-7/US-441 to Sr-845/Powerline Road Resurfacing (FPID 447679-1-52-01)
- SR-811/Dixie Hwy Fr North SR-834/Sample Rd. to S SR-810/Hillsboro Blvd Resurfacing (FPID 448174-1-52-01)
- Deerfield Elementary and Deerfield Middle Srts – Various Locations (FPID 444237-1-52-01)
- SR-5/US-1 from Broward/Palm Beach County Line to SR-794/Yamato Rd ATMS (FPID 441755-1-52-01)
- A1A from SE 31st to South of Grand Bay Ct Resurfacing (FPID 447661-1-52-01)
- SR-814/Atlantic Blvd from SR-7/US-441 to SR-9/I-95 ATMS (FPID 444119-1-52-01)
- SR-814/Atlantic Blvd at Lyons Road Lighting (FPID 447550-1-52-01)
- SR-810/Hillsboro Blvd from SR-7/US-441 to SR-845/Powerline Road



- Resurfacing (FPID 447679-1-52-01)
- SR-7/US-441 Transit Corridor Improvements Group/Priority 5 Bike Lane/Sidewalk (FPID 429576-5-52-01)
- Loxahatchee Rd. from Arthur Marshal Loxahatchee Refuge to SR-7/US-441 Road Reconstruction (FPID 436564-1-52-01)

## **END TSM&O SPECIFIC**

The Design-Build Firm shall consider and include in the Construction Plans and Work Package Proposal(s), any and all temporary detours or diversions required to facilitate traffic movements into and out of the Project limits; notwithstanding the alignment, lane positioning and/or grade differences of traffic conditions on those adjacent projects.

### **W. Issue Escalation**

In the event issues arise during prosecution of the work, the resolution of those issues will be processed as described below unless revised by a Project specific Partnering Agreement:

The escalation process begins with the Department Construction Project Manager. All issues shall be directed to the Department Construction Project Manager. If the issue cannot be resolved by the Department Construction Project Manager in coordination with the Department Resident Engineer and Department Design Project Manager as applicable, the Department Construction Project Manager shall forward the issue to the District Construction Engineer who will coordinate with the District Design Engineer, and the District Utility Administrator, as applicable. Each level shall have a maximum of five (5) calendar days (excluding weekends and Department observed holidays) to answer, resolve, or address the issue. The Design-Build Firm shall provide all supporting documentation relative to the issue being escalated. The five (5) calendar day period (excluding weekends and Department observed holidays) begins when each level in the issue escalation process has received all required supporting documentation necessary to arrive at an informed and complete decision. The five (5) calendar day period (excluding weekends and Department observed holidays) is a response time and does not infer resolution. Questions asked by the Department may be expressed verbally and followed up in writing within one (1) calendar day (excluding weekends and Department observed holidays). Responses provided by the Design-Build Firm may be expressed verbally and followed up in writing within one (1) working day. When a response is received from the District Construction Engineer, the Construction Project Manager will respond to the Design-Build Firm in a timely manner but not to exceed three (3) calendar days (excluding weekends and Department observed holidays). The Design-Build Firm's Project Manager shall be responsible for initiating any escalation, and the Department shall only receive this request from the Design-Build Firm itself.

The Department will provide a "Utility Coordination Liaison" throughout the Project duration who will assist the Design-Build Firm as a liaison with the UAOs with the goal of preventing delays and potential claims.

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.

### **X. Incident Management Responsibilities:**

Incident management within the I-95 Project limits will be the responsibility of the Department's existing Incident Management Program with the exception of those responsibilities listed below. The Design-Build Firm shall be responsible for Long-Term Maintenance of Traffic associated with incident management

activities (including any incident within the construction limits that requires traffic control items to be placed outside of the construction limits) along the I-95 corridor beginning once mobilization for construction begins, and continuing until Final Acceptance by the Department. Long-Term Maintenance of Traffic is defined as any lane blocking event lasting more than 60 minutes. The Design-Build Firm shall provide a qualified supervisor to be available twenty-four (24) hours per day, seven (7) days per week for incident management coordination and support.

The Design-Build Firm shall notify and assist the Department with traffic incidents during the construction and management of the Project, including but not limited to, contamination or hazardous materials release associated with traffic incidents, unauthorized dumping or similar incidents. The current Service Patrol Program will remain in service throughout the duration of the contract and will be funded by others. The service patrol concept, known today as Road Rangers, is a free service offered by the Department and its partners used for the management of vehicles for all types of incidents. The Road Rangers provide a direct service to motorists by quickly clearing travel lanes of minor incidents and assisting motorists. The Road Rangers and Florida Highway Patrol will provide short term maintenance of traffic for up to 60 minutes. The Design-Build Firm shall provide Long-Term Maintenance of Traffic (defined as all maintenance of traffic equipment setup and operational) within 60 minutes of any incident and such maintenance of traffic shall remain in place until the area is safe to reopen to traffic. If any incident causes the need for a detour route off the interstate system, the Design-Build Firm shall provide, install, and manage all maintenance of traffic features necessary to move traffic through the detour until I-95 is safe to reopen to traffic. Failure to comply with these requirements will result in the following deductions:

**Deficiency Identification**

Failure to properly respond to incidents/events as required in Section VIII.Z of this RFQ.

**Time Allowed/Criteria**

Respond to incidents/events within 60 minutes from the notification from the Traffic Management Center.

**Deduction**

\$5,000 per hour, prorated, per incident/event. Adjustments for violation deductions will be made against monthly invoicing.

In the event that any suspect contaminated and/or hazardous materials are encountered during construction, or if any spill of contaminated and/or hazardous material not caused by the Design-Build Firm's actions occurs, the Design-Build Firm shall stop work immediately and notify the Department's Project Manager who will coordinate with the District Operations Center.

The Design-Build Firm shall include the cost of coordinating and performing said responsibilities in their Work Package Proposal(s) and also include these activities in the Schedule of Values.

**Y. Service Patrol Responsibilities:**

The Design-Build Firm shall be responsible for cooperating, coordinating, and assisting with the Department's existing contractor(s) in meeting the goals of the "Open Roads Policy" agreement with the Florida Highway Patrol. See Section VIII.Z of this RFQ for additional criteria and requirements.

The Design-Build Firm shall include the cost of coordination in their Work Package Proposal(s) and also include these activities in the Schedule of Values.

## **Z. Emergency Management Responsibilities:**

The Design-Build Firm shall refer to Section 7.6 of the FDOT Construction Project Management Administration Manual (CPAM) regarding responsibilities and payment for any advance preparation, repairs, replacement, etc. required as a result of natural disaster, catastrophic or emergency response events. Additional compensation for emergency management activities during a Governor's declared state of emergency will be at the sole discretion of the Department's District Construction Engineer and will be subject to participation by FHWA under the Emergency Relief program or Federal Emergency Management Agency under its disaster reimbursement procedures. Reimbursement for eligible emergency response work will be handled with a separate emergency contract. Otherwise, the Design-Build Firm will not receive any additional compensation. The Department authorizes the Design-Build Firm to pursue damage claims of costs incurred in response to non-natural disasters against the individual or entity which caused damages, or their insurers. Emergency management responsibilities will commence once mobilization for construction begins and shall continue until Final Acceptance by the Department.

The Design-Build Firm shall include the cost of performing said responsibilities in their Work Package Proposal(s).

## **AA. Routine Maintenance Responsibilities:**

The Department and the City of Deerfield Beach (City) will continue maintenance and inspection activities within the Project limits during the construction period, unless otherwise noted below. Refer to Reference Document 5 for the Maintenance Maps depicting the maintenance entities jurisdiction limits, and for the existing Maintenance Memoranda of Agreements (MMOAs). The Design-Build Firm shall provide the Department and the City sufficient access (pull off areas, temporary gates, temporary traffic control devices or other temporary accommodations as necessary) to perform their maintenance and inspection responsibilities. Repair of third party damages to all installed material and to all existing FDOT assets within active maintenance of traffic zones shall be in accordance with FDOT Specification 7-11 and shall be restored by the Design-Build Firm. Third party damages to existing property occurring outside of active maintenance of traffic zones will be the Department or City's responsibility to restore. The Design-Build Firm shall coordinate access to all maintenance areas throughout the duration of this Project. Areas that have been cleared and grubbed or otherwise altered by the Design-Build Firm that are inaccessible by the Department or City at any point in time during construction are the responsibility of the Design-Build Firm to maintain. The Design-Build Firm's routine maintenance responsibilities shall include sweeping, litter removal, mowing, turf establishment, chemical vegetation control and erosion repairs within these cleared and grubbed areas until Final Acceptance by the Department, and shall be in accordance with the following requirements:

1. Sweeping – per FDOT Standard Specifications Section 107-1, except sweeping frequency shall be every 2 weeks.
2. Litter removal – per FDOT Standard Specifications Section 107-1, except litter removal frequency shall be every 2 weeks.
3. Mowing – per FDOT Standard Specifications Section 107-1, and includes existing turf and new turf with a mowing frequency of 10 cycles per year, with cycles between one month and two months apart.
4. Turf establishment – per FDOT Standard Specifications Section 570-4, and includes existing turf. Prior to Final Acceptance, the turf condition between Right of Way lines within the construction limits shall meet the Maintenance Rating Program (MRP) standards for turf condition.
5. Chemical vegetation control – per FDOT Standard Specifications Section 570-4, and includes all existing turf and existing mechanically Stabilized Earth (MSE) wall faces and slope pavement.

As part of the monthly progress reporting, the Design-Build Firm shall provide the Department Project

Manager with an active construction zone map for discussion and coordination of any maintenance access issues and responsibilities.

All defects in workmanship caused by the Design-Build Firm will be the Design-Build Firm's responsibility to correct. All damage anywhere within the construction limits caused by the Design-Build Firm will be the Design-Build's Firm responsibility for repair.

The Design-Build Firm shall provide new fencing and gates with locks at access points from any cross road to the I-95 limited access Right of Way to gain access to swales, retaining walls, noise walls, ITS, lighting, signing, and other facility assets within the right-of-way. The fencing and gates, including size and location, shall be coordinated and approved by the Department and FHWA prior to installation. Fencing and gates shall also be provided around the entirety of the new Crystal Lake Pond, as well as around the S-3 Control Structure along Canal 1, just south of Hillsboro Blvd.

The Design-Build Firm is responsible for a weekly inspection and replacement of all damaged or missing Express Lane Markers (ELMs), existing or installed within the Project limits, once active work in the Express Lanes commences through Final Acceptance. Damaged or missing ELMs are defined as meeting one or more of the following:

1. does not match existing in color
2. less than current Department standard height (from pavement surface to top of express lane marker)
3. less than 50% of the required 30 square inches of reflective sheeting missing or not functioning as intended from any direction
4. more than three consecutive express lane markers missing
5. leaning more than 15 degrees
6. more than a total of 100 (not consecutive) missing in either direction

The limits of existing ELMs to be maintained during construction are defined under the 95 Express During Construction Technical Memo – Option 2 included in Reference Document 5.

The Design-Build Firm shall include the replacement of 1000 ELMs in the applicable Work Package Proposal(s) throughout the Construction Phase. Any ELMs remaining from the 1000 at Final Acceptance will be transferred to the Department. The replacement of ELMs greater than 1000 will be in accordance with Section 4-4, Unforeseen Work, of the Division 1 Specifications.

The Design-Build Firm shall coordinate reasonable time frames with the Department's existing maintenance contractor for bridge work order lane closure requirements and for access for bi-annual bridge inspections. Damage to bridge structures by the Design-Build Firm shall be repaired within 30 days of notice unless emergency conditions require immediate corrective action. Once a bridge is actively under construction, any FDOT work orders for repair shall be performed by the Design-Build Firm.

The Design-Build Firm shall provide proper coordination with adjacent construction projects for routine maintenance activities.

The Design-Build Firm and the maintenance contractors shall perform a post-construction survey and agree on routine maintenance items that need attention. This survey shall be conducted far enough in advance of Final Acceptance to address all necessary deficiencies to the satisfaction of the Department and the City.

Refer to Attachment K for ITS maintenance responsibilities and requirements during construction.

Method of payment for all Design-Build Firm routine and ITS maintenance responsibilities will be determined upon sufficient development of the Phasing Plan and Work Package composition during the

Planning and/or Preconstruction Phases.

## **IX. Design and Construction Criteria**

### **A. General**

All design and Construction Work completed under the Contract shall be in accordance with the United States Standard Measures. The Design-Build Firm may, during the Planning and Preconstruction Phases, propose revisions to the criteria described herein. Acceptance of any such revisions is at the Department's sole discretion.

The Design-Build Firm shall schedule and participate in a Design Workshop. The Design Workshop shall occur early in the Planning Phase with the primary objective of clarifying technical issues and/or comments relating to the Project scope, specifications, and requirements.

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

The Design-Build Firm shall be responsible for the identification of and coordination with all settlement, vibration and groundwater sensitive sites impacted by the Work for the duration of the construction period. Refer to RFQ Section IX.N.6 – Work Restrictions for information regarding sensitive business sites that may require monitoring.

Existing Bridges – The Design-Build Firm is responsible for reviewing existing available pile driving records and using these documents and existing plans to account for existing foundation conditions when designing/installing new bridge foundations or sheet piles next to the following bridges. Refer to RFQ Section C - Geotechnical Services for new bridge foundation requirements:

- Bridge number 860564 I-95 SB to SW 10<sup>th</sup> Street off-ramp
- Bridge number 860194 I-95 NB over Hillsboro Blvd
- Bridge number 860124 I-95 SB over Hillsboro Blvd
- Bridge number 860122 NE 48<sup>th</sup> Street over I-95
- Bridge number 860123 SW 10<sup>th</sup> Street over I-95
- Bridge number 860557 EB SW 10th Street over SFRC/SW 12<sup>th</sup> Ave
- Bridge number 860553 WB SW 10th Street over SFRC/SW 12<sup>th</sup> Ave

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

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

- Identify any existing structures that will be monitored for vibrations during the construction period.

- Establish the maximum vibration levels for the existing structures. The maximum vibration levels stated shall not be exceeded.
- Identify any existing structures that will be monitored for settlement during the construction period.
- Establish the maximum settlement levels for the existing structures. The maximum settlement levels stated shall not be exceeded.
- Identify any existing structures that require pre-construction and post-construction surveys.
- Identify any existing structures that will be impacted due to dewatering and monitored during construction.
- Establish the maximum groundwater lowering limits. The maximum groundwater lowering levels stated for existing structures shall not be exceeded.

The Department will perform the review of Vibration and Settlement submittals in accordance with MSP108 Monitoring Existing Structures.

### **C. Geotechnical Services**

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

The Design-Build Firm shall determine whether the resistance factors used for pile design will be based on dynamic load testing, or a combination of dynamic and static/statnamic load testing. Prepare a Technical Special Provision (TSP) for tests other than the Modified Quick Test, such as Bidirectional (Osterberg Cell) Load Test or Statnamic Load Test. For Bidirectional Load Tests use the same loading and unloading intervals, as well as the same loading times specified for the Modified Quick Test. Comply with the instrumentation requirements of 455-2.4. All bridges require test piles. At least one (1) test pile must be located approximately every 200-feet of bridge length with a minimum of two (2) test piles per bridge or per twin parallel bridges. If resistance factors are to be based on a combination of dynamic and static/statnamic load testing, in any of the following areas, then a minimum number of static/statnamic load test must be performed in the representative locations shown of that area:

- Bridge B1 – minimum 2 tests equally spaced
- Bridge B1A – minimum 1 test
- Bridge B1B – minimum 1 test
- Bridge B3 – minimum 2 tests equally spaced
- Bridge B4 – minimum 2 tests equally spaced
- Bridge B5 – minimum 1 test
- Bridge B6 – minimum 1 test

- Bridge B7 – minimum 1 test
- Bridge B8 – minimum 1 test
- Bridge B8A– minimum 1 test
- Bridge B8B– minimum 1 test
- Bridge B9 – minimum 1 test
- Bridge B10 – minimum 2 tests equally spaced
- Bridge B11 – minimum 3 tests equally spaced
- Bridge B12 – minimum 1 test
- Bridge B13 – minimum 1 test
- Bridge B14– minimum 1 test
- Bridge B15– minimum 1 test
- Bridge B16– minimum 1 test
- Bridge B18– minimum 1 test
- Bridge B19– minimum 1 test
- Bridge B20 – minimum 1 test
- Bridge B21 – minimum 1 test
- Bridge B22 – minimum 1 test
- Bridge B23 – minimum 1 test
- Bridge B24 – minimum 1 test
- Bridge B25 – minimum 1 test

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

1. Selection of pile type and size.
2. Selection of test pile lengths, locations and quantity of test piles.
3. Selection of pile testing methods.
4. Determining the frequency of such testing unless otherwise stated herein.
5. Performance of the selected test pile program, including dynamic load test personnel and equipment. The Department may observe the installation of test

- piles and all pile testing.
6. Preparing and submitting a Pile Installation Plan for the Department's acceptance.
  7. Selection of production pile lengths.
  8. Development of the driving criteria.
  9. Submitting Production Pile Length and Driving Criteria Letters, including analysis of dynamically load tested piles.
  10. Driving piles to the required capacity and minimum penetration depth.
  11. Inspecting and Recording the pile driving information. Provide a pile inspection device that displays and stores electronically for every hammer blow along with a timestamp: stroke for open-ended diesel hammers and blows per foot and blows per minute for all hammers. The device must auto-generate the Department's Pile Driving Record form and export the non-editable electronic data in a format compatible with the Pile Driving Record form. Use this device during the inspection of test piles and production piles.
  12. Submitting Foundation Certification Packages.
  13. Providing safe access, and cooperating with the Department in verification of the piles, both during construction and after submittal of the certification package.

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

All drilled shafts shall utilize non-vibratory (oscillated/rotary casing installation and extraction) construction methods within 60 feet of existing structure foundations. 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 Bidirectional (Osterberg Cell) Load Test or Statnamic Load Test. For Bidirectional Load Tests use the same loading and unloading intervals, as well as the same loading times specified for the Modified Quick Test. Comply with the instrumentation requirements of 455-2.4. Before the resistance factors for static/statnamic load testing may be used for drilled shafts in any of the following areas of the Project, a minimum number of successful load tests must be performed in representative locations of that area:

- Bridge B1 – minimum 2 tests equally spaced
- Bridge B1A – minimum 1 test
- Bridge B1B – minimum 1 test
- Bridge B3 – minimum 2 tests equally spaced
- Bridge B4 – minimum 2 tests equally spaced
- Bridge B5 – minimum 1 test
- Bridge B6 – minimum 1 test
- Bridge B7 – minimum 1 test
- Bridge B8 – minimum 1 test
- Bridge B8A– minimum 1 test



- Bridge B8B– minimum 1 test
- Bridge B9 – minimum 1 test
- Bridge B10 – minimum 2 tests equally spaced
- Bridge B11 – minimum 3 tests equally spaced
- Bridge B12 – minimum 1 test
- Bridge B13 – minimum 1 test
- Bridge B14– minimum 1 test
- Bridge B15– minimum 1 test
- Bridge B16– minimum 1 test
- Bridge B18– minimum 1 test
- Bridge B19– minimum 1 test
- Bridge B20 – minimum 1 test
- Bridge B21 – minimum 1 test
- Bridge B22 – minimum 1 test
- Bridge B23 – minimum 1 test
- Bridge B24 – minimum 1 test
- Bridge B25 – minimum 1 test

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. Evaluate the influence of new drilled shafts on the existing foundations. For new shafts located within 30 ft (face to face) from existing foundations, include permanent casings tipped to competent intermediate geotechnical material, unless numerical analysis indicate

- that shafts can be installed safely without affecting the axial capacity of the existing foundations.
5. 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.
  6. Preparing and submitting a Drilled Shaft Installation Plan for the Department's acceptance.
  7. Constructing the method shaft (test hole) and load test shafts successfully and conducting thermal integrity tests on these shafts.
  8. Providing all personnel and equipment to perform a load test program on the load test shafts.
  9. Determining the production shaft lengths.
  10. Documenting and providing a report that includes all load test shaft data, analysis, and recommendations to the Department.
  11. Constructing all drilled shafts to the required tip elevation and socket requirement in accordance with the specifications.
  12. Inspecting and documenting the construction of all drilled shafts in accordance with the specifications.
  13. Performing Non-Destructive Drilled Shaft Integrity Testing in accordance with 455-17.6.
  14. Repairing all detected defects and conducting post repair integrity testing using 3D tomographic imaging and gamma-gamma density logging.
  15. Submitting Foundation Certification Packages in accordance with the specifications.
  16. 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 Bridges**

Use of Auger Cast Piles (ACP) for bridges requires authorization of the State Structures Design Engineer (SSDE). ACP, if authorized, shall be per the Structure Design Guidelines, and use Developmental Specifications Dev455ACP, Dev346ACP and DevMM9.2ACP as provided under Attachment D. The Design-Build Firm shall perform subsurface investigation for ACP in accordance with the Soils and Foundations Handbook. Crack control provisions in the FDOT Structures Manual for substructures also applies to the crack control of auger-cast piles.

### **Spread Footings Foundations**

Spread Footings are not allowed for bridges.

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

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

### **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 an Auger Cast Pile Installation Plan for the 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.

### **Specialty Geotechnical Services Requirements**

Specialty geotechnical work is any alternative geotechnical work not covered by Department Specifications and requires the development of a Technical Special Provision (TSP). Any TSP for geotechnical work shall include the following:

- Criteria of measurable parameters to be met in order to accept the specialty geotechnical work;
- A field testing and instrumentation program to verify design assumptions and performance;
- A quality control program to be performed by the Design-Build Firm that includes sampling and testing to ensure the material quality, products, and installation procedures meet requirements;
- A verification testing program to be performed by the Geotechnical Foundation Design Engineer of Record (GFDEOR) that includes inspection, sampling, and testing to verify the material, products, and procedures meet requirements. The TSP shall include language providing separate lab samples to be used for the Department's independent verification.
- A certification process.

After construction of the specialty geotechnical work, the Design-Build Firm shall submit a certification package for Department's review within 15 business days. The certification package shall include the results of all the field testing, instrumentation and lab testing performed and a signed and sealed letter by the GFDEOR certifying that the specialty geotechnical work meets the requirements. The Department may issue comments and require additional verification testing.

### **Permanent and Temporary Sheet piling**

All permanent and temporary sheet piles closer than 60 feet to an existing bridge foundation system (individual pile) shall be installed using non-vibratory methods.

### **Micropiles**

All new foundations constructed within a minimum of 30 feet of the existing bridge foundations (individual piles) listed below shall be micropiles except where otherwise noted where drilled shafts are required:

- Bridge number 860564 I-95 SB to SW 10<sup>th</sup> Street off-ramp
- Bridge number 860194 I-95 NB over Hillsboro Blvd
- Bridge number 860124 I-95 SB over Hillsboro Blvd
- Bridge number 860122 NE 48th St. over I-95
- Bridge number 860123 SW 10<sup>th</sup> Street over I-95
- Bridge number 860557 EB SW 10<sup>th</sup> Street over SFRC/SW 12<sup>th</sup> Ave

- Bridge number 860553 WB SW 10<sup>th</sup> Street over SFRC/SW 12<sup>th</sup> Ave

Perform a minimum of one static load test per bridge location. Once the existing bridges have been entirely removed, any foundation systems may be utilized except where otherwise noted as not permitted.

Design micropiles to support the design loads in accordance with the Contract Documents.

The ultimate structural capacity must be able to withstand at least 120% of the Maximum Test Load used in the verification pile testing. Determine lateral bracing requirements for the piles to be safely tested to the specified Maximum Test Load.

The micropile diameter must not be less than 9.5 inches and must provide at least 4 inches of grout cover over the steel reinforcement. The design diameter of the bonded zone must not exceed the outer diameter of the casing, or bit/auger, whichever is extended to the tip to construct the pile. Neglect the side friction resistance in the bond length zone within the plunge length.

Design calculations shall include, but not be limited to, the following items:

1. Design parameters, assumptions, and applicable codes and Specifications.
2. A signed and sealed written summary report which describes the overall micropile design, design calculations, including the factored design load and the estimated pile top movement at the service limit state and the maximum test load.
3. Applicable code requirements and design references.
4. Micropile structure critical design cross-section geometry including soil/rock strata and piezometric levels and location, magnitude and direction of design and applied maximum test loadings.
5. Design criteria including, soil/rock shear strengths (friction angle and cohesion), unit weights, and ground-grout bond values and micropile drill hole diameter assumptions for each soil/rock strata.
6. Load and resistance factors used in the design on the ground-to-grout bond values, soil/rock and material unit weights, steel, grout, and concrete materials.
7. Design calculation sheets with the project number, micropile location, designation, date of preparation, first initial and last name of designer and checker, and page number at the top of each page. Provide a cover page and an index page with the design calculations.
8. Design notes including an explanation of any symbols, acronyms and computer programs used in the design.

### **Organic and Unsuitable Soils**

For the design and construction of the proposed roadway corridor widening (including shallow foundations for structures and MSE walls), the Design-Build Firm shall be required to remove all organic soils (A-

8/Muck) and other unsuitable soils as per FDOT Standard Plan Index 120-002 without allowance for any modification in the plans by the Geotechnical/Design EOR. In addition, to enhance routine maintenance activities, the Design-Build Firm shall remove all organic soils (A-8/Muck) and other unsuitable soils to a minimum depth of two (2) feet below the bottom elevation of all dry detention/retention ponds, swales, ditches, and other areas to be utilized for conveyance, treatment, and/or storage (existing or proposed).

#### **D. 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 (UCM) 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/Design Manager. The Utility Coordination/Design Manager shall meet the requirements listed in Section VIII.L Key Personnel/Staffing.

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

1. Ensuring that all utility coordination and activities are conducted in accordance with the requirements of the Contract Documents.
2. Identifying all existing utilities and coordinating any new installations
3. Reviewing proposed utility permit application packages and providing comments based on the compatibility of the permit as related to the Design-Build Firm's plans.
4. Scheduling and conducting utility meetings, preparing and distributing minutes of all utility meetings, and ensuring expedient follow-up on all unresolved issues.
5. Distributing all plans, conflict matrices and changes to affected Utility Agency/Owners and making sure this information is properly coordinated.
6. Identifying, preparing, reviewing and facilitating any agreement required for any utility work needed through final approval and execution. The UCM shall also be responsible for monitoring and reporting the performance of all involved parties under said agreement.
7. Preparing, reviewing, and coordinating the execution and implementation of and submitting to the Department for review, all Utility Work Schedules.
8. Assist in resolving utility conflicts.
9. Obtaining and maintaining all appropriate "Sunshine 811" tickets as they apply to utility relocation work.
10. Performing Constructability Reviews of plans prior to construction activities with regard to the installation, removal, temporary removal, de-energizing, deactivation, relocation, or adjustment of utilities.
11. Providing periodic Project updates to the Department Project Manager and District Utility Office as requested.
12. Coordination with the Department on any issues that arise concerning reimbursement of utility work costs between the Department and the utility.
13. Prepare utility certifications or statements for all Federal-Aid construction projects per 23 CFR 635.309(p)(1)(v).

The following Utility Agency/Owners (UAO's) have been identified by the Department as having facilities within the Project corridor for which the Department contemplates an adjustment, protection, or relocation is possible.

**Table A - Summary of UAO's having facilities within the Proposed Project Limits**

| UAO   | Contact Person            | Contact Number / Email  |
|---|---------------------------|---|
| AT&T Distribution                                 | Garth Bedward             | Office: (561) 540-9263,<br>,<br>Email:<br>gb7410@att.comls7319@att.com  |
| AT&T Transmission                                 | Stefan Eriksson           | Office: (407) 578-8000<br>Email: seriksson@pea-inc.com  |
| Breezeline (fka. Atlantic Broadband / Fiberlight) | Javares Hall              | Mobile: (305) 213-9908<br>Email: jhall@breezeline.com   |
| Broward County Traffic                            | Robert Blount             | Office: (954) 847-2745<br>Email: rblount@broward.org  |
| Broward County Water & Wastewater Services        | George Lopez              | Office: (954) 831-0919,<br>Email: <a href="mailto:galopez@broward.org">galopez@broward.org</a>                                      |
| City of Coconut Creek                             | Eileen Cabrera            | Office: (954) 973-6786<br>Email: ecabrera@coconutcreek.net  |
| City of Deerfield Beach                           | Priscilla Cygielnik, P.E. | Office: (954) 616-7046<br>Email: pcygielnik@deerfield-beach.com   |
| City of Pompano Beach                             | Nathaniel Watson          | Office: (954) 786-5513<br>Email: <a href="mailto:ben.bray@copbfl.com">mailto:ben.bray@copbfl.com</a><br>nathaniel.watson@copbfl.com |
| Comcast   | Justin Cassell            | Mobile: (786) 427-4049,<br>Email:<br><a href="mailto:justin_cassell@cable.comcast.com">justin_cassell@cable.comcast.com</a>         |
| Crown Castle Fiber                                | Danny Haskett             | Office: (786) 610-7073,<br>Mobile: (786) 246-7827,<br>Email: danny.haskett@crowncastle.com  |
| Florida Gas Transmission                          | Joseph E. Sanchez         | Office: (407) 838-7171<br>Email:<br><a href="mailto:joseph.e.sanchez@energytransfer.com">joseph.e.sanchez@energytransfer.com</a>    |
| FP&L Distribution                                 | Byron A. Sample           | Office: (954) 321-2056,<br>Mobile: (954) 401-4584,<br>Email <a href="mailto:byron.a.sample@fpl.com">byron.a.sample@fpl.com</a>      |
| FP&L Fiber  | Julian Salcedo            | Office: (305) 740-2663<br>Email: <a href="mailto:julian.salcedo@fpl.com">julian.salcedo@fpl.com</a>                                 |
| FP&L Transmission                                 | Gretchen Dillman          | Mobile: (813) 469-0924,<br>Email: <a href="mailto:gretchen.dillman@fpl.com">gretchen.dillman@fpl.com</a>                            |
| Hotwire Communication                             | Walter Sancho-Davila      | Office: (954) 699-0900<br>Email: walter.sancho-davila@hotwirecommunication.com  |
| Lumen (fka. Centurylink)                          | Francisco Azuri           | Mobile: (786) 266-1713,<br>Email:<br><a href="mailto:francisco.azuri@lumen.com">mailto:francisco.azuri@lumen.com</a>                |
| Resurgence Infrastructure                         | Laura Glass               | Office: (820) 826-0846<br>Email: <a href="mailto:lglass@resurgenceig.com">lglass@resurgenceig.com</a>                               |
| Sprint/T-Mobile                                   | Jon Baker                 | Office: (321) 280-9596,<br>Mobile: (352) 409-5095,  |

|                  |                 |  |
|------------------|-----------------|--|
|                  |                 | Email: jon.baker@t-mobile.com  |
| TECO Peoples Gas | Max J. Chamorro | Office: (954) 453-0812,<br>Mobile: (954) 234-1036,<br>Email: mjchamorro@tecoenergy.com |
| Verizon/MCI      | John R. Hanson  | Mobile: (786) 412-7878,<br>Email: john.r.hanson1@verizon.com                           |

Table B below summarizes the anticipated utility work by for the Project. For further information, refer to the Utility Concept Plan in Reference Document 1 and the Utility Work by Highway Contractor Agreement and Preliminary Utility Work Schedules in Reference Document 6.

**Table B – Summary of Department Contemplated Utility Work by Design-Build Firm**

| <b>UAO/Description</b>                   | <b>Utility Nominal Diameter (IN)</b> | <b>Approximate Length (LF)</b> | <b>Location</b>  | <b>Work Performed by DBF or UAO</b> |
|--|--------------------------------------|--------------------------------|--|-------------------------------------|
| Lumen/Centurylink - Fiber Optic Conduits | (3)-2"                               | 794                            | Military Trail to Natura Blvd                                | DBF                                 |
| Lumen/Centurylink - Fiber Optic Conduit  | (3)-2"                               | 5,730                          | Military Trail to Natura Blvd                                | DBF                                 |
| Lumen/Centurylink - Fiber Optic Conduit  | (3)-1.5"                             | 100                            | Hillsboro Blvd and I-95                                      | DBF                                 |
| AT&T – Fiber Optic/Telephone Conduits    | (2)-4"                               | 236                            | Crossing and Connection at SW 24th Ave                       | DBF/UAO                             |
| AT&T - Fiber Optic/Telephone Conduits    | (4)-4"                               | 224                            | Crossing and Connection at SW 24th Ave                       | DBF/UAO                             |
| AT&T - Fiber Optic/Telephone Conduits    | (6)-4"                               | 938                            | Military Trail Crossing/Connection at Military Trail         | DBF/UAO                             |
| AT&T - Fiber Optic/Telephone Conduits    | (22)- 4"                             | 87                             | SW 24th Ave Connection South                                 | DBF/UAO                             |
| AT&T - Fiber Optic/Telephone Conduits    | (13) – 4"                            | 1,689                          | East Side of I-95 to Natura Blvd and I-95 and Southeast Ramp | DBF/UAO                             |
| AT&T - Fiber Optic/Telephone Conduits    | (18) – 4"                            | 333                            | Between SFRC and I-95  | DBF/UAO                             |
| AT&T - Fiber Optic/Telephone Conduits    | (20) – 4"                            | 309                            | SW 24th Ave to Natura Blvd                                   | DBF/UAO                             |
| AT&T - Fiber Optic/Telephone             | (24)- 4"                             | 4,829                          | SW 24th Ave to Natura Blvd                                   | DBF/UAO                             |

|   |           |        |  |         |
|---|-----------|--------|--|---------|
| Conduits                                    |           |        |  |         |
| FP&L - Buried Electric Conduits             | (2) – 6”  | 269    | Military Trail Connections to Poles  | DBF/UAO |
| FP&L - Buried Electric Conduits             | (9) – 6”  | 4476   | SW 24th Ave to Natura Blvd   | DBF/UAO |
| FP&L - Buried Electric Conduits             | (10) – 6” | 2,158  | Between SFRC and I-95  | DBF/UAO |
| FP&L - Buried Electric Conduits             | (11) – 6” | 235    | Military Trail Crossing/Connection   | DBF/UAO |
| BCWWS - Potable Water Main                  | 12”       | 270    | Northeast Corner of Military Trail   | DBF     |
| BCWWS - Raw Water Main                      | 18”       | 102    | Military Trail Area; East of SW 24th Ave   | DBF     |
| BCWWS - Raw Water Main                      | 42”       | 1,668  | Military Trail to SW 12th Ave  | DBF     |
| BCWWS - Raw Water Main                      | 48”       | 337    | East of SW 24th Ave Intersection and Deflection East of Military Trail                                   | DBF     |
| City of Deerfield Beach - Raw Water Main    | 16"       | 1,097  | Military Trail Area; East of SW 24th Ave   | DBF     |
| City of Deerfield Beach - Raw Water Main    | 24"       | 1,047  | Military Trail Area; East of SW 24th Ave   | DBF     |
| City of Deerfield Beach - Raw Water Main    | 24”       | 100    | Quadrant Business Center/Triangle Lake   | DBF     |
| City of Deerfield Beach -Force Main         | 16”       | 100    | Quadrant Business Center/Triangle Lake   | DBF     |
| City of Deerfield Beach -Force Main         | 6”        | 44     | Southeast Corner of Military Trail   | DBF     |
| City of Deerfield Beach -Force Main         | 8”        | 3,469  | Powerline Rd to Waterways Blvd   |         |
| City of Deerfield Beach -Force Main         | 12”       | 7,540  | Waterways Blvd to West of Military Trail   | DBF     |
| City of Deerfield Beach -Force Main         | 20”       | 5,670  | Powerline Rd to Natura Blvd  | DBF     |
| City of Deerfield Beach -Force Main         | 16”       | 550    | Hillsboro Blvd and I-95  | DBF     |
| City of Deerfield Beach -Reclaimed Main     | 12”       | 25,929 | Waterways Blvd to Natura Blvd  | DBF     |
| City of Deerfield Beach -Reclaimed Main     | 16”       | 3,168  | SFRC Crossing and between Waterways Blvd to Natura Blvd  | DBF     |
| City of Deerfield Beach -Potable Water Main | 8”        | 1,675  | Connections to Connector Roadways along SW 10 <sup>th</sup> Street between Waterways Blvd to Natura Blvd | DBF     |
| City of Deerfield Beach -Potable Water Main | 12”       | 178    | Connections to Connector Roadways along SW 10 <sup>th</sup> Street between                               | DBF     |



|   |     |       |   |     |
|---|-----|-------|---|-----|
|   |     |       | Waterways Blvd to Natura Blvd             |     |
| City of Deerfield Beach -Potable Water Main | 16" | 2,723 | Military Trail to Natura Blvd             | DBF |
| City of Deerfield Beach -Potable Water Main | 24" | 3,396 | SW 24 <sup>th</sup> Ave to Military Trail | DBF |
| City of Deerfield Beach -Potable Water Main | 24" | 100   | Quadrant Business Center/Triangle Lake    | DBF |
| City of Deerfield Beach -Potable Water Main | 20" | 5,261 | SW 24 <sup>th</sup> Ave to Military Trail | DBF |
| City of Deerfield Beach -Potable Water Main | 12" | 100   | Hillsboro Blvd and I-95                   | DBF |

The following summary description of anticipated utility adjustments, relocations, reconstruction, and removal is provided to expand on Table B above, by UAO. Table B and this section below represent the best understanding of anticipated utility work by highway contractor, with the exception of specific FP&L Transmission or TECO Peoples Gas performed utility relocations described below. The Design-Build Firm shall be responsible for all utility relocations and adjustments necessary to comprehensively accommodate the proposed roadway, drainage, structures, etc. improvements, and maintain continuity of all utility service throughout construction, as well as in the final configuration following construction of the proposed improvements.

The Design-Build Firm shall install all conduit systems noted in Table B. AT&T and FP&L are to install associated fiber optic cable, telephone wire, electric wire within the conduit systems. The Design-Build Firm shall coordinate with UAO's related to respective wire/cable installation. Existing utilities shall not be taken out of service prior to new wire/cables placed into service to facilitate continued service. The Design-Build Firm shall be responsible for the plugging and filling of the existing FP&L and AT&T conduit under I-95 after the new line is in place and active. All other buried FP&L and AT&T conduits taken out of service shall be removed. All elements of the FP&L conduit system installation and all elements of the AT&T conduit and manhole work shall be in accordance with FP&L Specifications provided in Attachment T, and the AT&T Specifications provided in Attachment U, respectively. The proposed FP&L Distribution manholes will be placed by FP&L. The Design-Build Firm shall closely coordinate all components of the work described in the FP&L preliminary utility work schedule, including but not limited to manhole final design, location, placement, elevations, finished grade, and duct layout and entry at proposed manhole locations. The Design-Build Firm shall provide a 40-ft spacing between ducts and the manhole face for all entry and exit points to better accommodate the installation of sweeps that facilitate the pulling of electrical wire into the manhole.

Broward County Water & Wastewater Service has an existing 42 -inch/48 -inch raw water main paralleling SW 10<sup>th</sup> Street on the south side. The existing raw water main is to remain in place where possible. Due to conflicts with the proposed roadway improvement design, the existing 42-inch raw water main segment is to be relocated along the north side of SW 10<sup>th</sup> Street between Military Trail to SW 12<sup>th</sup> Avenue. Proposed 42-inch raw water main is to tie-into the existing 42-inch raw water main on the south side of SW 10<sup>th</sup> Street and west side of W Newport Center Drive. The existing 42-inch raw water main canal crossing and within a portion of I-95 south of SW 10<sup>th</sup> Street is to be relocated to avoid conflicts with roadway, retaining wall, and canal improvements in this area. The 42-inch raw water main will be encased in 54-inch steel casing at the SFRC crossing. Raw water main is to remain in service during

construction. All elements of Broward County Water & Wastewater Service construction shall be in accordance with Broward County Minimum Design and Construction Standards, provided as Attachment Q.

The City of Deerfield Beach owns the following facilities that require relocation: a 24-inch DIP water main, 16-inch DIP water main, 12-inch DIP water main, 20-inch DIP force main, 12-inch DIP force main, 8-inch DIP force main, 24-inch PVC Raw water main, and 16-inch PVC Raw water main along SR-869/SW 10th Street between Powerline Rd. and SW Natura Blvd.; a 24-inch DIP water main, 24-inch Raw water main, and 16-inch PVC force main crossing I-95 near Quadrant Business Center; and at the Hillsboro Blvd intersection a 16-inch PVC force main and 12-inch DIP water main. City of Deerfield Beach utilities are to be kept in service at all times. All elements of City of Deerfield Beach utility construction shall be in accordance with City of Deerfield Beach's Manual of Standard Engineering Specifications, provided as Attachment R. The City of Deerfield Beach also owns and operates four existing ground water wells that will remain in place and be protected. Three of the wells are generally located along SW 10th Street west of Military Trail at approximate Station/Offset 329+91, 92' RT, 331+90, 101' RT, and 340+57, 103' RT, and one is located adjacent to the SFRTA corridor north of SW 10th Street at approximate Station/Offset 373+48, 290' LT.

FP&L currently has two overhead transmission lines along SW 10th Street, one along the north side and one along the south side of the right of way. FP&L proposes to install a single overhead transmission line to be reconstructed on the south side of SW 10th Street. The preliminary FP&L Transmission relocation CADD files are provided in Reference Document 1. All transmission design and construction for this relocation will be performed by FP&L. The Design-Build Firm will coordinate with FP&L for the removal of the temporary box-out at Powerline Rd that will be installed as part of FP&L's Phase 3 work as depicted in their Phased Relocation Plan and detailed in the FP&L Temporary Pole and Wire Connection Exhibit. The FP&L Phased Relocation Plan and Exhibit are provided in Reference Document 6. The Design-Build Firm will confirm to FP&L that the Bridge 24 abutment/superstructure over Powerline Rd is in place and complete prior to requesting the transfer of wire to final alignment and removal of the FP&L temporary box-out work. The Design-Build Firm will further confirm to FP&L that removal of the temporary box-out can be accomplished prior to construction of the adjacent MSE wall, including placement and removal of FP&L construction equipment, leveling pads and mats, and the transfer of wire to the final relocation alignment over Bridge 24. The Design-Build Firm will at all times provide FP&L with access to the temporary workspace depicted in the FP&L Temporary Pole and Wire Exhibit. The FP&L temporary workspace shall be kept free of staging, material, equipment, and personnel during FP&L removal work.

Coordination is required with the South Florida Regional Transportation Authority (SFRTA) for the utility crossings at the South Florida Rail Corridor (SFRC) crossing on SW 10<sup>th</sup> St. Due to right-of-way and utility location limitations, utility crossings under the SFRC rail switch located on the north side of the existing SW 10<sup>th</sup> Street right of way are proposed. There are six (6) total crossings proposed to be installed east-west below the SFRC as part of the Project, as follows:

1. 16-inch Potable Water Main within 30-inch Steel Casing; City of Deerfield Beach
2. 16-inch Reclaimed Water Main within 30-inch Steel Casing; City of Deerfield Beach
3. 20-inch Force Main within 36-inch Steel Casing; City of Deerfield Beach
4. 42-inch Raw Water Main within 54-inch Steel Casing; Broward County Water & Wastewater Services
5. (24) 4-inch Conduits within 42-inch Steel Casing; AT&T Distribution
6. (9) 6-inch Conduits within 36-inch Steel Casing; FP&L (Florida Power and Light) Distribution

A preliminary trenchless installation methodology review has been conducted for SFRTA. The proposed utility crossings below the SFRC shall be performed using microtunnel technology per FDOT specifications, unless otherwise approved by the Department. Installation under SFRC right of way shall follow SFRC Design and Construction Standards for Pipelines, provided within Attachment X. The casing shall remain at a steady grade minimum fifteen (15) feet below the rail/track.

Pre-construction survey by the Design-Build Firm is required to establish pre-construction grade and rail elevations. Daily surveying is required during installation. A final post-construction survey is required within one (1) week of the final utility installation completion.

Additional monitoring requirements using piezometers, inclinometers, extensometers, and crack monitors to be installed by a qualified independent contractor is required. The settlement and vibration monitoring to be performed continuously for the duration of the operation over the entire proposed area where utilities will pass under the SFRC R/W. In addition to the required full-time FRA 213 flagman to be present during installation, a SFRC certified track inspector is also required to be present during the installation process in order to verify the track condition and monitor track geometry. The FRA 213 qualified flagman and track inspector have the authority to stop construction within SFRC right of way if they deem construction activities are undesirably affecting the track infrastructure, Train Operation safety, and/or create a safety concern.

There are four existing well field sites along SW 10<sup>th</sup> Street in the Project limits. The well fields require a minimum 500-ft radius of separation for gas, reclaimed and wastewater pipelines per FDEP regulations. If a 500-ft radius is not possible, FDEP requires that the gas line, reclaimed and wastewater collection systems maintain the maximum set back possible, and at least a distance of 100 feet from the well. Access to the well fields must be maintained throughout construction. All improvements shall be designed and constructed to ensure protection of wellfields.

TECO Peoples Gas (TECO) currently has an 8-inch steel gas main and a 6-inch plastic gas main located within the Project limits. These facilities will be relocated by TECO to accommodate the Project improvements.

### TSM&O SPECIFIC

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

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

| UAO  | Utility Relocation Type      | Reimbursable | Responsible Party | Cost Estimate |
|--|------------------------------|--------------|-------------------|---------------|
| AT&T Distribution                          | Adjustment/Relocation by UAO | No           | UAO               | N/A           |
| Broward County Traffic Engineering Dept.   | Adjustment/Relocation by UAO | No           | UAO               | N/A           |
| Broward County Water & Wastewater Services | Adjustment/Relocation by UAO | No           | UAO               | N/A           |
| TECO Peoples Gas                           | Adjustment/Relocation by UAO | No           | UAO               | N/A           |

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

| <b>UAO</b>  | <b>Contact Information</b> | <b>Contact Number</b>   |
|---|----------------------------|---|
| Advanced Cable/Bluestream                         | Ken Moore                  | Office: (954) 752-7244 x737<br>Email: <a href="mailto:kmoore@bluestreamfiber.com">kmoore@bluestreamfiber.com</a>                                  |
| AT&T Distribution                                 | Garth Bedward              | Office: (561) 540-9263,<br>Email: <a href="mailto:gb7410@att.com">gb7410@att.com</a>  |
| AT&T Transmission                                 | Stefan Eriksson            | Office: (407) 578-8000<br>Email: <a href="mailto:seriksson@pea-inc.com">seriksson@pea-inc.com</a>   |
| Breezeline (fka. Atlantic Broadband / Fiberlight) | Javares Hall               | Mobile: (305) 213-9908<br>Email: <a href="mailto:jhall@breezeline.com">jhall@breezeline.com</a>   |
| Broward County Traffic                            | Robert Blount              | Office: (954) 847-2745<br>Email: <a href="mailto:rblount@broward.org">rblount@broward.org</a>   |
| Broward County Water & Wastewater Services        | George Lopez               | Office: (954) 831-0919,<br>Email: <a href="mailto:galopez@broward.org">galopez@broward.org</a>  |
| City of Coconut Creek                             | Eileen Cabrera             | Office: (954) 973-6786<br>Email: <a href="mailto:ecabrera@coconutcreek.net">ecabrera@coconutcreek.net</a>   |
| City of Coral Springs                             | Najla Zerrouki             | Office: (954) 345-2188<br>Email: <a href="mailto:nzerrouki@coralsprings.org">nzerrouki@coralsprings.org</a>                                       |
| City of Deerfield Beach                           | Priscilla Cygielnik, P.E.  | Office: (954) 616-7046,<br>Email: <a href="mailto:pcygielnik@deerfield-beach.com">pcygielnik@deerfield-beach.com</a>                              |
| City of Margate                                   | Mark Collins               | Office: (954) 972-8126<br>Email: <a href="mailto:mcollins@margatefl.com">mcollins@margatefl.com</a>   |
| City of Pompano Beach                             | Nathaniel Watson           | Office: (954) 786-5513<br>Email: <a href="mailto:nathaniel.watson@copbfl.com">nathaniel.watson@copbfl.com</a>                                     |
| Comcast   | Justin Cassell             | Mobile: (786) 427-4049,<br>Email: <a href="mailto:justin_cassell@comcast.com">justin_cassell@comcast.com</a>                                      |
| Crown Castle Fiber                                | Danny Haskett              | Office: (786) 610-7073,<br>Mobile: (786) 246-7827,<br>Email: <a href="mailto:danny.haskett@crowncastle.com">danny.haskett@crowncastle.com</a>     |
| Direct Plus                                       | Chris Campos               | Office: (305) 406-1857<br>Email: <a href="mailto:chris.campos@directplusnow.com">chris.campos@directplusnow.com</a>                               |
| Florida Gas Transmission                          | Joseph E. Sanchez          | Office: (407) 838-7171<br>Email: <a href="mailto:joseph.e.sanchez@energytransfer.com">joseph.e.sanchez@energytransfer.com</a>                     |
| FP&L Distribution                                 | Byron A. Sample            | Office: (954) 321-2056,<br>Mobile: (954) 401-4584,<br>Email <a href="mailto:byron.a.sample@fpl.com">byron.a.sample@fpl.com</a>                    |
| FP&L Fiber  | Julian Salcedo             | Office: (305) 740-2663<br>Email: <a href="mailto:julian.salcedo@fpl.com">julian.salcedo@fpl.com</a>   |
| FP&L Transmission                                 | Gretchen Dillman           | Mobile: (813) 469-0924,<br>Email: <a href="mailto:gretchen.dillman@fpl.com">gretchen.dillman@fpl.com</a>  |
| Hotwire Communication                             | Walter Sancho-Davila       | Office: (954) 699-0900<br>Email: <a href="mailto:walter.sancho-davila@hotwirecommunication.com">walter.sancho-davila@hotwirecommunication.com</a> |

|                           |                 |   |
|---------------------------|-----------------|---|
| Lumen (fka. Centurylink)  | Francisco Azuri | Mobile: (786) 266-1713,<br>Email: <a href="mailto:francisco.azuri@lumen.com">francisco.azuri@lumen.com</a>                            |
| Palm Beach County Water   | Frantz Fenelon  | Email: <a href="mailto:ffenelon@pbcwater.com">ffenelon@pbcwater.com</a>   |
| Resurgence Infrastructure | Laura Glass     | Office: (820) 826-0846<br>Email: <a href="mailto:lglass@resurgenceig.com">lglass@resurgenceig.com</a>                                 |
| Sprint/T-Mobile           | Jon Baker       | Office: (321) 280-9596,<br>Mobile: (352) 409-5095,<br>Email: <a href="mailto:jon.baker@t-mobile.com">jon.baker@t-mobile.com</a>       |
| TECO Peoples Gas          | Max J. Chamorro | Office: (954) 453-0812,<br>Mobile: (954) 234-1036,<br>Email: <a href="mailto:mjchamorro@tecoenergy.com">mjchamorro@tecoenergy.com</a> |
| Verizon/MCI (Mastec)      | John R. Hanson  | Mobile: (786) 412-7878,<br>Email: <a href="mailto:john.r.hanson1@verizon.com">john.r.hanson1@verizon.com</a>                          |
| Windstream                | Steven Carter   | Email:<br><a href="mailto:Steven.carter@windstream.com">Steven.carter@windstream.com</a>  |

The Department has conducted limited advanced utility coordination with the above UAOs. Information pertaining to this coordination is included in Reference Document 8.f. The Department contemplates the adjustment or relocation of utility lines for the proposed ADMS location in the vicinity of US-1/SR-5 and NE 51<sup>th</sup> St. as noted in Table A. There is also privately-owned electrical conduit and additional conduit of unknown ownership at this location. The Design-Build Firm shall finalize coordination with the UAOs at this location to determine if utility accommodation work will be required.

TECO Peoples Gas is in the process of installing a new gas main in the vicinity of W. Sample Rd/SR-834 and Lyons Rd. Once the new installation is complete the existing gas main at this location will be placed out of service. The Design-Build Firm shall coordinate closely with TECO Peoples Gas to ensure the proposed utility work shall not conflict with Project improvements.

**END TSM&O SPECIFIC**

All utility manholes and vaults must be watertight.

Any existing piping and related appurtenances shall be removed once taken out of service unless otherwise directed by the Engineer. Except as otherwise noted in the RFQ, abandon in place will not be allowed.

For a reimbursable utility relocation where the UAO desires the work to be done by their contractor, the UAO will perform the work in accordance with the utility work schedule and permit and bill the Department directly.

If the Project work proposed by the Design-Build Firm effects the scope of the utility relocation work by UAO's described above, and thereby causes a greater impact to the utility, the Design-Build Firm shall be solely responsible for all increased costs incurred by the UAO associated with the increase in the scope of the impact to their utility work. The Design-Build Firm shall obtain written agreement from the UAO which outlines the changes to the scope of the impact. The written agreement shall also address the Design-Build Firm's obligation to compensate the UAO for the additional costs above the costs which would have been incurred without the Design-Build Firm's increase in the scope of the impact to the utility. The Department shall not compensate or reimburse the Design-Build Firm for any cost created by a change in scope of the impact to the utility, or be liable for any time delays caused by a change in scope of the impact to the utility. The Design-Build Firm shall also provide a draft utility permit application acceptable to the Department for the placement of the UAO's facilities based on the final design.

The relocation agreements, plans, work schedules and permit application are to be forwarded to the Department for review by the District Utility Office (DUO) and the Department's Construction Manager. The DUO and Department's Construction Manager only review the documents and are not to sign them. Once reviewed, the utility permit application will be forwarded to the District Maintenance office for the permit to be signed and recorded or submitted through the One Stop Permitting (OSP) system.

## **E. Roadway Plans**

### **General:**

During the Planning Phase, the Design-Build Firm shall prepare a Roadway Geometrics Package for the Department's approval prior to submittal of any Roadway Plans Package associated with an individual Work Package. The Roadway Geometrics Package should be developed in accordance with FDM 900 Series (NexGen Plans Production). The Roadway Geometrics Package shall include the following details for the Department's review:

- Horizontal and vertical alignments of all mainline, ramp, frontage roads, and local roads
- Typical sections of improvement for all mainline, ramp, frontage roads, and local roads
- Identification of clear zone encroachments and mitigative measures
- Identification of any design exceptions requested at the time of submittal of the Roadway Geometrics Package
- CAD Files

Based on the Approved Roadway Geometrics Package, the Design-Build Firm shall prepare the Roadway Plans Package for each Work Package identified in the Phasing Plan. This work effort includes the roadway design and drainage analysis needed to prepare a complete set of Roadway Plans, Temporary Traffic Control Plans (TTCP), Environmental Permits and other necessary documents.

### **Design Analysis:**

The Design-Build Firm shall either utilize the signed and sealed Typical Section Package (refer to Reference Document 1) and comply with the same, or during the Planning Phase, develop and submit a different signed and sealed Typical Section Package for review and concurrence by the Department. 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 and FHWA on Projects of Division Involvement (PoDIs).

Any deviation from the Department's design criteria will require a Design Variation and any deviation from AASHTO will require a Design Exception. All such Design Variations and Design Exceptions must be approved.

## **F. Roadway Design**

See FDM Part 9; Chapter 901 for Roadway Design sheets, elements and completion level required for each submittal.

- 1. Typical Section Package:**  
Refer to FDM Part 1, Chapter 120
- 2. Pavement Design Package:**

Refer to FDOT Flexible Pavement Design Manual

The following documents are provided by the Department as part of Reference Document 1 and shall be used by the Design-Build Firm in the development of the pavement design:

- Pavement Design Package including all appendices

Use of the Mechanistic-Empirical Pavement Design Guide (MEPDG) for pavement design shall not be allowed.

**3. Drainage Analysis and Report:**

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; other Department's standards and criteria; 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, underdrains, edge drains, roadway ditches, outfall ditches, storm sewers, retention/detention facilities, stormwater control structures, interchange drainage, water management, stormwater pump station(s), or 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 the Drainage Design section will be required from the outset. Full documentation of all meetings and decisions is to be submitted to the District Drainage Design section. These activities and submittals shall be coordinated through the Department's Project Manager.

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

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

The primary objectives of the Design-Build Firm are to obtain an approved stormwater treatment/attenuation design and to design and generate construction plans documenting that the permitted systems function to the criteria.

Conceptual Drainage Reports are included within the Conceptual Permit Packages under Reference Document 1 of this RFQ. The Conceptual Drainage Reports were prepared and included within the Conceptual Permit Packages submitted to the South Florida Water Management District (SFWMD). The Design-Build Firm shall review the Conceptual Drainage Reports and conceptual permit packages, and provide additional analysis as required for the final design for both BCWCD 2 Canal Basins C-1, C-2, and C-3.

The design of the final stormwater management system(s) shall generally conform to the stormwater management system identified in the Conceptual Drainage Report. The design of the stormwater management facilities shall demonstrate avoidance and minimization of French drains and side slopes steeper than 1:4, and conform with the requirements stipulated in the Landscape Opportunity Plans criteria of this RFQ. Additionally, utilizing the same seasonal high groundwater table (SHGWT) elevations, curve number calculation methodology, rainfall amounts, and rainfall files used in the conceptual design. The final design of the stormwater management system(s) shall limit maximum stages to those of the conceptual

design or to the maximum allowable stages per FDOT freeboard requirements. Stages within the Broward County Water Control District (BCWCD) No. 2 C-1, C-2, and C-3 Canal basins shall be maintained at or below the existing conditions elevations for all design storm events. In addition, peak discharges rates and water quality discharges to the Hillsboro, C-2, and C-3 Canals shall meet the criteria outlined in the conceptual permits. Further, the proposed design must maintain the flood plain storage within the BCWCD No. 2 C-1, C-2 and C-3 Canal basins.

All stormwater management facilities, control structures, and outfalls shall be restricted to the existing roadway right of way, SFWMD canal rights-of-way, and BCWCD No 2 rights-of-way. Manatee grates and/or other provisions shall be provided for all existing and proposed outfalls to receiving water bodies, including tidal rivers and SFWMD or local regulatory canals.

The Design-Build Firm shall provide access to the BCWCD No. 2 C-1 canal boat ramp located in the NW quadrant of the NE 48<sup>th</sup> St. / I-95 crossing for a maintenance vehicle and boat trailer. Access shall be provided via a driveway and stabilized maintenance road from NE 48<sup>th</sup> St. to the existing boat ramp. The Design-Build Firm shall lay out the proposed maintenance access road and show that a vehicle towing a 20' boat on a trailer can maneuver from NE 48<sup>th</sup> St. and be able to safely travel on the maintenance access road to the existing boat ramp and return to NE 48<sup>th</sup> St. The maintenance road shall be a minimum of 10' wide with a maximum slope cross slope of 1:20 and be designed to handle the weight of the truck and at a minimum, use 8 inches of compacted Type B Stabilization and be sodded. Refer to "NE 48th Street Boat Ramp Access Concept Plan" in Reference Document 1 for a conceptual layout of the maintenance access. The Design-Build Firm shall remove all vegetation from the existing boat ramp and pressure wash/clean the concrete boat ramp to have an improved connection to the improvements to C-1.

The Design-Build Firm shall provide access to the BCWCD No. 2 C-2 canal boat ramp located between SW 28<sup>th</sup> and SW 24<sup>th</sup> Avenue for a maintenance vehicle and boat trailer. The Design-Build Firm shall lay out the proposed maintenance access and show that a vehicle towing a 20' boat on a trailer can maneuver from SW 10<sup>th</sup> St. and be able to safely travel on the maintenance access road to the existing boat ramp and return to SW 10<sup>th</sup> St. on both sides of the canal. The maintenance road shall be a minimum of 10' wide with a maximum slope cross slope of 1:20 and be designed to handle the weight of the truck and at a minimum, use 8 inches of compacted Type B Stabilization and be sodded.

The Design-Build Firm shall provide access to the Crystal Lake stormwater pond located on the southeast corner of Powerline Road and Wiles Road/Green Road, via Wiles Road/Green Road east of Powerline Road.

The Design-Build Firm shall accommodate future maintenance access to stormwater management facilities from I-95, ramps, and/or adjacent streets. In locations of restricted access to stormwater management systems from I-95, the Design-Build Firm shall provide access from adjacent streets, including turnouts, fencing, and gates.

The Design-Build Firm shall demolish, relocate, dispose of, and reconstruct the BCWCD No 2 Control Structures S-2 and S-3 within the C-1 Canal. Refer to the "C-1 Canal Basin Drainage Concept Plans" in Reference Document 1 for a conceptual design of these control structures. Refer to Attachment V, TSP – C-1 Basin; Control Structures S-2 and S-3 for the gates, SCADA, and telemetry equipment design criteria and specifications. The Design-Build Firm shall coordinate the proposed equipment and materials with the BCWCD No 2 Drainage Engineer.

All outfalls of adjacent drainage systems or properties (via Drainage Connection Permits or historical overland flow) shall be maintained in the final design and throughout construction. The Design-Build Firm shall identify any offsite areas with historical overland flow to the existing corridor and provide final design



measures necessary to maintain such drainage and/or to provide a diversion to an adjacent receiving water body. For the existing drainage outfalls to the C-1 Canal from the Quadrant Business Center adjacent to SB I-95, the Design-Build Firm shall maintain continuous positive flow to the canal using new or reconstructed outfalls through the proposed canal sheet pile wall.

The Design-Build Firm shall verify that all existing cross drains and storm sewers that are to remain have adequate hydraulic capacity and design life. Flood flow requirements will be determined in accordance with the Department's procedures. If any of these existing cross drains or storm sewers are found to be hydraulically inadequate or found to have insufficient design life, they must be replaced or supplemented in accordance with the drainage requirements of this RFQ. If any existing cross drains or storm sewers require repairs but otherwise would have sufficient remaining design life, repairs shall be made in accordance with the requirements of this RFQ.

Existing cross drains shall be extended outside of the clear zone. The extended cross drain material shall be the same material type as the existing cross drain. The placement of a permanent protection barrier (guardrail or barrier wall) for the sole purpose of protecting cross drains shall be avoided unless the culvert extension cannot be constructed outside of the clear zone. The existing C-3 Canal twin-60" corrugated metal pipe (CMP) culverts under local SW 10th St shall remain in place. Due to the condition of the CMP culverts, the Design-Build Firm shall install 54" Steel pipes in the existing culverts using slip lining construction methodology.

All wet ponds shall be shielded with guardrail or barrier wall.

No open cuts shall be permitted for any new drainage conveyance pipes crossing beneath roadways or ramps. The Design-Build Firm shall provide micro-tunnel and/or jack-and-bore installations for all new drainage conveyance crossings beneath roadways and ramps.

Jack and bore and micro-tunneling casing pipes can be utilized as carrier pipes in accordance with the following criteria:

- The casing shall extend the entire length from drainage structure to drainage structure. The entire length of the casing run from drainage structure to drainage structure shall have a uniform diameter, wall thickness and material type.
- The casing shall meet Specifications 556.
- Casing wall thickness calculations which support the jack and bore or micro-tunneling operation shall be provided. These calculations shall consider, at a minimum, the fill height over the casing and any installation requirements.
- A pitting analysis and soil boring(s) at each location shall be provided as part of the casing pipe service life estimator calculations.

Masonry sealing of pipe connections will be allowed where the pipe to drainage structure connections meet any of the conditions listed below. The Design-Build Firm shall submit the supporting documentation which provides the justification for elimination of the resilient connectors to the Department's District Drainage Engineer for review and approval. Justification shall include a demonstration that avoidance of the following conditions is not practical. Storm drain systems should generally be designed to ensure that resilient connectors can be installed and exclusions due to skew angle and minimum beam height are unnecessary. The conditions where resilient connectors will not be required are as follows:

- The pipe skew angle at the connection to the drainage structure is greater than 15 degrees, in either the horizontal or vertical direction.
- The drainage structure and all connections fall outside the 1:2 roadway template

control line for the Project construction or the future configuration (as depicted in the Typical Section Package) as per Standard Plans Index 120-001.

- The remaining beam height of the single precast unit from the top of that segment to the existing crown of selected pipe is less than 8-inches.
- Where elliptical pipes are specified on the plans.

Inlets will be placed along local SW 10<sup>th</sup> St near the curb returns, including along the local roadways (such as on Waterways Blvd, Independence Dr., SW 30<sup>th</sup> Ave, SW 28<sup>th</sup> Ave, SW 24<sup>th</sup> Ave, SW 12<sup>th</sup> Avenue, Military Trail, Newport Center Drive, and SW Natura Blvd/FAU Research Park Blvd.) to collect all stormwater from SW 10<sup>th</sup> St prior to it flowing down the local streets.

In locations where drainage collection and conveyance pipes are required within MSE wall sections, the Design-Build Firm shall perform early coordination with the wall manufacturer and provide documentation within the Drainage Design Report on the minimum required MSE strap length and placement relative to the proposed conveyance pipe offset from wall. Where pipes must go through MSE walls, the pipe external to the wall shall not be attached to the pipe internal to the wall until the MSE embankment is at full depth. Any pipes in the vicinity or within the MSE shall meet the wall zone requirements outlined in the Drainage Manual.

Vertical Pipes adjacent to retaining walls shall have a concrete thrust block at the base of the pipe and a resilient connector at the base of the inlet.

The Design-Build Firm will consider optional culvert materials in accordance with the Department's Drainage Manual Criteria, as well as the following: The Design-Build Firm shall use one type of pipe material on pipe runs between drainage structures. All precast storm sewer manholes and inlets shall have resilient connectors from the Approved Products List (APL) in compliance with Specification Section 942. The Design-Build Firm shall include the type of resilient connectors, any required pipe adaptors, and the pipe material for each structure in the drainage shop drawing submittals. Drainage structure shop drawings shall be reviewed and approved by the Drainage Engineer of Record. The Department will not be responsible for approving the Drainage Structure Shop Drawings, but will review each submittal to ensure that the EOR and Design-Build Contractor have reviewed/stamped each page and then return each submittal marked "Rejected" or "Released for Construction".

Inverted siphons shall not be permitted, unless approved by the Engineer and District Drainage Engineer.

The Design-Build Firm shall be responsible to construct new or modify the existing drainage collection and conveyance system(s) to accommodate the proposed improvements, as needed based on the proposed configuration of the improvements. The Design-Build Firm shall extend drainage pipes to accommodate the new system, remove drainage structures that are not required for the operation of the proposed drainage system, and plug and fill associated abandoned pipes. No proposed manhole lids shall be permitted within any I-95 or SW 10<sup>th</sup> Street Connector travel lanes. The Design-Build Firm shall construct the conveyance system as required to meet all stormwater management criteria and permitting requirements, including construction of new outfalls into the Broward County Water Control District Canal 2, from the east and west. This includes stormwater system construction west of SW 24<sup>th</sup> Avenue, for the extension into the Canal 2 system. The Design-Build Firm shall excavate Crystal Lake and construct the complete Crystal Lake pond improvements to provide 100-year encroachment volume for the entire C-2 basin SW 10<sup>th</sup> St roadway improvements, between Powerline Road and the South Florida Rail Corridor, as documented in the conceptual Environmental Resource Permit provided with the RFQ.

Portions of the Project are located in or near potable water wellfield zones. All drainage elements and stormwater management facilities must meet the wellfield protection requirements per SFWMD, FDEP, Broward County, and City of Deerfield Beach design criteria and standards.

The Design-Build Firm shall install Dry Swale areas with decorated crushed stones under the proposed bridges.

At a minimum, shoulder gutter limits shall match guardrail limits where embankment slopes are steeper than 1:4 and at bridge ends where concentrated runoff flow from the bridge deck would otherwise run down the fill slope.

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

The Design-Build Firm shall provide the Department's District Drainage Engineer with a signed and sealed Bridge Hydraulics Report. It shall be a record set of all drainage computations, including hydrologic, hydraulic, and scour. The Design-Build Firm shall include all necessary supporting data.

At the completion of all soil disturbing activities and paving and drainage work, the Design-Build Firm shall desilt the entire drainage system within the limits of construction, including existing and proposed cross drains, storm sewers, and drainage structures.

Prior to Final Acceptance by the Department, the Design-Build Firm shall prepare and submit an "As-Built Certification and Request for Conversion to Operation Phase" form [SFWMD Form 62-330.310(1)] to the Department with the appropriate As-Built Plans, signed and sealed by a professional engineer. For any components of the permitted activities that are not in substantial conformance with the permit, the Design-Build Firm shall correct such deficiencies or prepare and submit a complete permit application to the Department for modification of the permit.

Any permit special condition (such as water quality monitoring) which was required as a condition of future performance, prior to issuance of the permit, shall be satisfied, in full, to the satisfaction of the regulatory agencies prior to the end of the contract. Prior to the end of the contract, the Design-Build Firm shall provide written documentation from the SFWMD that the performance measures have been achieved and the water management district has concurred the stormwater treatment facilities are functioning as designed and state water quality standards are being achieved.

### **G. Geometric Design**

The Design-Build Firm shall prepare the geometric design using the Standard Plans and criteria 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.

The Design-Build Firm shall use design criteria as specified in the FDOT Design Manual (FDM) for this Project unless otherwise noted or modified during the Planning or Preconstruction Phases.

### **General**

Any existing median barrier wall "bulb-outs" at locations where an existing Sign/ITS Structure is being removed, shall include complete removal of the structure to four (4) feet below ground, and construction of a new median barrier wall providing consistent width of shoulders.

Opaque Visual Barrier (OVV) shall be provided throughout the Project construction limits for all I-95, and SW 10<sup>th</sup> Street Connector Lanes median barrier wall/traffic railing.

The Design-Build Firm shall be responsible for the replacement, reconstruction and/or restoration of any existing drainage feature, shoulder gutter, bridge traffic railing, barrier walls, retaining walls, guardrail, or any other existing features impacted by the proposed widening and resurfacing/overbuild (into the existing inside or outside shoulders). This includes required replacement, reconstruction and/or restoration to maintain the standard inside or outside shoulder cross slopes, as well as standard heights for roadside protection features such as traffic railings and guardrails.

The Design-Build Firm shall construct a maintenance path on the north side of NE 48<sup>th</sup> St for access to the C-1 Canal. Access to the maintenance path shall be located east of NW 2<sup>nd</sup> Ave.

The Design-Build Firm shall provide an incident management permanent staging area located along I-95 SB north of Hillsboro Blvd. between Hillsboro Blvd. SB On-ramp and Hillsboro Blvd. SB Off-ramp. The staging area shall have a width of 15' (not including the shoulder), a length of 100', an entry taper of 100', and an exit taper with a 1:20 flare rate. The staging area shall be constructed as an extension of the proposed paved shoulder.

The Design-Build Firm shall provide Emergency Use access from the Hillsboro Westbound, I-95 Southbound on ramp, to I-95 Southbound. Access shall be provided to safely accommodate a Broward Sheriff's Office (BSO) fire truck. The Design-Build Firm shall coordinate with BSO regarding the appropriate design vehicle. The Emergency Use access shall be a minimum of 27' wide and have a 30 mph design speed. Access shall have the same pavement design as the Hillsboro Westbound, I-95 Southbound on ramp. Refer to Reference Document 1 for a conceptual layout of the Emergency Use access. The Design-Build Firm shall install an access gate system and associated signs to manage access to the Emergency Use access. The access gate system is intended to be used by first responders only and will be operated and maintained by the Department. The Design-Build Firm shall coordinate with the Department on detailed design and deployment requirements.

For any proposed fill slopes steeper than 1:3 (V:H), the Design-Build Firm shall provide turf reinforcement mats. Slopes steeper than 1:2 (V:H) are not allowed unless approved by the Department.

The Shared Use Path shall be constructed as a concrete sidewalk. Between Powerline Road and SW 28<sup>th</sup> Ave. the Shared Use Path shall be 6" thick.

The Design and Control Vehicle for all work on all the Newport Center roadways as well as SW 12<sup>th</sup> Avenue shall be a WB-62 FL. The roundabout shall be designed per the FDM, using a WB-62 FL for all movements, including turning, through and U-turns.

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

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

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

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

1. Standards Plans and criteria used for the Project
2. Geometric design calculations for horizontal alignments
3. Superelevation calculations
4. Vertical geometry calculations
5. Horizontal stopping sight distances
6. Guardrail and barrier wall length of need
7. Vertical clearances
8. Design alignments and profiles output files
9. Documentation of decisions reached resulting from meetings, telephone conversations or site visits

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

##### **1. Analysis:**

- a. The Design-Build Firm shall submit to the Department final signed and sealed design documentation prepared during the development of the plans.
- b. The Design-Build Firm shall insure that the final geotechnical and hydraulic recommendations and reports required for bridge design are submitted with the 90% bridge plans.
- c. The Design-Build Firm shall "Load Rate" all bridges in accordance with the Department Procedure 850-010-035 and the Structures Manual. The Bridge Load Rating Calculations, the Completed Bridge Load Rating Summary Detail Sheet, and the Load Rating Summary Form shall be submitted to the Department for review with the 90% superstructure submittal. The final Bridge Load Rating Summary Sheet and Load Rating Summary Form shall be submitted to the Department for review with the Final superstructure submittal. A final, signed and sealed Bridge Load Rating, updated for as-built conditions, shall be submitted to the Department for each phase of the bridge construction prior to placing traffic on the completed phase of the bridge. A final, signed and sealed Bridge Load Rating, updated for the as-built conditions as part of the As-Built Plans submittal shall be submitted to the Department before any traffic is placed on the bridge. The Bridge Load Rating shall be signed and sealed by a Professional Engineer licensed in the State of Florida.
- d. The Design-Build Firm shall evaluate scour on all bridges over water using the procedures described in HEC 18.
- e. 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.
- f. 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, falsework systems, etc.) to ensure compliance with the contract plan requirements and intent.

- g. Wall heights, from the top of leveling pad to the top of wall coping, greater than 40' shall not be permitted, unless approved by the Department.

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- h. The Design-Build Firm shall insure that the final geotechnical reports required for sign structure design and mastarm design are submitted with the 90% signing and ITS plans.
- i. Existing Mastarm Structure Analysis (Design Manual 261.7) is not required if the following attachment criteria is adhered to:
  - 1. Maximum of one dome camera or similar ITS load such as Connected Vehicle Roadside Unit (RSU) attached to the arm within 5 feet of the upright pole.
  - 2. Maximum of two video detection cameras added to arm.
- j. Analysis is not needed if adding one luminaire extension arm with radar/video detection camera to existing strain poles. In addition, one video detection camera or similar load can be added to the strain pole without a structural analysis.

#### **END TSM&O SPECIFIC**

### **2. Criteria**

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

- a. All plans and designs are to be prepared in accordance with the Governing Regulations of Section VIII.A.
- b. All piers supporting prestressed beams shall include a cheek wall (both sides)
- c. For steel superstructure bridges, changes in the bridge superstructure depth at a pier between adjacent spans shall be limited to 2'-0".
- d. Structural steel for bridges shall be painted with a Inorganic Zinc Coating System (High Performance System). Include a final clear coat. Unpainted weathering steel is not allowed. The color shall be Federal Color Number 15052. Steel box interiors, including those of straddle bents, shall be painted white.
- e. All exposed surfaces of prestressed girders shall be coated with a Class 5 Applied Finish Coating. The color shall be Federal Color Number 15052.
- f. For steel superstructures, the fascia girders and straddle bents shall have no stiffeners on

the fascia side of the girder, except for bearing at the supports of plate girders and straddle bents.

- g. Pile bent substructures are not permitted. Below ground-level foundations with column piers/caps are only allowed options. Water level footings are allowed for foundations located in canals and lakes.
- h. Steel superstructures consisting of a single steel box girder will not be allowed.
- i. Spread footings are not allowed for bridge structures.
- j. The use of modular joints are not allowed. Use finger joints with self-cleaning membranes where needed.
- k. The Design-Build Firm is responsible to verify and resolve any existing typical section element deficiencies that occur due to discrepancies between the current as-built survey and existing plans. The Design-Build Firm can request access to the bridges for inspection, testing, structural investigation, or as otherwise needed, prior to the RFQ Response by contacting:
  - Tony Castro, P.E.
  - District Four Maintenance Engineer
  - Florida Department of Transportation
  - 954-777-4449
- l. Critical Temporary Retaining Walls: Whenever the construction of a 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. Therefore, if a critical temporary retaining wall is required during the construction stage only, it may be removed and reused after completion of the work. Such systems as steel sheet pilings, 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 must be signed and sealed by the Structural Engineer in responsible charge of the wall design.
- m. Permanent Retaining Walls: Partial height walls such as perched or toe walls, as defined by the Department's Structural Design Guidelines Figure 3.12-1, and as supplemented by the six points below will not be permitted unless otherwise noted elsewhere. In addition, geosynthetic reinforced soil (GSR) walls and abutments will not be permitted. All retaining walls shall have a concrete facing, except at locations where permanent steel sheet pile walls exist. The maximum height of retaining walls shall be limited to 40 feet, and the front slope adjacent to retaining walls shall be no steeper than 1:3 for maintenance purposes for a minimum distance of 10 feet. This 10-foot section shall be designed to handle the weight of the maintenance truck and at a minimum, use 8 inches of compacted Type B Stabilization. Steel sheeting walls shall receive inorganic zinc primer per the specifications prior to concrete facing and shall receive both inorganic zinc primer and coal tar-epoxy per the specifications if exempted from having the concrete surfacing. All tie-back plates, hardware and structural members shall be encased in the concrete facing or in a concrete cap in an aesthetic fashion.

- i. Perched walls shall be defined as walls that are: (1) founded on fill above the elevation of the natural ground line, or (2) located within a fill slope between the toe of slope and the top of slope.
  - ii. Toe walls shall be defined as walls that: (1) preserve a portion of an existing fill slope, or (2) eliminate a portion of sloped embankment at the bottom of the slope.
  - iii. Toe walls with increased height will be allowed at the following locations:  
Northwest quadrant of NW 48th Street
  - iv. Fill slopes that create a perched wall and/or create a retaining wall greater than 40 feet 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.
  - v. Ground geometry immediately adjacent to MSE walls shall at least meet the criteria established by the wall manufacturer for stability considerations.
  - vi. Any drainage swale modifications adjacent to existing MSE walls shall be checked for global stability and be isolated from water ponding. Any new MSE walls proposed in locations of drainage swales adjacent to the walls shall be designed to reduce soil loss and corrosion.
- n. Perimeter Wall: The Design-Build Firm shall construct an 8 foot high concrete perimeter wall, extending from proposed ground mounted noise barrier E5N(A) (approx. SW 10<sup>th</sup> St. Sta. 356+09 LT) to the existing perimeter wall west of Military Trail (approx. SW 10<sup>th</sup> St. Sta. 363+72 LT). The wall shall be designed and constructed in accordance with Standard Plans Index 534-250 and shall match the color and aesthetics, including type of cap and panel full width coping, of the existing perimeter wall west of Military Trail. The wall shall include an approx. 8 foot transition section between the portion of the wall within FDOT right of way (to the west), and the portion of the wall within Century Village East right of way (to the east). Using 2 columns, a joint shall be provided in the wall where the transition section crosses FDOT right of way. Refer to the SW 10<sup>th</sup> St. Roadway Concept Plan in Reference Document 1 for the proposed wall location, and the existing Military Trail Perimeter Wall Plans in Reference Document 4.

The Design-Build Firm shall remove all existing ROW fence along the entire SW 10<sup>th</sup> Street frontage of Century Village East, from the western limit of proposed noise barrier E5N(A) to the existing perimeter wall west of Military Trail. The frontage area between the existing Century Village East right of way line and proposed noise barrier E5N(A) and existing/proposed perimeter walls will be maintained by Century Village East once construction is complete.

- o. Disposal of existing bridge components shall be the responsibility of the Design-Build Firm. The reuse of a bridge component from a partial or complete demolition of an existing bridge for use as part of a new structure, at the same location or a different location, is prohibited. Existing piles remaining in place shall not be incorporated into any proposed



foundations or substructures.

- p. Any erection, demolition, or construction activities that may potentially impact a railroad must be submitted to and approved by the respective railroad agency. This applies to areas adjacent to, within and over railroad corridor rights of ways.
- q. Visibility of all bridge drainage conveyance systems shall be minimized as much as possible. The conveyance systems (piping) shall not be embedded in the piers, but run on the exterior and aesthetically integrated with the pier. The conveyance systems must be painted in accordance with Section 22.3.1.E of the Department's Structures Detailing Manual (SDM). Avoid, when possible, placing drainage pipes inside of box superstructures by providing inlets near piers.
- r. The Design-Build Firm shall be responsible for providing new bridge deck drainage systems in locations necessary to accommodate spread criteria or where stipulated by the regulatory agencies.
- s. Bridge drainage system material requirements are as follows:
  - i. All pipes, fittings and cleanout caps shall be PVC type 1, grade 1 (gray) schedule 80
  - ii. PVC pipe shall conform to ASTM D1785. Socket fittings shall be used and shall conform to ASTM D2467 and threaded fittings shall conform to ASTM D2464
  - iii. Flexible couplings and reducers shall be flexible PVC conforming to ASTM D5926
  - iv. All supports and miscellaneous hardware shall be hot dipped galvanized
  - v. When possible, for the design of bridge expansion, separate the downspout from the collector pipe and be inserted a minimum of 3 inches
  - vi. Pipes shall be a minimum 6-inch diameter. The main collection pipe shall be a minimum 12-inch diameter.
  - vii. Pipes shall be hung beneath the deck utilizing two linked eye rods. Maximum spacing for 6-inch pipes shall be 6 feet. Maximum spacing for 12-inch pipes shall be 5 feet.
  - viii. Provide non-conductive type roller for all longitudinal runs.
- t. A Class 5 Applied Finish Coating shall be applied to portions of new bridge structures and cast-in-place retaining walls. All new bridge piers, end bents, caps, exterior surfaces of concrete beams, bottom of bridge deck overhangs, coping and back side of barriers shall have a Class 5 coating. Bridge and retaining wall barriers that include a noise wall or visual barrier shall have a Class 5 coating on all surfaces of the barriers and the noise wall. A Class 5 Applied Finish Coating shall be applied to the traffic railing/barrier walls separating the Local SW 10th Street lanes from the SW 10th Street Connector lanes, as well as the median barrier wall separating the EB and WB SW 10th Street Connector lanes.
- u. The Design-Build Firm shall coordinate the aesthetic appearance of retaining walls with bridges and other elements. All retaining walls shall have a concrete facing unless otherwise noted elsewhere. Bulkhead walls shall have a concrete cap, and sheet piles shall have corrosion protection coatings applied in accordance with FDOT Specification 560. Exposed steel wales shall not be permitted. Poured in place retaining walls shall be smooth

finish unless adjacent to an existing MSE wall. All perimeter and noise walls shall have a Class 5 coating on both sides and top of the wall. Concrete retaining walls, including junction slabs, shall have a Class 5 coating on all exterior surfaces. Retaining wall precast panels are excluded from the Class 5 Finish Coating requirements unless otherwise required elsewhere.

- v. Precast deck systems, full or partial depth, are not allowed on girder supported bridge superstructures.
- w. Shored construction (composite dead load design) for steel type superstructures will not be allowed.
- x. If Standard Plans Index 455-030 (30" Square Prestressed Concrete Pile) or 455-031 (30" Square Prestressed Concrete Pile - High Moment Capacity) piling are proposed, provide venting similar to previous 2015 Design Standard Index Indices 20630 or 20631, respectively.
- y. Uplift in bridge bearings is not permitted.
- z. All concrete straddle pier caps must be post-tensioned if the following criteria cannot be met: (1) the maximum number of layers of primary flexural reinforcement must be 3, (2) minimum vertical spacing of 4 inches between the layers, (3) minimum horizontal spacing between bars or bundles of 4d (d = rebar diameter), (4) bundled bars limited to 2 bars per bundle. All columns of C-piers or eccentrically-loaded hammerhead piers where the column would exhibit net sustained tension under permanent service loads must be post-tensioned. All C-pier caps must be post-tensioned.
- aa. All steel integral piers require complete shop assembly of all girder to bent connections. Bearing sole plates shall not be left out of the shop assembly.
- bb. Any temporary structure clearances shall not be less than 16 feet measured at the lowest point from outside shoulder to outside shoulder.
- cc. Temporary tie-downs are required for stability of non-framed straddle caps.
- dd. For all sidewalk barriers, only use Standard Index 521-422 Traffic Railing – (42" Vertical Shape).
- ee. The Design-Build Firm shall coordinate with the District Maintenance office to obtain bridge numbers for all new bridges prior to the RFC of bridge components

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- ff. New mast arm structures and foundations to be installed at the following intersections (four at each intersection anticipated):
  - 1. Hillsboro Boulevard and Deerfield Plaza
  - 2. Hillsboro Boulevard and NW 41 Way
- gg. All existing mast arms at both intersections shall be removed and properly disposed of.

Foundation shall be removed two feet under the existing or proposed ground, which ever is lower.

- hh. The design criteria for the structural design of support structures and foundations shall be based on the Department's Standard Plans, Department's Structures Design Manual Volume 3, and on the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals (LTS-6) with current interims. All CCTV camera poles shall be pre-stressed round or 12-sided concrete poles.
- ii. Any CCTV installation on elevated roadway or bridge structure shall incorporates an anti-vibration/dampening design for review and approval by the Engineer. The Design-Build Firm shall submit an original signed and sealed design with all applicable calculations from a Florida licensed Professional Engineer specializing in structural design for each proposed CCTV installation on a bridge structure within the Project corridors.
- jj. The pole shall be designed and constructed so that all wiring and grounding facilities are concealed within the pole. All hand holes, couplings, through-bolt holes, and ground wires shall be cast into the pole during the manufacturing process. The hand hole shall be not positioned under a Camera Lowering Device (CLD) or facing oncoming traffic.
- kk. All cable entry holes shall be installed according to the location selected by the DBF based on the requirements. The cable entry holes shall be sized as required and shall be free from sharp edges for the passage of electrical wiring. Entry holes shall be compliant with the FDOT Design Standards Index No. 641-020.

**END TSM&O SPECIFIC**

**3. Specific Bridge Requirements**

- a. Bridge B1B
  - i. Provide Standard Plans Index 550-013 railroad fencing on the span over the railroad right-of-way.
  - ii. Bridge shall use a concrete prestressed beam superstructure type.
  - iii. Drilled shaft foundations shall be used for pier foundations.
- b. Bridge B8
  - i. Protection for parking lot users shall be provided for any drop off introduced as part of the Design-Build Firm's proposed canal or ramp realignment located adjacent to the western right of way of Southbound I-95 and the existing parking lot from approximate station 1388+00 to 1403+00. The drop off shall be protected by a rigid barrier. A drop off shall be defined as:
    - 1. Any vertical faced structure
    - 2. Any drop off height of 3 feet or greater at a slope steeper than 1:4 beginning within a distance of twelve feet or less from the edge of the parking lot pavement.
  - ii. A four foot clear area shall be provided between the back of the barrier and the front of the fence for maintenance access between the barrier and fence for the full limits provided here.
- c. Bridge B11
  - i. Provide Standard Plans Index 550-013 railroad fencing on the span over the railroad right-of-way.

- d. Bridge B12
  - i. Provide Standard Plans Index 521-509 railing/barrier on the South side of the bridge.
  
- e. Bridge B13
  - i. Bridge shall be designed to accommodate the future widening of the Sawgrass Expressway (SR 869) from west of US 441 (SR 7) to Powerline Rd (SR 845) (FPID 437153-1). Sections of the proposed bridge to Florida's Turnpike shall be coordinated with FTE during the Planning and Preconstruction Phases to facilitate future construction completion of this bridge without the need for lane closures. The partial connection shall be designed and constructed by the Design-Build Firm as part of the Contract. Temporary barriers shall be placed as required to close off this area in a permanent manner.
  
- f. Bridge B14
  - i. Bridge shall be designed to span a potential future Hillsboro Boulevard Typical Section with the following minimum typical section elements in each direction: 4-12' through lanes, 7' buffered bike lane, 1-12' auxiliary lane, 2' curb and gutter, 6' sidewalk, 4' buffer, and a 22' median for a minimum typical section width of 180'.
  
- g. Bridge B15
  - i. Bridge shall be designed to span a potential future Hillsboro Boulevard Typical Section with the following minimum typical section elements in each direction: 4-12' through lanes, 7' buffered bike lane, 1-12' auxiliary lane, 2' curb and gutter, 6' sidewalk, 4' buffer, and a 22' median for a minimum typical section width of 180'.
  
- h. Bridge B16
  - i. Bridge shall be designed to span a potential future Hillsboro Boulevard Typical Section with the following minimum typical section elements in each direction: 4-12' through lanes, 7' buffered bike lane, 1-12' auxiliary lane, 2' curb and gutter, 6' sidewalk, 4' buffer, and a 22' median for a minimum typical section width of 180'.
  
- i. Bridge B20
  - i. Provide Standard Plans Index 550-013 railroad fencing on the North side of the bridge on the span over the railroad right-of-way.
  - ii. Provide Standard Plans Index 521-509 railing/barrier on the South side of the bridge.
  - iii. Bridge shall use a concrete prestressed beam superstructure type.
  - iv. Drilled shaft foundations shall be used for pier foundations
  
- j. Bridge B21
  - i. Provide Standard Plans Index 550-013 railroad fencing on the span over the railroad right-of-way.
  - ii. Bridge shall use a concrete prestressed beam superstructure type.

iii. Drilled shaft foundations shall be used for pier foundations

k. Bridge B24

i. The temporary reroute of FP&L's 230kV Goosby Lakeview transmission line within the close proximity of the East abutment of Bridge 24 will require the construction phased in order to comply with OSHA's 20' minimum clearance requirement to the transmission line, as well as FP&L's 100' clearance requirement to its temporary dead end pole 256C9A. The portion of the approach slab and MSE walls East of the bridge will be required to be built after FP&L has relocated the transmission line to its final position.

**4. Structure Design Guidelines (SDG) Modification for Non-Conventional Projects**

Only the below listed sections of SDG are to be modified as stated:

- a. SDG 1.1.3.B.1 – No bridges over navigational waters
- b. SDG 1.3.1 See Preliminary Geotechnical Report under Attachment N
- c. SDG 1.3.2.E Weathering Steel is not permitted unless coated.
- d. SDG 1.3.3.A Samples not required
- e. SDG 1.4.3-3 No substructures in extremely aggressive marine environments
- f. SDG 1.4.5 Class V coating shall be provide as shown in the Design Approval for Class 5 Finish and as listed under section I.2.
- g. SDG 1.5.A See reference documents for lead-based paint and/or asbestos on existing bridges
- h. SDG 1.5.D No asbestos abatement plan required
- i. SDG 2.6.2 No planned widenings or future roadway realignments
- j. SDG 2.6.3 All existing pier protection shall be updated to current standards
- k. SDG 2.6.4 There are no project specific crash wall requirements
- l. SDG 2.10.B An operational importance factor of 1.0 shall be used for all bridges.
- m. SDG Table 3.5.1-1 Minimum pile size is 18 inches
- n. SDG 3.5.19. Micropiles allowed
- o. SDG 3.6.11.B GRS abutments not allowed
- p. SDG 3.12.B See RFQ IX.I.2.m.iii
- q. SDG 4.3.1.A.2 Use conventional steel prestressing strands
- r. SDG 5.1.1.B Special coating requirements already specified in RFQ
- s. SDG 5.1.1.C no preference to box girders over plate girders
- t. SDG 6.7.1.F Three (3) – 2" diameter conduits with expansion fittings and pull boxes Type "B" in accordance with FDOT Standard Index No. 630-010 shall be installed in all new traffic railings located on bridges and retaining walls. Conduits are not allowed in bridge deck slabs or approach slabs. If additional conduits are required, they shall be attached to the exterior of the structure. No penetration of bridge backwalls will be allowed.
- u. SDG 6.7.2.B Non-FDOT standard mounted traffic railings are not allowed
- v. SDG 6.7.6 SDG 6.7.6 TL-5 bridge traffic railing required for curved bridge structures with radii less than 1200 feet (both sides of the bridge).

**5. Bridge Aesthetic Requirements**

- a. All bridges except bridges 14, 15, 16, 18, 19, 20 and 21 shall have pier columns and cap shapes shown in the Project Structure Component: Aesthetics Guide in Reference Document 5.
- b. Bridges along the SW 10<sup>th</sup> Street corridor shall have pier columns with formliner pattern, cap shapes, column inserts, and column bases that match the information and locations presented in the Aesthetics Guide.
- c. Select MSE Walls shall have pylon enhancements and corner details/patterns/colors and spacing that match the information presented in the Aesthetics Guide. The spacing of the enhancements will be a maximum of 100 feet apart along the full length of the MSE walls.
- d. Bridge superstructure type remains open to all options except where otherwise noted.

**6. Noise Barrier Walls**

Noise barrier walls shall be designed and constructed at the following I-95 and SW 10<sup>th</sup> Street locations:

| Noise Barrier Wall Table |               |             |                |       |  |                      |
|--------------------------|---------------|-------------|----------------|-------|--|----------------------|
| Name                     | From Station* | To Station* | Approx. Length | Side  | Adjacent Community   | Type                 |
| FC                       | 1298+00       | 1303+90     | 590            | Left  | Jim & Jan Morgan Family Center   | 14' MSE Wall Mounted |
| CK_HM(a)                 | 6086+20       | 110+45      | 1980           | Left  | Highland Meadows Estates   | 14' MSE Wall Mounted |
| CK_HM(b)                 | 110+45        | 120+00      | 955            | Left  | Highland Meadows Estates   | 8' Bridge Mounted    |
| CK_HM(c)                 | 6106+00       | 6117+00     | 1100           | Left  | Highland Meadows Estates   | 14' Shoulder Mounted |
| HV(a)                    | 5696+50       | 408+15      | 1639           | Right | Highland Village   | 14' Shoulder Mounted |
| HV(b)                    | 408+15        | 414+86      | 671            | Right | Highland Village   | 8' MSE Wall Mounted  |
| NATURA(a)                | 19+00         | 24+00       | 500            | Right | Tivoli Park Apartments   | 8' MSE Wall Mounted  |
| NATURA(b)                | 63+60         | 71+60       | 800            | Right | Natura   | 22' Ground Mounted   |
| E1S                      | 243+56        | 257+93      | 1,430          | Right | The Enclave at Waterways Apartments  | 22' Ground Mounted   |
| E2S(A)                   | 259+68        | 274+13      | 1,475          | Right | Waterways at Quiet Waters, Independence Bay, and Freedom Square Condominiums | 22' Ground Mounted   |

| Noise Barrier Wall Table |               |             |                |       |  |   |
|--------------------------|---------------|-------------|----------------|-------|--|---|
| Name                     | From Station* | To Station* | Approx. Length | Side  | Adjacent Community   | Type  |
| E2S(B)                   | 275+45        | 282+52      | 714            | Right | Waterways at Quiet Waters, Independence Bay, and Freedom Square Condominiums | 22' Ground Mounted  |
| E4S(A)                   | 315+46        | 324+79      | 980            | Right | Waterford Homes  | 22' Ground Mounted  |
| E4S(B)                   | 325+47        | 334+64      | 1,025          | Right | Waterford Homes  | 22' Ground Mounted  |
| E4S(C)                   | 334+00        | 336+20      | 220            | Right | Waterford Homes  | 14' Ground-mounted traffic railing/noise barrier wall combination |
| E4S(DC)                  | 335+95        | 341+27      | 600            | Right | Waterford Homes  | 22' Ground Mounted  |
| E5N(A)                   | 308+32        | 356+10      | 4,755          | Left  | Century Village  | 22' Ground Mounted  |
| E5N(B)1                  | 354+56        | 361+81      | 725            | Left  | Century Village  | 9' to 14' Structure Mounted (Retaining Wall)                      |
| E5N(B)2                  | 361+81        | 364+09      | 230            | Left  | Century Village  | 8' Structure Mounted (Bridge)                                     |

\*Stations apply to respective roadways. Refer to the Noise Study Report Addendum in Reference Document 2.

The tabulated horizontal limits, heights, and types of these noise walls shall not be changed except as approved by the Department. Except for the noise walls that will connect to an existing shoulder mounted noise wall and/or replaced in-kind, the station limits for the shoulder mounted noise walls listed in the above table include the standard begin and end tapers. The standard begin and end tapers shall be included per FDOT Standard Plan Index No. 521-510 or Index No. 521-511.

The Design-Build Firm shall be responsible for the preparation of noise wall calculations and details. An engineering review will be performed prior to initiating the design of the noise walls to identify engineering conflicts or constraints affecting the noise wall design. The engineering review will require coordination with the Department. The Design-Build Firm will be responsible for documenting any resolutions to engineering issues/conflicts that preclude the construction of or that require modification to the recommended noise walls. Resolution of any engineering issues will be subject to approval by the Department prior to construction. At a minimum, the engineering review will consider the following:

- Utility conflicts
- Drainage issues
- Other criteria as applicable (such as safety, etc.)

The noise wall design shall incorporate the following:

- Construction of ground mounted precast noise walls shall be in accordance with the FDOT Standard Plans Index No. 534-200 and approved Department systems.

- Construction of shoulder mounted noise walls shall be in accordance with FDOT Standard Plans Index Nos. 521 -510, 521- 511, 521-512, 521- 514, and 521-515, as required.
- Shoulder mounted noise walls and the supporting traffic railing barriers, both on-bridge and off-bridge, shall receive a Class 5 Applied Finish Coating on the top, front and back sides.
- Texture on the highway side of I-95 ground mounted noise walls on both panels and posts shall be Type “H” Trapezoid Vertical Fins with Fractured Face (Colorado Drag Aggregate).
- Texture on the property side of I-95 ground mounted noise walls on both panels and posts shall be Type “A” Smooth.
- SW 10th Street ground mounted noise walls shall have a seagrass theme as per the Project Structure Component: Aesthetics Guide.
- I-95 ground mounted noise walls shall have a bird theme with brown pelican (BP-1,2 and 3) graphics per FDOT Standard Plans Index 534-200. Graphics shall be inset and included every 200 feet, with a grouping of four (4) panels.
- Ground mounted noise walls shall receive a Class 5 Applied Finish Coating on both the front and back sides, applied in accordance with the requirements of the Specifications except that the color will match the Texcote T-114 Color: Sandalwood, except for sections on SW 10<sup>th</sup> Street that will require federal color 15192 per the Project Structure Component: Aesthetics Guide. A sample color is to be provided and shall be field verified for a match prior to paint finish installation.
- Flush panel option on I-95 shall be used for the ground mounted noise walls.
- Consideration shall be given to aesthetically pleasing noise wall profiles. Excessive undulation of the wall’s top edge shall be avoided when possible. The elevation changes in the top edge of the noise wall shall be limited to changes of approximate 2-foot steps per 500 feet of length unless otherwise approved by the Department. Minor changes in the ground elevation shall not be reflected in the top of wall profile.
- Side-installed ground mounted noise wall panels and a minimum 4-foot panel height versus the standard minimum 6-foot panel height can only be used when reduced overhead clearance between posts prohibits installation of panels from the top, and shall be in accordance with FDOT Standard Plans Index No. 534-200.

The Design-Build Firm shall submit to the Department final signed and sealed design documentation prepared during the development of the Noise Wall Plans. The Design-Build Firm shall ensure that the final geotechnical and hydraulic recommendations and reports required for design are submitted concurrently with the plans.

Any noise walls greater than 8 foot high and located on retaining walls, shall be isolated from the retaining structure and shall have its own foundation system. Current noise wall analysis proposes 14’ noise walls on Retaining walls in a few elevated sections of the Project. See the Design Variation included in Reference Document 1. This design variation includes an example set of details and calculations for walls of this type supported on a junction slab. The Design-Build Firm shall submit their own signed and sealed details and calculations for any wall type proposed including the example type included in the Design Variation. See the design calculations included in the Design Variation for the governing design criteria.

The Design-Build Firm shall establish the current status of the outdoor advertising signage along the corridor within the vicinity of the noise walls and, if needed, perform the necessary steps to address Section 479.25 of the Florida Statutes.



**7. Visual Barrier Walls**

Visual barrier walls shall be designed and constructed in accordance with FDOT Standard Plans Index No. 521-510 at the following I-95 and SW 10<sup>th</sup> Street locations:

| 8' Visual Barrier Table |               |             |                    |       |                        |
|-------------------------|---------------|-------------|--------------------|-------|------------------------|
| Name                    | From Station* | To Station* | Approximate Length | Side  | Adjacent Community     |
| N1                      | 24+00         | 59+90       | 564'               | Right | Tivoli Park Apartments |
| N2                      | 59+90         | 75+77       | 1587'              | Right | Tivoli Park Apartments |
| N3                      | 75+77         | 79+44       | 367'               | Right | Tivoli Park Apartments |
| LD1                     | 106+00        | 113+28      | 728'               | Right | Lakes at Deerfield     |
| LD2                     | 113+28        | 116+27      | 299'               | Right | Lakes at Deerfield     |
| LD3                     | 269+79        | 272+83      | 304'               | Right | Lakes at Deerfield     |
| LD4                     | 272+83        | 275+37      | 254'               | Right | Lakes at Deerfield     |

\*Stations apply to respective roadways. Refer to the Noise Study Report Addendum in Reference Document 2.

**8. Structures Aesthetics Master Plan**

The Structures Aesthetics Master Plan shall include details and placement identification of the final master plan layout of all proposed bridge pier, steel bridge color, noise barrier wall, and retaining wall structure aesthetics, meeting all of the requirements included above in this Structure Plans section and the Project Structure Component: Aesthetics Guide. The Structures Aesthetics Master Plan shall also include renders of proposed aesthetics, including elements of the Landscape Opportunity Master Plan, along the same view sheds provided in the Structures Aesthetics Guide included in Reference Document 5. The Structures Aesthetics Master Plan will be shared with the City of Deerfield Beach for final coordination and feedback purposes and will require final FDOT approval before moving to the design phases for the corresponding structure plans submittals.

**J. Specifications**

Department Specifications may not be modified or revised. 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.

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 Work Package Proposals were due in the District Office, along with any approved Developmental Specifications and Technical Special Provisions, that are not part of this RFQ. Any subsequent modifications to the Construction Specifications Package shall be prepared, signed and sealed as a Supplemental Specifications Package. The Specifications Package(s) 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/programmanagement/PackagePreparation/TrainingConsultants.aspx>

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

<https://fdotewp1.dot.state.fl.us/SpecificationsPackage/Utilities/Membership/login.aspx?ReturnUrl=%2fSpecificationsPackage%2fdefault.aspx>

Upon review and approval by the Department, the Construction Specifications Package will be stamped “Released for Construction” and initialed and dated by the Department.

### **K. Shop Drawings**

The Design-Build Firm shall be responsible for the preparation and approval of Shop Drawings. Shop Drawings shall be in conformance with the FDM. 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. When required to be submitted to the Department, Shop Drawings shall bear the stamp and signature of the Design-Build Firm’s Engineer of Record (EOR), and Specialty Engineer, as appropriate. All “Approved” and “Approved as Noted” Shop Drawings submitted to the Department for review shall also include Engineer of Record QA/QC Shop Drawing check prints along with the EOR stamped set(s). The Department shall review the Shop Drawing(s) to evaluate compliance with Project requirements and provide any findings to the Design-Build Firm. The Department’s procedural review of Shop Drawings is to assure that the Design-Build Firm’s EOR has approved and signed the drawing, the drawing has been independently reviewed and is in general conformance with the plans. The Department’s review is not meant to be a complete and detailed review, but the Department reserves the right to perform a more detailed review, as necessary. Upon review of the Shop Drawing, the Department will initial, date, and stamp the drawing “Released for Construction” or “Released for Construction as Noted”.

### **L. Sequence of Construction**

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

1. Maintain or improve, to the maximum extent possible, the quality of existing traffic operations, both in terms of flow rate and safety, throughout the duration of the Project.
2. Minimize the number of different Temporary Traffic Control Plan (TTCP) phases, i.e., number of different diversions and detours for a given traffic movement.
3. Take advantage of newly constructed portions of the permanent facility as soon as possible when it is in the best interest of traffic operations and construction activity.
4. Maintain reasonable direct access to adjacent properties at all times, with the exception in areas of limited access Right-of-Way where direct access is not permitted.
5. Coordinate with adjacent construction projects and maintaining agencies.
6. Expedite the TSM&O through early Work Package(s) to maximize its benefit in mitigating traffic congestion during the I-95 and SW 10<sup>th</sup> Street Connector construction phases.
7. Expedite construction of all ground mounted noise walls and complete prior to any adjacent utility, roadway, drainage, retaining wall, or bridge construction. Ground mounted sound walls and perimeter walls in the SW 10<sup>th</sup> St. corridor are to be constructed prior to the initiation of any other construction activities within the corridor.

8. Reconstruct SW 12th Ave., the Newport Center Drive roadways and roundabout subsequent to the completion of all Local SW 10th St. and SW 10th St. Connector bridge construction from west of the SFRC to east of Newport Center Dr.
9. Expedite the completion of all contract work items as described under Section II.L – Contract Bonuses.

#### **M. Stormwater Pollution Prevention Plans (SWPPP) and Erosion Control Plans**

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 FDM 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.

#### **N. Transportation Management Plan**

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

The Design-Build Firm must develop a Transportation Management Plan (TMP) in accordance with the Department's FDOT Design Manual (FDM) Chapter 240. The TMP will consist of three components:

1. Temporary Traffic Control Plan
2. Transportation Operations Plan
3. Public Information Plan

The Temporary Traffic Control Plans shall address construction phasing, utility relocation, drainage structures and temporary drainage, signalization, ditches, front slopes, back slopes, drop offs within clear zone, lighting, ITS, ramp signals, signing and marking, operational transition, temporary roadway lighting 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 utilizing existing, temporary and/or permanent drainage systems. Documentation of temporary drainage analysis, including necessary calculations, shall be submitted as part of the Drainage Design Documentation. The Design-Build Firm shall make use of the criteria contained in the FDOT Drainage Design Guide Chapter 10 for selection of temporary barrier wall to satisfy spread requirements during construction as well as address other temporary drainage issues associated with maintenance of traffic and during construction operations.

The Temporary Traffic Control Plan shall address how to assist with maintenance of traffic throughout the duration of the contract, including coordination and interface with adjacent construction projects. The existing regulatory speed limits shall be maintained during construction unless otherwise approved by the Department. Water blasting or asphalt replacement are the only acceptable methods for removal of conflicting pavement markings.

The Temporary Traffic Control Plan shall be prepared by a certified designer who has completed the Department's Advanced Maintenance of Traffic training course, and in accordance with the FDM and the Departments Standard Plans for Road and Bridge Construction.

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

The Design-Build Firm shall utilize the Department's Standard Plans Index Series 102 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), and traffic control plan sheet(s).

The Design-Build Firm shall prepare additional plan sheets such as detours, cross sections, profiles, drainage structures, temporary drainage systems including temporary outfalls, temporary roadway lighting, retaining wall details, and sheet piling as necessary for proper construction and implementation of the Temporary Traffic Control Plan. Any pavement drop-offs as defined under Standard Plans Index 102-600, Sheet 8 of 11 shall be limited to a maximum 48-hour duration. The Design-Build Firm shall maintain positive collection, conveyance, and outfall systems for all roadways throughout all phases of construction, either using the existing drainage systems, temporary drainage systems, or the permanent new drainage system to be constructed with the proposed roadway improvements.

The Design-Build Firm shall maintain existing pedestrian access on all sidewalks, transit facilities, and at all intersections. Pedestrian sidewalks and paths shall be maintained and continue to conform to ADA requirements. When the Design-Build Firm allows work areas to encroach upon a sidewalk or crosswalk areas, and a minimum clear width of 4-foot cannot be maintained for pedestrian use, an alternative accessible pedestrian route shall be provided in accordance with Standard Plans Index 102-660.

The Design-Build Firm shall include traffic management and signage, access to local businesses, detour routes, public notification of alternate routes, emergency services coordination and Project schedule. Portable Changeable Message Signs (PCMS) shall be placed within 500 feet of the construction limits and placed every two (2) miles along the Project corridor in both the northbound and southbound directions. These signs serve as advanced construction notice and shall be in place two (2) weeks prior to the start of construction activities. At the completion of the two (2) week advanced construction notice period the PCMS shall be removed. The message shall notify motorists that roadway construction is commencing and display the begin month and date. PCMS shall be in place seven (7) days in advance of any lane or ramp closure. The display shall alternate with messages stating the exit name to be closed and the date and time of closure.

All construction activities requiring traffic shifts in which the use and removal of temporary pavement markings is required shall be completed prior to the placement of friction course. Construction activities that require traffic shifts that entail the installation and removal of temporary pavement markings, or other activities that in any way damage or scar the existing pavement that is to remain, shall require full width milling and resurfacing (all travel lanes) for the full limits of the impacted pavement using a friction course to match the adjacent sections of existing roadway to remain.

Acceleration and deceleration of all construction vehicles within a travel lane is prohibited. The Design-Build Firm shall make provisions for construction vehicle access to the work areas including material delivery. Where required, soil tracking devices shall be provided.

If detour routes are proposed by the Design-Build Firm during school days, the Design-Build Firm shall contact the Broward County School Board Transportation Services at 754-321-4400 to arrange a school bus route meeting at least 45 days prior to the needed detour route. This meeting is to determine impacted bus routes and to make any necessary arrangements or rerouting. This meeting shall include the Special Projects Coordinator from Broward County Traffic Engineering Division.

In maintaining operations of the 95 Express lanes during construction, the Express lanes shall be separated from the I-95 General Purpose lanes by use of a double solid white stripe between the ingress and egress locations within the Project limits. The transition from express lane marker separation to double solid white stripe separation can only occur once traffic lane shifts are implemented to modify the existing configuration. Refer to the 95 Express During Construction Technical Memo – Option 2 in Reference Document 5 for signing, pavement marking and express lane marker requirements during construction.

When proposed sign panels are not in use, the Design-Build Firm shall cover the sign panels in accordance

with the FDOT Standard Specifications.

### 3. Traffic Control Restrictions:

Full closure on I-95 or SR 869/SW 10<sup>th</sup> Street is allowable only for the setting and removal of overhead ITS or sign span structures and the removal or erection of bridge structures over I-95 and SR 869/SW 10<sup>th</sup> Street mainline or ramps. The Design-Build Firm is limited to one full closure in one direction of traffic on I-95 or SR 869/SW 10<sup>th</sup> Street for each closure period. NO PACING OPERATIONS are allowed. Closure of adjacent interchange ramps in the same direction at the same time shall not be permitted.

Lane closures for the I-95 mainline, SR 869/SW 10<sup>th</sup> Street and the interchange ramps are only allowed during nighttime for the following time periods:

| Roadway  | Lanes Closed      | Sunday - Thursday                                      | Friday*   | Saturday*  |
|--|-------------------|--|---|--|
| I-95 NB or SB<br>(includes general purpose lanes, express lanes and auxiliary lanes) | 1<br>2<br>≥3/Full | 9:00pm - 5:30am<br>9:30pm - 5:30am<br>11:00pm - 5:00am | 9:00pm - 8:00am<br>10:00pm - 8:00am<br>12:00am - 6:00am | 9:00pm - 10:00am<br>10:00pm - 8:00am<br>12:00am - 7:00am |
| SR 869/SW 10 <sup>th</sup> Street<br>WB or EB**                                      | 1<br>≥2/Full      | 8:30pm - 6:00am<br>10:30pm - 5:30am                    | 9:00pm - 8:00am<br>11:00pm - 6:00am                     | 9:00pm - 10:00am<br>11:00pm - 7:00am                     |
| Single Lane Ramps  | 1/Full            | 10:00pm - 5:00am                                       | 10:30pm - 6:00am  | 10:30pm - 7:00am   |
| Multi-lane Ramps   | 1<br>≥2/Full      | 9:00pm - 5:30am<br>11:00pm - 5:00am                    | 9:00pm - 8:00am<br>12:00am - 6:00am                     | 9:00pm - 10:00am<br>12:00am - 7:00am                     |

\*Lane closures on Friday and Saturday shall be limited exclusively to construction operations for overhead beam erection or bridge demolition on bridges in the I-95/ SR 869/SW 10<sup>th</sup> Street interchange, NE 48<sup>th</sup> St over I-95, or I-95 over Hillsboro Blvd. No other lane closures shall be allowed on Friday and Saturday without approval by the District 4 Secretary.

\*\* For required utility relocations crossing SW 10<sup>th</sup> St. and Military Trail, weekend lane reductions to 2-lane/2-way traffic will be allowed from Friday 9:00pm to Monday 5:00am. The reduction to 2-lane/2-way traffic shall not be concurrent on both SW 10<sup>th</sup> St. and Military Trail, and no more than 12 total weekend lane reductions shall be permitted (6 each for SW 10<sup>th</sup> St. and Military Trail).

On the cross streets listed below, lane closures are only allowed between the time periods listed below. Construction operations that affect the existing traffic patterns and configurations at SW 10<sup>th</sup> Street and Hillsboro Blvd. Interchange ramps or cross-streets with I-95 shall not occur simultaneously.

| Daytime Lane Closures |                |                                 |                                 |                                 |
|-----------------------|----------------|---------------------------------|---------------------------------|---------------------------------|
| Cross Street          | Lanes Closed   | Monday – Friday                 | Saturday                        | Sunday                          |
| Hillsboro Blvd        | 1<br>2<br>Full | 9:00am – 4:00pm<br>None<br>None | 8:00am – 4:00pm<br>None<br>None | 8:00am – 4:00pm<br>None<br>None |
| Military Trail**      | 1<br>Full      | None<br>None                    | 8:00am – 4:00pm<br>None         | 8:00am – 4:00pm<br>None         |

| Daytime Lane Closures          |                |                                 |                                 |                                 |
|--------------------------------|----------------|---------------------------------|---------------------------------|---------------------------------|
| NE 48th Street                 | 1<br>Full      | 10:00am – 4:00pm<br>None        | 8:00am – 4:00pm<br>None         | 8:00am – 4:00pm<br>None         |
| SW 12 <sup>th</sup> Avenue     | 1<br>Full      | 10:00am – 4:00pm<br>None        | 8:00am – 4:00pm<br>None         | 8:00am – 4:00pm<br>None         |
| E/W Newport Center<br>Roadways | 1<br>Full      | 10:00am – 4:00pm<br>None        | 8:00am – 4:00pm<br>None         | 8:00am – 4:00pm<br>None         |
| SR 845/Powerline<br>Road       | 1<br>2<br>Full | 9:00am – 4:00pm<br>None<br>None | 8:00am – 4:00pm<br>None<br>None | 8:00am – 4:00pm<br>None<br>None |

| Nighttime Lane Closures        |              |                                     |                                     |                                     |
|--------------------------------|--------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Cross Street                   | Lanes Closed | Sunday - Thursday                   | Friday*                             | Saturday*                           |
| Hillsboro Blvd                 | 1<br>≥2/Full | 7:00pm – 6:00am<br>11:00pm – 5:00am | 9:00pm - 8:00am<br>12:00am - 6:00am | 9:00pm - 8:00am<br>12:00am - 7:00am |
| Military Trail**               | 1<br>Full    | 8:00pm – 7:00am<br>11:00pm – 5:00am | 9:00pm - 8:00am<br>12:00am - 6:00am | 9:00pm - 8:00am<br>12:00am - 7:00am |
| NE 48th Street                 | 1<br>Full    | 8:30pm - 5:30am<br>11:00pm – 5:00am | 9:00pm - 8:00am<br>12:00am - 6:00am | 9:00pm – 8:00am<br>12:00am - 7:00am |
| SW 12 <sup>th</sup> Avenue     | 1<br>Full    | 8:30pm - 5:30am<br>None             | 9:00pm - 8:00am<br>12:00am - 6:00am | 9:00pm – 8:00am<br>12:00am - 7:00am |
| E/W Newport Center<br>Roadways | 1<br>Full    | 8:30pm - 5:30am<br>None             | 9:00pm - 8:00am<br>12:00am - 6:00am | 9:00pm – 8:00am<br>12:00am - 7:00am |
| SR 845/Powerline<br>Road       | 1<br>≥2/Full | 7:00pm – 6:00am<br>11:00pm – 5:00am | 9:00pm - 8:00am<br>12:00am - 6:00am | 9:00pm - 8:00am<br>12:00am - 7:00am |

\*Nighttime lane closures on Friday and Saturday shall be limited exclusively to construction operations for overhead erection or demolition of bridges. No other lane closures shall be allowed on Friday and Saturday without approval by the District 4 Secretary.

\*\* For required utility relocations crossing SW 10<sup>th</sup> St. and Military Trail, weekend lane reductions to 2-lane/2-way traffic will be allowed from Friday 9:00pm to Monday 5:00am. The reduction to 2-lane/2-way traffic shall not be concurrent on both SW 10<sup>th</sup> St. and Military Trail, and no more than 12 total weekend lane reductions shall be permitted (6 each for SW 10<sup>th</sup> St. and Military Trail).

### TSM&O SPECIFIC

A lane may only be closed during active work periods. There will be NO PACING OPERATIONS allowed between the hours of 5:00 AM to 10:00 PM. There will be no DETOURS allowed between the hours of 6:00 AM and 9:00 PM. All lane closures, including ramp closures, must be reported to the local emergency agencies, the media and the District Four information officer. 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.

NIGHTTIME LANE CLOSURES are allowed on the Project during the times shown below:

| Cross Street                                     | Lanes Closed | Sunday - Thursday                    | Friday - Saturday |
|--|--------------|--------------------------------------|-------------------|
| SR 5/US 1  | 1<br>Full    | 7:00pm – 6:30am<br>11:00pm – 5:00am  | None<br>None      |
| SR 811/Dixie Highway                             | 1<br>Full    | 8:00pm – 7:00am<br>11:00pm – 5:00am  | None<br>None      |
| SR 845/Powerline Road                            | 1<br>Full    | 7:00pm – 6:00am<br>11:00pm – 5:00am  | None<br>None      |
| SR 7/US 441                                      | 1<br>Full    | 8:00pm – 7:00am<br>11:00pm – 5:00am  | None<br>None      |
| SR 834/Sample Road                               | 1<br>Full    | 7:00pm – 6:30am<br>11:00pm – 5:00am  | None<br>None      |
| SR 810/Hillsboro Boulevard (from SR 7 to SR 811) | 1<br>Full    | 7:00pm – 6:00am<br>11:00pm – 5:00am  | None<br>None      |
| SR 810/Hillsboro Boulevard (from SR 811 to SR 5) | 1<br>Full    | 8:00pm – 7:00am<br>11:00pm – 5:00am  | None<br>None      |
| Military Trail                                   | 1<br>Full    | 8:00pm – 7:00am<br>11:00pm – 5:00am  | None<br>None      |
| Lyons Road                                       | 1<br>Full    | 7:00pm – 7:00am<br>11:00pm – 5:00am  | None<br>None      |
| Wiles Road                                       | 1<br>Full    | 8:00pm – 7:00am<br>11:00:pm – 5:00am | None<br>None      |

DAYTIME LANE CLOSURES are allowed on the Project during the times shown below:

| Cross Street                                     | Lanes Closed | Monday - Friday | Saturday - Sunday |
|--|--------------|-----------------|-------------------|
| SR 5/US 1  | 1            | 9:00am – 4:00pm | 8:00am – 4:00pm   |
| SR 811/Dixie Highway                             | 1            | None            | 8:00am – 4:00pm   |
| SR 845/Powerline Road                            | 1            | 9:00am – 4:00pm | 8:00am – 4:00pm   |
| SR 7/US 441                                      | 1            | None            | 8:00am – 4:00pm   |
| SR 834/Sample Road                               | 1            | 9:00am – 3:00pm | 8:00am – 4:00pm   |
| SR 810/Hillsboro Boulevard (from SR 7 to SR 811) | 1            | 9:00am – 4:00pm | 8:00am – 4:00pm   |
| SR 810/Hillsboro Boulevard (from SR 811 to SR 5) | 1            | None            | 8:00am – 4:00pm   |
| Military Trail                                   | 1            | None            | 8:00am – 4:00pm   |

|            |   |                  |                 |
|------------|---|------------------|-----------------|
| Lyons Road | 1 | 10:00am – 4:00pm | 8:00am – 4:00pm |
| Wiles Road | 1 | None             | 8:00am – 4:00pm |

No concurrent lane closures will be allowed on SR 5/US 1 and SR 811/Dixie Highway.

For each corridor, maximum continuous lane closure for 1 mile, and minimum spacing between continuous lane closure 1 mile.

On Florida's Turnpike, lane closures are only allowed for nighttime between the following time periods:

| Roadway  | Lanes Closed | Sunday - Thursday       | Friday - Saturday |
|--|--------------|-------------------------|-------------------|
| Florida's Turnpike NB or SB<br>(includes general purpose lanes, auxiliary lanes) | 1 Full       | 9:30pm - 5:30am<br>None | None<br>None      |

No lane closures will be permitted during an event that generates increased levels of traffic, including but not limited to, the following:

- Holiday Boat Parade (third weekend in December)
- Holiday Street Parade (second week in December)
- Holiday Tree Lighting (third weekend in November)
- Florida Renaissance Festival (weekends in February and March)
- Boca-bash (fourth weekend in April)
- Spring-fest (first weekend in April)
- Food Truck Fridays (first week in May and June)

For all lane closures on the Turnpike System, notification via telephone shall be provided to the Turnpike Regional Traffic Management Center (TMC) at the beginning (approximately 15 to 30 minutes before implementation of each lane closure) and end of each lane closure activity. Contact information for the TMC is provided below:

- Pompano TMC at (954) 934-1370: Mile Post 0 to Mile Post 99, and Sawgrass Expressway.

**END TSM&O SPECIFIC**

No lane closures of SW 12<sup>th</sup> Avenue, Newport Center Dr., and the direct access drive between the Publix Distribution Center and local SW 10<sup>th</sup> Street shall be permitted during the following times:

- 14 days prior to and through Easter Sunday
- 7 days prior to and through Memorial Day
- 7 days prior to and through Independence Day
- 7 days prior to and through Labor Day
- November 1 through January 8



Publix Distribution Center entrance direct access to local SW 10<sup>th</sup> Street from the north shall not be closed simultaneously with any closure of SW 12<sup>th</sup> Avenue below SW 10<sup>th</sup> Street, just east of the SFRC.

All temporary routes/detours associated with construction operations impacting the existing SW 10<sup>th</sup> St./Newport Center Dr./SW 12<sup>th</sup> Ave. intersection shall accommodate a WB-62 FL Design and Control Vehicle for all turning, through and U-turn movements.

Prior to using SW 12<sup>th</sup> Ave as a temporary detour, the Design-Build Firm shall widen the existing SW 12<sup>th</sup> Ave roadway pavement underneath the SW 10<sup>th</sup> Street bridge over SFRC using temporary pavement to provide 15 feet travel lanes within the curved segment to accommodate a WB-62 FL Design and Control Vehicle.

Access shall be provided at all times from SW 10<sup>th</sup> St to the FP&L temporary workspace at Powerline Road required for the relocation of the FP&L transmission poles. The FP&L temporary workspace shall be free of staging, material, equipment or personnel. Refer to Section IX.D – Utility Coordination for further information on the FP&L relocation requirements.

All intersection turn movements shall be maintained at all times.

The Design-Build Firm is limited to one closure for each structure installation per direction of traffic. Full closures on cross streets will be permitted only for demolition, bridge deck concrete pours, and beam setting.

For lane closure periods, other than those stated in this section, the Design-Build Firm shall submit a request to demonstrate that the roadway network can accommodate the requested lane closure. The request to modify the established limitations shall be submitted with sufficient time (at least three weeks in advance) for the Department to review and obtain approval by the District 4 Secretary. The request shall include, but not be limited to written justification for need including length of time for lane closure; a Temporary Traffic Control Plan; a Transportation Operations component including a lane closure analysis; and a Public Information component including specific recommendations for advanced notifications to the public.

The Design-Build Firm shall perform a traffic operational analysis for the full closure of I-95 or SR 869/SW 10<sup>th</sup> Street to demonstrate that the local roadway network can accommodate the temporary I-95 or SR 869/SW 10<sup>th</sup> Street offsite detour traffic. Detours on Friday and Saturday shall be limited exclusively to construction operations for overhead steel erection or demolition of bridges in the I-95/SR 869/SW 10<sup>th</sup> Street interchange, NE 48<sup>th</sup> St. over I-95, or I-95 over Hillsboro Blvd. No other detours shall be allowed on Friday and Saturday without approval by the District 4 Secretary.

The Design-Build Firm shall obtain concurrence from the local agency when detours are to utilize local (county or city) roadways. For any work requiring full roadway closures the Design-Build Firm shall prepare and submit traffic operational analysis and temporary detour route plans to the Department for approval.

NO LANE CLOSURES are allowed on the Project during an event that generates increased levels of traffic, including but not limited to, the following:

- Boots on the Beach – County Music Festival: typically occurs in mid-November.
- Deerfield Mango Festival: typically occurs in late July.
- Pompano Beach Seafood Festival: typically occurs in late April.
- Florida Renaissance Festival: typically occurs in early February to late March.
- Greater Fort Lauderdale Road Runners Club – Freedom 5K: typically occurs in late June.
- Head and Neck 5K/2-Mile Walk: typically occurs in late April.

All lane closures, including ramp closures, must be reported to the local emergency agencies and the District Four Public Information Officer in writing two (2) weeks in advance. Notice of approved road closures shall be given two (2) weeks in advance by Portable Changeable Message Signs on I-95 or SR 869/SW 10<sup>th</sup> Street.

The Design-Build Firm shall use a Law Enforcement Officer as required by Specifications Section 102. All lanes of traffic shall be open in the event of an emergency evacuation or if the lane closure(s) causes a driver delay greater than 10 minutes as determined by the Department.

The Design-Build Firm shall be responsible for daily temporary retiming of existing signalization systems to provide for changes in traffic volumes affected by the proposed lane closures or detours implemented as part of the Maintenance of Traffic Plan. The Design-Build Firm shall be responsible for performing the signal timing analysis, providing recommendations, and coordinating with Broward County Traffic Engineering Division.

#### 4. **Smart Work Zone (SWZ) Requirements**

The Design-Build Firm, as part of the Transportation Management Plan (TMP), shall design and deploy a SWZ system per Attachment L for the duration of the Project construction. The Design-Build Firm shall develop a system diagram showing at a minimum the architecture of the required SWZ strategies with the information flow and exchange among various components and equipment. The TTCP shall show the locations of SWZ devices and include a description of the proposed thresholds and proposed messaging.

#### 5. **Hurricane Readiness Plan**

Within the Preconstruction Phase, the Design-Build Firm shall submit a Hurricane Readiness Plan which will address the measures the Design-Build Firm will implement in preparation for a hurricane or catastrophic event. The Plan shall also stipulate the measures to be taken post-event. The Plan shall address all associated equipment and activities within the Project limits.

All lanes and available shoulders within the Project limits must be open to traffic during an evacuation notice of a hurricane or other catastrophic event and shall remain open for the duration of the evacuation event as directed by the Engineer.

#### 6. **Work Restrictions**

The Design-Build Firm shall use means and methods of construction that minimize noise throughout all phases of the Project. Location of mobile and stationary equipment such as, air compressors, generators, pumps, etc., shall be such as to minimize impact to businesses and residences in the vicinity of the Project. All equipment associated with the work shall be equipped with noise suppression devices which shall be maintained in their original operating condition considering normal wear. Manufacturer installed noise suppression devices such as mufflers, engine covers, insulation, etc. shall not be removed nor rendered ineffectual nor remain off the equipment while the equipment is in use. The necessity for additional noise suppression, beyond standard manufacturer feature, shall be at the sole discretion of the Department.

Construction activities that create excessive noise or vibration including demolition, pile driving, sheet pile installation, and other similar construction activities, shall occur only during the following time periods:

- Monday through Friday – 7:00am to 7:00pm
- Saturday – 9:00am to 5:00pm
- Sunday and holidays – not permitted.

Any deviation from the time restrictions provided above shall be submitted for Department approval on a case-by-case basis.

The Design-Build Firm shall not perform pile driving or sheet piling within one-half (1/2) mile of any school during days that Florida standardized testing is administered. The Design-Build Firm shall coordinate with the Broward County School Board for specific dates of said testing. Hours for pile driving, sheet piling or any other operation that creates excessive noise or vibration shall be coordinated with local clinics, laser surgery related businesses, and diagnostic facilities located along the Project within a 1,000-foot radius, prior to the start of work activity. The following businesses have been identified during the development of this RFQ:

- Rand Eye Institute  
5 West Sample Road, Pompano Beach, 33063  
Contact: Deborah Rand, 954-782-1700  
Hours of Operation: 6:45 A.M. – 7:00 P.M.  
Sensitivities to noise and/or vibration: laser vision correction and eye surgery
- Pompano Health and Rehabilitation Center  
51 West Sample Rd, Pompano Beach, 33064  
Contact: 954-942-5530  
Hours of Operation: 8:00 A.M. – 5:00 P.M.  
Sensitivities to noise and/or vibration: medical equipment
- Aaron H Wolfson, MD, FACR  
1182 East Newport Center, Deerfield Beach, FL 33063  
Contact: Aaron Wolfson, 305-243-4200  
Hours of Operation: 8:00 A.M. – 5:00 P.M.  
Sensitivities to noise and/or vibration: Oncology
- Deerfield Beach Outpatient Surgical Center  
250 West Natura Ave, Deerfield Beach, 33441  
Contact: 954-418-7222  
Hours of Operation: 8:00 A.M. – 5:00 P.M.  
Sensitivities to noise and/or vibration: medical equipment
- Dr. Ashish Sahai- Spine Surgeon  
280 SW Natura Ave, Deerfield Beach, 33441  
Contact: (561)549-9090  
Hours of Operation: 8:00 A.M. – 5:00 P.M.  
Sensitivities to noise and/or vibration: medical equipment
- Meirson Dermatology  
1166 W Newport Center Dr STE 100, Deerfield Beach, 33442  
Contact: (954)782-7701  
Hours of Operation: 8:30 A.M. – 4:30 P.M.  
Sensitivities to noise and/or vibration: medical equipment

This list may not include all of the businesses/facilities that could be impacted by excessive noise or vibration. The Design-Build Firm shall be responsible for confirming that all related business/facilities are identified and notified of the proposed construction activities and to coordinate work restrictions accordingly.

The resulting coordination shall be published to local businesses, municipalities and schools within the 1,000-foot radius a minimum of 5 days prior to said activity. The following is a list of educational facilities that have been identified proximate to the Project corridor:

| <b>Educational Facilities</b> |   |                     |
|-------------------------------|---|---------------------|
| <b>Name</b>                   | <b>Address</b>  | <b>Phone Number</b> |
| Deerfield Beach High School   | 910 Buck Pride Way, Deerfield Beach, FL 33441               | 754-322-0650        |
| Highlands Christian Academy   | 501 NE 48 <sup>th</sup> St, Pompano Beach, FL 33064         | 954-421-1747        |
| Tedder Elementary School      | 4157 NE 1 <sup>st</sup> Terrace, Pompano Beach, FL 33064    | 754-322-8650        |
| Bright Horizons               | 3901 NE 1 <sup>st</sup> Terrace, Pompano Beach, FL 33064    | 754-321-6400        |
| Puffin Learning Academy       | 1287 E Newport Center Dr STE 211, Deerfield Beach, FL 33442 | 954-570-9897        |
| South Florida Bible College   | 2200 SW 10 <sup>th</sup> St, Deerfield Beach, FL 33442      | 954-637-2268        |

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

The Department has conducted an investigation of the Project site and determined that potential gopher tortoise habitats could be impacted by the Project. All coordination by the Design-Build Firm with the Department regarding gopher tortoises will be completed through the District Environmental Management Office. If the Department has determined that suitable gopher tortoise habitat exists in the Project area, then the Design-Build Firm shall be responsible for conducting the gopher tortoise burrow survey for the purpose of identifying potential gopher tortoise habitats that could be impacted by the Project including any areas to be used for construction staging. The habitat will be systematically surveyed according to the current Gopher Tortoise Permitting guidelines published by the Florida Fish and Wildlife Conservation Commission (FWC). The Department must verify the completeness and accuracy of the assessment prior to commencement of any permitting or construction activities. Any areas where the Design-Build Firm proposes to protect burrows to remain on-site with “exclusionary fencing” shall be reviewed and approved by the Department. The Design-Build Firm shall submit an “exclusionary fencing” plan for review prior to any “exclusionary fencing” installation. If there are unavoidable impacts to gopher tortoise burrows, the Design-Build Firm shall be responsible for preparing required documentation for the Department to obtain a FWC permit for the relocation of gopher tortoises and commensals from burrows which cannot be avoided. Preparation of complete permit packages will be the responsibility of the Design-Build Firm. As the “permittee”, the Department is responsible for reviewing and approving the permit application package including all permit modifications, or subsequent permit applications. This applies whether the project is Federal or state funded. Once the Department has approved the permit application, the Design-Build Firm is responsible for submitting the permit application to FWC. A copy of the permit and any subsequent reports to FWC must be provided to the District Environmental Management Office or District Environmental Permit Office, as appropriate. If FWC rejects or denies the permit application, it is the Design-Build Firm’s responsibility to make whatever changes necessary to ensure the permit application is approved. Once the permit is obtained, the Design-Build Firm shall notify the Department at least one week prior to the relocation of gopher tortoises. If gopher tortoise relocations are phased throughout the construction, the Design-Build Firm shall notify the Department at least one week prior to each relocation phase. The Department will provide oversight of the relocations and ensure permit compliance. The Design-Build Firm shall be responsible for any necessary permit extensions or re-permitting in order to keep the relocation permit valid throughout the construction period. The Design-Build Firm shall provide the Department with draft copies of requests to modify the permits, re-permitting, and/or requests for permit extensions, for review and approval by the Department prior to submittal to the Agencies. The Design-Build Firm shall provide the appropriate reports as required by the permit conditions, including closing out the permit. The Design-Build Firm shall note that permits for gopher tortoise relocation for areas outside of the Department owned Right of Way (i.e. utility easements; license agreements) cannot be obtained with

the Department as the “permittee”, per FWC requirements. Should permits in areas outside of the Right of Way be required, the Department will still perform the oversight of the process as described above. The Design-Build Firm will be required to pay all permit fees including any and all fees associated with the relocation of gopher tortoises. Any fines levied by permitting agencies shall be the responsibility of the Design-Build Firm.

There is one eagle nest documented in the FWC Eagle Nest Locator database located north of SW 10th Street adjacent to Quiet Waters Park and east of the northbound off-ramp of the Turnpike. The Department will be responsible for conducting an updated bald eagle nest survey in accordance with the Bald and Golden Eagle Act survey requirements. The Design-Build Firm will be responsible for Bald Eagle avoidance and minimization measures including appropriate construction timing, nest observation during construction, contractor education, and creating a visual buffer between the nest and the proposed improvements.

The Design-Build Firm will have to abide by the Standard Protection Measures for the Eastern Indigo Snake during construction. The proposed Project improvements will require permits from federal, state, and local regulatory agencies, including the Florida Department of Environmental Protection (FDEP), South Florida Water Management District (SFWMD), and Broward County Environmental Protection and Growth Management Department (BCEPGMD). The Department has identified a number of regulatory permits that will likely be required for the Project. This list is indicative only and is not meant to be comprehensive. In the interest of expediency, the Department has commenced the process for securing the following permits until execution of the Agreement:

1. SFWMD Conceptual Environmental Resources Permits (separate permits for Basins C-1, C-2 and C-3)
2. FDEP State Section 404 Permits (separate permits for Basins C-1, C-2 and C-3)

These permit applications have been submitted to the regulatory agencies and are provided in Attachment E, along with all Requests for Additional Information (RAI) letters and responses to the regulatory agencies. The Design-Build Firm is advised that the permit plans and permit sketches submitted to the various regulatory agencies have been provided for preliminary permitting purposes only and are subject to change based on the Final Design. In the event that the Department has secured any of these permits, the Design-Build Firm shall be responsible for complying with all permit conditions. The Design-Build Firm shall also be responsible for modifying these permits, if such modifications are acceptable by the applicable regulatory agency, to reflect the Final Design components. The Design-Build Firm shall also be responsible for applying for an extension or applying for a new permit, should the time frame expire for permits obtained by the Department or the Design-Build Firm.

The Department has identified additional regulatory permits that will likely be required for this Project and will be the responsibility of the Design-Build Firm for procuring. This list is indicative only and is not meant to be comprehensive:

1. SFWMD Construction Environmental Resources Permit(s)
2. SFWMD Water Use (Dewatering) Permit(s)
3. SFWMD Right of Way Occupancy Permit(s)
4. FDEP State Section 404 Permit
5. FDEP National Pollutant Discharge Elimination System (NPDES)
6. BCEPGMD Stormwater Management License(s)

The Design-Build Firm shall be responsible for obtaining all permits required for the Project, as well as any permit modifications, re-permitting of expired permits, local permits, building permits, and any

construction permits related to the final design components. This also includes any permits still pending at the time of execution of the Agreement. The Design-Build Firm must comply with all permit conditions, environmental mitigation and other permitting requirements. Should any penalties be assigned including additional mitigation as a result of the Design-Build Firm's actions that are not in compliance with permit conditions, the Design-Build Firm will be responsible for such penalties/mitigation.

Unless specifically identified otherwise, the design and construction of any alternate design approach identified within this RFQ is not a requirement of this RFQ. The Design-Build Firm is not responsible for any permitting or commenting agency coordination or other impacts to the permit processes that would be associated with any alternate design approach, unless the Design-Build Firm chooses to include the alternate design approach in its Proposal.

- **NEPA Requirements**

In accordance with NEPA, several environmental agency coordination meetings and concurrence reviews have been ongoing for the Project. The District Planning and Environmental Management office will continue to coordinate with these agencies and provide additional information or surveys as requested throughout the design and construction phases.

- **Cultural Resources**

In accordance with the PD&E Manual, Part 2, Chapter 8 requirements, a Cultural Resources Assessment Survey (CRAS) was performed for the Project corridor during the Project Development and Environment (PD&E) Study phase to identify cultural resources within the Area of Potential Effect (APE) and the potential for impacts associated with Project construction to such resources. The following documents are included in Reference Document 2:

- *CRAS for SR-9/I-95 from South of SW 10<sup>th</sup> Street (MP 22.00) to North of Hillsboro Boulevard (MP 25.10), Broward County, Florida. FM No: 436964-1-22-01, dated November 2018*
- *CRAS Addendum for SR-9/I-95 from South of SW 10<sup>th</sup> Street (MP 22.00) to North of Hillsboro Boulevard (MP 25.10), Broward County, Florida. FM No: 436964-1-22-01, dated April 2021*
- *CRAS for the State Road 869 / SW 10<sup>th</sup> Street Connector - SW 10<sup>th</sup> Street from Florida's Turnpike / Sawgrass Expressway to I-95 – FDOT FMN: 439891-1, dated September 2018*

Based on the CRAS, the Project will not have significant impacts to cultural resources and SHPO concurred.

Although unlikely, should construction activities uncover any archaeological material, it is required that activity in the immediate area be stopped while a professional archaeologist evaluates the material. The Design-Build Firm shall notify Lynn Kelley, FDOT District 4 PLEMO at 954-777-4334 to arrange for the archaeologist. All archaeological services will be provided by District 4.

- **Section 4(f) (federal projects only)**

No Section 4(f) involvement is anticipated for the Project.

- **Wetlands, Wildlife and Habitat, and Mitigation:**

The Project will result in 1.99 acres of impacts to excavated stormwater conveyance features. These surface water impacts will occur to excavated stormwater management facilities associated with I-95 in which water quality/quantity impacts will be addressed through improvements to the existing stormwater management system. As such, compensatory mitigation is not required. These surface water impacts shall be minimized by the Design-Build Firm to the greatest extent practicable during the Project's design and permitting phase. The Design-Build Firm shall review the Natural Resources Evaluation Report (NRE).

Per the NRE, it was determined that several Federal and State protected species have the potential to occur in the Project corridor. In order to ensure that the proposed Project will not adversely impact these species, the Design-Build Firm shall adhere to the following measures established by Department:

- While mitigation is not anticipated, any adverse impacts to suitable foraging habitat for the federally listed wood stork for which mitigation is deemed necessary will be mitigated through the purchase of credits from a FWS-approved mitigation bank pursuant to Section 373.4137, F.S. or as otherwise agreed to by the FDOT and the FWS.
- Should protected plant species be identified within the Project impact area during the design and permitting phase, coordination will be initiated with the FDACS or other appropriate agencies to allow for relocation to adjacent habitat or other suitable protected lands prior to construction.
- Should gopher tortoise burrows be identified within the Project area, the FDOT will avoid burrows in accordance with FWC regulations. For burrows that cannot be avoided during construction, the FDOT will apply for a gopher tortoise relocation permit from the FWC.
- During the construction phase of this Project, the FDOT will implement the Standard Specifications for Road and Bridge Construction and other best management practices to avoid, where possible, and otherwise minimize adverse impacts to wetlands/surface waters and water quality within the Project limits to the maximum extent practicable.

- **Contamination:**

In accordance with Department Policy and Federal Highway Administration (FHWA) requirements, a Contamination Screening Evaluation Report (CSER) was performed for the Project corridor during the Project Development and Environment (PD&E) Study phase to determine the potential for contamination involvement associated with Project construction. An Environmental Features Identification (EFID) Memorandum was also prepared by the FDOT to identify environmental issues along the corridor, including contamination concerns. The following documents are included in Reference Document 2:

- *CSER for SR-9/I-95 from South of SW 10<sup>th</sup> Street (MP 22.00) to North of Hillsboro Boulevard (MP 25.10), Broward County, Florida. FM No: 436964-1-22-01, dated May 2021*
- *CSER Update Memorandum, dated September 2022*
- *CSER for the State Road 869 / SW 10th Street Connector - SW 10th Street from Florida's Turnpike / Sawgrass Expressway to I-95 – FDOT FMN: 439891-1 – December 2018*
- *Level II Contamination Assessment Report Addendum for the SW 10<sup>th</sup> Street Ponds – FDOT FMN: 439891-1 – August 2021*
- *Level II Contamination Assessment Report Addendum No. 1 for the SW 10<sup>th</sup> Street Ponds – Parcel 14 (Crystal Lake) – FDOT FMN: 439891-1 and 436963-1 – October 2022*

Based on the CSER and Level I contamination review, as well as the soil and groundwater sampling results summarized in the Level II contamination review, areas of groundwater contamination in excess of the Florida cleanup target levels (CTLs) have been identified and documented adjacent to the Project corridor.

In addition, solid waste (construction debris) was identified from grade to 5 feet below the ground surface in the area of a proposed future stormwater pond expansion located adjacent south of Green Road and east of Powerline Road (Parcel 14). Detailed information regarding management of the contamination along the Project corridors is included in the sections that follow.

### **Design and Coordination**

The Design-Build Firm shall review the above-mentioned reports which detail the presence of known or potential impacts due to contamination on and near the Project corridor. The Design-Build Firm shall then schedule an Environmental Coordination meeting with the District Contamination Impact Coordinator (DCIC) to discuss the contamination-based issues on the Project. The DCIC can be contacted at 954-777-4286. Subsequently, the DCIC or designee will attend the Design Progress Meetings. During such meetings, the Design-Build Firm shall work together with the DCIC to prepare design and propose construction methods that would avoid potential contamination impacts, as feasible. The Design-Build Firm has the opportunity to present innovative approaches to the design of the Project that will reduce costs in the areas where contamination impacts are present.

As Project plans are prepared and at each step of the submittal process, the Design-Build Firm shall be responsible to provide plans to the DCIC for review and approval within and near the areas deemed contaminated, and for the Department to determine if appropriate plans notes and/or if additional contamination assessment is warranted.

The Department will have a District Wide Contamination Assessment and Remediation Contractor (CAR Contractor) qualified to perform assessments and remedial construction services within and near the contaminated areas. If required, such CAR Contractor working under a separate contract will assist the Design-Build Firm with remedial and/or construction activities within and near contaminated areas as directed and approved by the DCIC.

### **Contaminated Soils Management**

There is potential soil contamination within the SW 10th St. corridor. Potentially contaminated areas shall be treated as Identified Areas of Contamination. Stockpile any soil that will not be reused from Deerfield Beach Lakes, LLC property for testing. All non-contaminated soils not used for the Project shall be removed; offsite removal of soils requires Engineer approval. The Department's CAR Contractor will be responsible for the testing, removal, handling, transportation, and disposal of all identified and unidentified, contaminated and/or hazardous materials encountered during construction, in accordance with Standard Specification 120 Excavation and Embankment.

### **Potential Contaminated Sediments**

There is no canal sediment excavation associated with the I-95 or SW 10<sup>th</sup> St corridors.

### **Contaminated Groundwater Management**

Documented groundwater contamination has been identified at the following locations adjacent to the Project corridor:

- FDEP ID: 9817567 – TV Guy Orlando LLC – Tanker Spill at I-95 Northbound at Sample Road, Pompano Beach

However, because the proposed improvements are located beyond 500 feet of the observed radius of influence, no contamination impact is anticipated.



Due to the presence of aluminum in groundwater exceeding the groundwater CTL in the area of a proposed future stormwater pond expansion located adjacent south of Green Road and east of Powerline Road (Parcel 14), a remediation action plan shall be developed by the CAR Contractor in cooperation with the Prime Contractor and Engineer, and shall be implemented accordingly.

### **Current Remediation**

No active remediation activities are being conducted within the Project corridor prior to the beginning of construction activities, as of September 22, 2022. However, active monitoring activity is taking place within the Project corridor at the TV Guy Orlando, LLC Tanker Spill location, located between I-95 northbound lanes and the eastern sound barrier wall. Broward County has requested the development of a Natural Attenuation Monitoring Plan to continue Total Xylene management and reduction. The Department will continue to follow up on the status of this project, until No Further Action has been obtained by the regulatory agency.

### **Asbestos Containing Materials**

Asbestos inspections and surveys were completed to determine the location of Asbestos Containing Materials (ACM) on the Project bridges. Asbestos Survey Reports (ASRs) are available for the following bridges along the Project corridor:

- Bridge No. 860123 (State Road-869 and State Road-9)
- Bridge No. 860553 (State Road-869 Service Road/ SC Railroad Bridge)
- Bridge No. 860557 (Eastbound Southwest 10<sup>th</sup> Street over Southwest 12<sup>th</sup> Avenue)
- Bridge No. 860194 (Northbound Interstate 95 Over Hillsboro Boulevard)
- Bridge No. 860124 (Southbound Interstate 95 Over Hillsboro Boulevard)
- Bridge No. 860122 (Northeast 48<sup>th</sup> Street over Interstate 95) Asbestos Survey Report (ASR)
- Bridge No. 860564 (Southbound Interstate 95 Exit Ramp to Southwest 10<sup>th</sup> Street)

According to the available ASRs, no ACM was identified for the above bridges in the samples collected. The ASRs are included under Reference Document 2 and should be reviewed by the Design-Build Firm prior to any work being performed on these structures.

Any additional suspect ACM not covered in the provided reports shall be identified, sampled and analyzed by the Design-Build Firm's Asbestos Consultant as needed. The Asbestos Consultant will be responsible for:

- i. Making all required agency notifications, securing permits, preparation of plans and specifications for asbestos removal and/or wet demolition, monitoring the abatement (including clearance sampling when determined to be necessary by the Asbestos Consultant and/or as required by regulation) and/or wet demolition work, rehabilitation or demolition, approval of pre-job and post-job submittals, keeping daily logs, air monitoring and final clearance samples, preparation of the final report, etc.
- ii. All coordination, notifications, and document submittals.
- iii. Submitting a Notice of Asbestos Renovation or Demolition to Broward County (delegated by FDEP) a minimum of ten (10) working days prior to initiating any renovation or demolition activity that includes the following pursuant to Broward County's air quality code Chapter 27, Section 27-180:
  - Statement of Responsibilities Regarding Asbestos

- Notice of Demolition or Asbestos Renovation
- Thorough asbestos survey of the Project
- Fee determined according to the Broward County Fee Schedule

### **Heavy Metals Bridge Screening**

All existing bridges within the Project corridor are concrete structures, therefore, no heavy metal bridge screening is required.

### **Permits**

The Design-Build Firm shall meet any of the general and/or special conditions included in the SFWMD Water Use (Master Dewatering) Permit that covers this Project. The Design-Build Firm shall submit any needed modifications to the Master Dewatering Permit that covers the Project. The Design-Build Firm shall be responsible for any required permit fees.

### **General Provisions**

Based on the review of available information, Monitoring Wells (MWs) were identified within the FDOT ROW at the following locations:

- Twenty-two (22) MWs on east side of Northbound I-95, north of Sample Road at TV Guy Orlando LLC Tanker Spill facility (FDEP ID: 9817567)

Additional MWs may be present within the FDOT ROW along the Project corridor(s). For groundwater monitoring wells found within the Project Right of Way, the Design-Build Firm shall be required to adhere to Subarticle 110-10.1 of Section 110 (Clearing and Grubbing) in the FDOT Standard Specifications for Road and Bridge Construction – “Water Wells Required to be Plugged.” If conflicts with existing MWs are identified and deemed unavoidable, the Design-Build Firm shall schedule a meeting with the DCIC at least 4 weeks prior to any activities with potential to disturb existing MWs to determine scheduling and proper abandonment of the MWs. The CAR Contractor will be responsible for abandoning the MWs and coordinating with the regulatory agencies, as deemed necessary.

The Design-Build Firm shall indemnify the Department against any and all claims arising from Design-Build Firm’s handling, storage, transportation or disposal of contaminated materials. The Design-Build Firm shall also be solely and totally responsible, at its own cost, for completely assessing and remediating any contamination caused by its own activities in accordance with applicable environmental regulatory requirements. This includes but is not limited to spillage/leakage of contaminants from equipment and/or portable tanks used in constructing the Project.

### **TSM&O SPECIFIC**

#### **Contamination:**

In accordance with Department policy and Federal Highway Administration (FHWA) requirements, Contamination Screening Evaluation Reports (CSER) were performed for the SW 10th St. Connector during the Project Development and Environment (PD&E) Study phase to determine the potential for contamination involvement associated with Project construction. An Environmental Features Identification (EFID) Memorandum was also prepared by the FDOT to identify environmental issues along the corridor, including contamination concerns. The following documents are included in Reference Documents 2 and 8.b:

- *CSER for SR-9/I-95 from South of SW 10<sup>th</sup> Street (Mile Post {MP} 22.00) To North of Hillsboro*

*Boulevard (MP 25.10) - FDOT FMN: 436964-1-22-01 – May 2021*

- *CSER for the State Road 869 / SW 10<sup>th</sup> Street Connector - SW 10<sup>th</sup> Street from Florida's Turnpike / Sawgrass Expressway to I-95 – FDOT FMN: 439891-1 – December 2018*
- *Type I Categorical Exclusion (CE) EFID Memorandum – FDOT FMN: 439891-5 SR-869/SW 10<sup>th</sup> Street Connector TSM&O Smart Work Zone – April 2022*

Based on the documents above and the findings from the updated Level I contamination review conducted for the Project, Level II contamination assessments (including bridge testing) were conducted by the Department to determine the potential for construction impacts associated with soil and groundwater contamination, and the presence of asbestos containing materials (ACM) and/or metal-based paint (MBP) on structures along the Project corridor. Results from the Level II activities conducted in August 2021 and April 2022 (corresponding reports dates of November 2021 and June 2022, respectively) and available bridge survey reports from the FDOT are found in the following documents included in Reference Document 8.b:

- *Bridge No. 860315 (SR- 810/Hillsboro Boulevard over C-2 Canal) Asbestos Survey Report (ASR), dated August 2021*
- *Bridge No. 860124 (SB I-95 over Hillsboro Boulevard) ASR, dated August 2011*
- *Bridge No. 860194 (NB I-95 over Hillsboro Boulevard) ASR, dated August 2011*
- *Bridge No. 860121 (SB I-95/SR-9 over SR-834/Sample Road) ASR, dated November 2006*
- *Bridge No. 860178 (NB I-95/SR-9 over SR-834/Sample Road) ASR, dated November 2006*
- *Bridge No. 860251 (EB SR-834/Sample Rd. over Florida's Turnpike) ASR, dated May 2010*
- *Bridge No. 860406 (WB SR-834/Sample Rd. over Florida's Turnpike) ASR, dated October 2009*
- *Bridge No. 860586 (Hillsboro Blvd over Florida's Turnpike) ASR, dated October 2015*
- *Bridge No. 860502/860503 (EB/WB Sawgrass Expressway over SR-7/US-441) ASR, dated January 2010*
- *Bridge No. 860593 (SR-7/US-441 over SR-834/Sample Rd.) Asbestos Survey, Limited Toxicity Characteristic Leaching Procedure (TCLP) Sampling, And Paint Screening Survey Report, dated April 2019 (\*includes Bridge No. 860644)*
- *Level II Contamination Assessment Report (CAR), SR-869/SW 10<sup>th</sup> St Connector TSM&O Smart Work Zone – FDOT FMN: 439891-5 – November 2021*
- *Level II CAR, SR-869/SW 10<sup>th</sup> St Connector TSM&O Smart Work Zone – FDOT FMN: 439891-5 – June 2022*
- *Impact to Construction Assessment (ICA) Report for SR-869/SW 10<sup>th</sup> St Connector TSM&O Smart Work Zone, Broward County, Florida – FDOT FMN: 439891-5 – June 2022*

Based on the CSER and Level II CAR Reports, areas of soil and groundwater contamination in excess of the Florida cleanup target levels (CTLs) have been identified and documented in the ICA Report referenced above. The ICA Report includes details of all assessment activities and supersedes all past assessment reports. Information regarding management of the contamination along the Project corridors is summarized in the sections that follow.

### **Design and Coordination**

The Design-Build Firm shall review the above-mentioned reports which detail the presence of known or potential impacts due to contamination on and near the Project corridor. The Design-Build Firm shall then schedule an Environmental Coordination meeting with the District Contamination Impact Coordinator (DCIC) to discuss the contamination-based issues on the Project. The DCIC can be contacted at 954-777-4286. Subsequently, the DCIC or designee will attend the Design Progress Meetings. During such meetings, the Design-Build Firm shall work together with the DCIC to prepare design and propose

construction methods that would avoid potential contamination impacts, as feasible. The Design-Build Firm has the opportunity to present innovative approaches to the design of the Project that will reduce costs in the areas where contamination impacts are present.

As Project plans are prepared and at each step of the submittal process, the Design-Build Firm shall be responsible to provide plans to the DCIC for review and approval within and near the areas deemed contaminated, and for the Department to determine if appropriate plans notes and/or if additional contamination assessment is warranted.

The Department will have a District Wide Contamination Assessment and Remediation Contractor (CAR Contractor) qualified to perform assessments and remedial construction services within and near the contaminated areas. If required, such CAR Contractor working under a separate contract will assist the Design-Build Firm with remedial and/or construction activities within and near contaminated areas as directed and approved by the DCIC.

### **Contaminated Soils Management**

Contaminants of concern and specific locations of contaminated soils have been determined during the Level II Assessments conducted in August 2021 and April 2022. The Level II CAR Reports dated November 2021 and June 2022 are included in Reference Document 8.b. In particular, contaminated soils exceeding commercial/industrial cleanup target levels may be found at the following locations adjacent to the FDOT ROW (reported stationing is from the Draft ITS Conceptual Plans dated 2/1/22):

- Pierre's Auto Repair Service Inc (FDEP ID No. 8501611) - located at 3991 North Dixie Highway, Pompano Beach (approximate STA. 5017+20 RT)
- Texaco Food Mart (FDEP ID No. 8501850) - located at 4791 N Federal Hwy, Pompano Beach (approximate STA. 6055+20 LT)
- AMP Petroleum Enterprise Inc. (FDEP ID No. 8501788) - located at 560 W Sample Rd, Pompano Beach (approximate STA. 255+40 RT)

The Design-Build Firm may be responsible for excavation and stockpiling of soils in the areas listed above. The Department will be responsible for the testing, removal, handling, transportation, and disposal of all identified and unidentified, contaminated and/or hazardous materials encountered during construction, in accordance with Standard Specification 120 Excavation and Embankment.

The Design-Build Firm is advised that soil removed by ground disturbing activities from the identified areas shall be stockpiled if warranted, adjacent to the immediate work area for proper testing and disposal by the CAR Contractor. The Design-Build Firm shall provide a minimum of 4 weeks notification to the FDOT Project Engineer when approaching the above referenced area. The FDOT Project Engineer shall contact the DCIC for proper coordination. In areas where the CAR Contractor performs installation of construction features, the CAR Contractor will only provide equipment and labor to perform the direct installation of construction features through contaminated areas. The CAR Contractor's scope of work will be limited to performing installation, backfill and compaction activities up to 2 feet (may change based on particular area and upon approval of DCIC) below the existing grade or proposed finished grade, whichever is lower. The Design-Build Firm is responsible for all work from the above referenced elevation to the finished grade elevation.

Contaminated soils exceeding FDEP Commercial/Industrial Cleanup standards shall be excavated and stockpiled by the Design-Build Firm for testing and disposal by the CAR Contractor. If soils below the Commercial standards are deemed suitable, they can be reused within the Project corridor; the Design-Build Firm shall incorporate reusable soils within the Project corridor at no additional cost to the

Department. If soils below Commercial standards are deemed unsuitable, the Design-Build Firm should coordinate with the CAR Contractor for proper management and/or disposal of such materials. Detailed information regarding the areas that may require CAR Contractor involvement are included in the ICA Report.

The Design-Build Firm shall be responsible for the performance of all quality control testing (densities etc.) of the work performed by the CAR Contractor; however, the Design-Build Firm will not be responsible for the quality of the work associated with work activities performed by the CAR Contractor.

The Design-Build Firm shall be responsible to provide and pay for Maintenance of Traffic, bedding materials, suitable fill materials, structures, pipe, and other associated materials necessary to accomplish the scope of work through the contaminated areas.

The Design-Build Firm, at no additional cost to the Department, shall prepare work areas prior to the mobilization of the CAR Contractor to include clearing and grubbing, provide the CAR Contractor adequate storage and equipment laydown facilities in reasonable proximity to the work areas and provide areas with sufficient capacity to stockpile, sample and subsequently dispose of contaminated soils.

### **Potential Contaminated Sediments**

One water crossing is located within the Project corridor along SR-810/Hillsboro Boulevard at the C-2 Canal. However, sediments have not been screened at the crossing location as no in-water excavation activities are anticipated for this Project. Should any canal sediments be excavated, stockpile excavated material that will not be reused for testing by the CAR Contractor. All non-contaminated canal sediment not used for the Project shall be removed; offsite removal of canal sediment requires Engineer approval.

### **Contaminated Groundwater Management**

Due to the Project's scope of work, groundwater impacts are not anticipated. However, if dewatering is required during construction activities, groundwater management may be necessary in association with the sites listed below. Documented groundwater contamination has been identified at the following locations near the following project corridors:

- FDEP Facility ID (FID)# 8502705 — Sample BP LLC — 3601 N Dixie Hwy, Pompano Beach
- FDEP FID# 8501611 — Pierre's Auto Repair Service Inc — 3991 N Dixie Hwy, Pompano Beach
- FDEP FID# 8502103 — Speedway #6442 — 900 E Sample Rd, Pompano Beach
- FDEP FID# ERIC\_4163 — Dry Cleaning Depot - Former — 1530 E Sample Rd, Pompano Beach
- FDEP FID# 8502854 — Sunoco Lighthouse — 3900 N Federal Hwy, Lighthouse Point
- FDEP FID# ERIC\_3933 — Flash Cleaners — 4131 N Federal Hwy, Pompano Beach
- FDEP FID# 8502880 — SK Marathon — 4517 N Dixie Hwy, Deerfield Beach
- FDEP FID# 8501850 — Texaco Food Mart — 4791 N Federal Hwy, Pompano Beach
- FDEP FID# 8502070 — Exxon-Lighthouse — 4891 N Federal Hwy, Pompano Beach
- FDEP FID# 8502181 — Sunshine #49 — 4900 N Federal Hwy, Lighthouse Point
- FDEP FID# ERIC\_4175 — Roberts Cleaners & Tailors — 5030 N Federal Hwy, Lighthouse Point
- FDEP FID# 8943423 — Sheehan Cadillac LLC — 5101 N Federal Hwy, Pompano Beach
- FDEP FID# 8502223 — M & A Brothers Realty No. 17 Inc — 5391 N Federal Hwy, Pompano Beach
- FDEP FID# ERIC\_4168 — Nu - Look One Hour Cleaners — 1203 S Federal Hwy, Deerfield Beach

- FDEP FID# ERIC\_14943 — Jim's Radiator & Auto Air — 1171 SW 1st Way, Deerfield Beach
- FDEP FID# 8501924 — Chevron-Federal Hwy Food Mart — 998 S Federal Hwy, Deerfield Beach
- FDEP FID# ERIC\_4060 — Sutton Place Cleaners — 814 S Federal Hwy, Deerfield Beach
- FDEP FID# 8502873 — Speedway #6490 — 714 S Federal Hwy, Deerfield Beach
- FDEP FID# 8501702 — Sunshine #357 — 1790 W Hillsboro Blvd, Deerfield Beach
- FDEP FID# 8501892 — 7-Eleven Store #34943 — 10 N Federal Hwy, Deerfield Beach
- FDEP FID# 8943503 — Deerfield Shell — 301 W Hillsboro Blvd, Deerfield Beach
- FDEP FID# 8501456 — Shell-First Coast Energy #1814 — 5 N Federal Hwy (# US1), Deerfield Beach
- FDEP FID# 8501788 — AMP Petroleum Enterprise Inc — 560 W Sample Rd, Pompano Beach
- FDEP FID# 8501787 — Chevron-Assura Shaun Corp — 390 W Sample Rd, Pompano Beach
- FDEP FID# 9817567 — BTV Guy Orlando LLC - Tanker Spill — 1-95 Northbound at Sample Rd, Pompano Beach
- FDEP FID# ERIC\_17977 — Sample Shell — 301 E Sample Rd, Pompano Beach
- FDEP FID# 8501737 — Sunshine #523 — 2031 W Sample Rd, Deerfield Beach
- FDEP FID# 8501784 — 7-Eleven Store #34946 — 3560 N Powerline Rd, Pompano Beach
- FDEP FID# 8501761 — U-Gas #3203 Lighthouse Point — 5200 N Federal Hwy, Lighthouse Point
- FDEP FID# 8731807 — Shell-First Coast Energy #1801 — 390 S Powerline Rd, Deerfield Beach
- FDEP FID# 8625891 — Richs Landscaping — 1410 S Powerline Rd, Deerfield Beach
- FDEP FID# ERIC\_14937 — Hardrives Asphalt Company — 5701 N Powerline Rd, Ft Lauderdale
- FDEP FID# 55469 — Sun Recycling #8 — 1410 S. Powerline Rd, Deerfield Beach
- FDEP FID# ERIC\_4213 — Club Cleaners — 6572 N SR 7, Coconut Creek
- FDEP FID# ERIC\_4107 — J & H Cleaners, 825 W Sample Rd — Pompano Beach
- FDEP FID# BF061301001 — 5001 North Federal Highway Site — 5001 North Federal Highway, Pompano Beach
- FDEP FID# ERIC\_6601 — BP Amoco #7044 — 6700 North State Road 7, Coconut Creek
- FDEP FID# ERIC\_7557 — Former Deerfield Builders Supply — 77 SE 2nd Ave, Deerfield Beach
- FDEP FID# ERIC\_7373 — Walmart #1517 — 5001 N Federal Hwy, Pompano Beach
- FDEP FID# ERIC\_7548 — Hillsboro Technological Center (HTC) Parcel B — 50 Hillsboro Technology Dr, Deerfield Beach
- FDEP FID# ERIC\_4134 — 60-Minute Cleaners — 1090 E Hillsboro Blvd, Deerfield Beach
- FDEP FID# ERIC\_6991 — Deerfield Beach Lakes, LLC — 4862 N Powerline Rd, Pompano Beach
- FDEP FID# 8945020 — Western Beverage LLC — 50 Lock Rd, Deerfield Beach
- FDEP FID# ERIC\_4151 — Dry Clean USA #11416 — 3720 W Hillsboro Blvd, Deerfield Beach
- FDEP FID# 8502653 — Sonnys Brushless Car Wash #009 — 5190 N Federal Hwy, Lighthouse Point
- FDEP FID# ERIC\_4244 — Spot Busters — 6750 N State Road 7, Coconut Creek
- FDEP FID# ERIC\_4102 — Dryclean USA - Kimco #604 — 5528 W Sample Rd, Margate
- FDEP FID# ERIC\_4140 — Tip Top Cleaners — 4400 W Sample Rd, Coconut Creek
- FDEP FID# 8502264 — Shell-First Coast Energy #3810 - Now A TD Bank — 3600 N Federal Hwy, Lighthouse Point

- FDEP FID# ERIC\_10327 — Former Hillsboro Pines Golf Course — 450 Century Boulevard
- FDEP FID# FL0000539254 — Gator Metal Finishing, LLC — 1649 SW 1st Way # B-1
- FDEP FID# FLR000047746 — Powerline Business Park — 4100 N Powerline Rd Bldg C5

The Design-Build Firm shall coordinate with the DCIC during the Project design phase for technical assistance prior to applying for a dewatering permit from any environmental regulatory agency to determine proper groundwater management associated with such sites.

In the case of dewatering within or near contaminated areas, the CAR Contractor will only be responsible for the proper management and/or disposal of the contaminated effluent from the Design-Build Firm's dewatering operation. The Design-Build Firm shall provide a minimum of 90-days notification to the FDOT Project Engineer when approaching the areas noted above if dewatering is proposed. The Design-Build Firm, at no additional costs to the Department, shall provide adequate staging areas for the CAR Contractor's remedial work, treatment equipment, and transport of the dewatering effluent to the established treatment systems as needed.

### **Current Remediation**

No remediation activities are being conducted within the Project corridor(s) at this time.

### **Asbestos Containing Materials**

Asbestos inspections and surveys were conducted to determine the presence and location of ACM. ASRs are available for the following bridges along the Project corridor:

- Bridge No. 860315 (SR-810/Hillsboro Boulevard over C-2 Canal)
- Bridge No. 860124 (SB I-95 over Hillsboro Boulevard)
- Bridge No. 860194 (NB I-95 over Hillsboro Boulevard)
- Bridge No. 860121 (SB I-95/SR-9 over SR-834 (Sample Rd.))
- Bridge No. 860178 (NB I-95/SR-9 over SR-834 (Sample Rd.))
- Bridge No. 860251 (EB SR-834/Sample Rd. over Florida's Turnpike)
- Bridge No. 860406 (WB SR-834/Sample Rd. over Florida's Turnpike)
- Bridge No. 860586 (Hillsboro Blvd over Florida's Turnpike)
- Bridge No. 860503 (WB Sawgrass Expressway over SR-7/US-441)
- Bridge No. 860502 (EB Sawgrass Expressway over SR-7/US-441)
- Bridge No. 860593 (SB SR-7/US-441 over SR-834/Sample Rd.)
- Bridge No. 860644 (NB SR-7/US-441 over SR-834/Sample Rd.)

According to the available ASRs, no ACM was identified for the above bridges in the samples collected, with the exception of Bridge No. 860251 where ACM was found in the Class 5 Finish on the end and intermediate bents. The ASRs are included under Reference Document 8.b and should be consulted by the Design-Build Firm prior to any work being performed on these structures.

Any additional suspect ACM not covered in the provided reports shall be identified, sampled and analyzed by the Design-Build Firm's Asbestos Consultant as needed. The Asbestos Consultant will be responsible for:

- i. Making all required agency notifications, securing permits, preparation of plans and specifications for asbestos removal and/or wet demolition, monitoring the abatement (including clearance sampling when determined to be necessary by the Asbestos Consultant and/or as required by regulation) and/or wet demolition work, rehabilitation or demolition, approval of pre-job and post-job submittals, keeping daily logs, air monitoring and final clearance samples, preparation of the final report, etc.

- ii. All coordination, notifications, and document submittals.
- iii. Submitting a Notice of Asbestos Renovation or Demolition [DEP Form 62-257.900(1)] to the Florida Department of Environmental Protection (FDEP) – and/or delegated local agency - a minimum of ten (10) working days prior to initiating any renovation or demolition activity.

The Asbestos Consultant will need to contact the Florida Department of Environmental Protection (FDEP) to determine the appropriate notification for the project.

### **Heavy Metals Bridge Screening**

All bridges within the Project corridor, with the exception of Bridges No. 860593 and 860644 (SR-7/US-441 over SR-834/Sample Rd.), are concrete structures (see Table 1 in ICA - Appendix C or RFQ).

TCLP Sampling and Paint Screening Surveys were completed for Bridges No. 860593 and 860644 to identify and determine heavy metal impacts to bridges with steel components. Heavy metals, including cadmium, chromium, lead, and zinc were detected above the reporting limit for the representative painted surface sample. Therefore, for any work activities proposed that may disturb the steel coating system, a licensed and qualified (painting) contractor/consultant will be required as it does present a potential health and safety risk. The TCLP test results indicated that the waste stream associated with the paint chips from the bridge's steel coating system is non-hazardous. The TCLP sampling and paint screening report is found in Reference Document 8.b and should be consulted by the Design-Build Firm prior to any work being performed on these structures.

The Design-Build Firm shall conform to all Federal, State and Local regulations when working with lead-based paint. The Design-Build Firm will need to review Section 110-6 through Section 110-9 of the FDOT Standard Specifications and conform to these requirements. Section 10.4.4.2 of the FDOT CAMP states that the contractor or subcontractor that will perform painting renovation, rehabilitation or demolition work on bridge components coated with Lead Based Paint (LBP) must meet the requirements outlined for Category "A" contractors, as defined in the Society for Protective Coatings (SSPC) Qualification Procedure No. 2 (QP2) Standard Procedure for the Qualification of Painting Contractors. This qualification process is in place to ensure that contractors engaged in activities involving LBP are properly trained and certified, training programs are accredited, and standards are set for performing activities that disturb LBP. This qualification process should be reconfirmed annually.

Under EPA regulations lead-impacted waste generated during demolition or abatement activities is handled as a solid waste or a hazardous waste, depending on the amount and form of the lead. If the maximum level of lead in an extract of a representative sample of the waste stream proposed for disposal, as determined by a Toxicity Characteristic Leaching Procedure (TCLP) laboratory analysis, is less than 5 ppm then EPA regulations allow the material to be disposed of as solid waste at a solid waste landfill. If the TCLP analysis equals or exceeds 5 ppm, the material must be managed as a hazardous waste. Lead-impacted materials that are recycled, such as painted steel beams sent to a scrap metal yard, are not considered waste; therefore, they are exempt from waste disposal regulations.

### **Permits**

The Design-Build Firm shall meet any of the general and/or special conditions included in the SFWMD Water Use (Master Dewatering) Permit that covers this Project. The Design-Build Firm shall submit any needed modifications to the Master Dewatering Permit that covers the Project. The Design-Build Firm shall be responsible for any required permit fees.



### General Provisions

Based on the review of available information, Monitoring Wells (MWs) were identified within the FDOT ROW at the following locations:

- Three (3) MWs on the east side of US-1, and east of 4131 N Federal Hwy (Flash Cleaners), Pompano.
- Nine (9) MWs total, seven (7) MWs on the US-1 median, and east of 4517 N Dixie Hwy (SK Marathon), Deerfield Beach, and two (2) MWs on the east side of US-1, and east of 4517 N Dixie Hwy (SK Marathon), Deerfield Beach.
- One (1) MW on the east side of US-1, and east of 4891 N Federal Hwy (Exxon-Lighthouse), Pompano.
- Three (3) MWs on the west side of NE 22<sup>nd</sup> Ave, and east of 5030 N Federal Hwy (Roberts Cleaners & Tailors), Lighthouse Point.
- Four (4) MWs total, one (1) MW on the east side of US-1, and west of 5200 N Federal Hwy (U-Gas #3203), Lighthouse Point, and three (3) MWs south of NE 52<sup>nd</sup> Street and south of 5200 N Federal Hwy (U-Gas #3203), Lighthouse Point.
- Approximately 12 MWs at 390 S Powerline Rd (Shell-First Coast Energy #1801), Deerfield. Several Observation Wells (OWs) also identified.
- Two (2) MWs in total. One (1) MW on the west side of US-1, and east of 5 N US-1 (Shell-First Coast Energy #1814), Deerfield. One (1) on the north side of Hillsboro Blvd, and south of 5 N US-1 (Shell-First Coast Energy #1814), Deerfield.
- Two (2) OWs in total. One (1) OW on the median of Powerline Road, west of 3560 N Powerline Rd (7-Eleven Store #34946), Pompano, and one (1) OW on the median of Sample Road, north of 3560 N Powerline Rd.
- One (1) MW on the north side of West Sample Road, and north of 560 W Sample Rd (AMP Petroleum Enterprise Inc) and one (1) MW on the east side of NW 5<sup>th</sup> Terrace, and east of 560 W Sample Rd.
- Three (3) MWs on the east side of Dixie Hwy and east of 3991 N Dixie Hwy (Pierre's Auto Repair), Pompano.
- One (1) MW on the north side of Sample Rd and south of 301 E Sample Rd (Sample Shell), Pompano.

Additional MWs may be present within the FDOT ROW along the Project corridor(s). For groundwater monitoring wells found within the Project right-of-way, the Design-Build Firm shall be required to adhere to Subarticle 110-10.1 of Section 110 (Clearing and Grubbing) in the FDOT Standard Specifications for Road and Bridge Construction – “Water Wells Required to be Plugged”. If conflicts with existing MWs are identified and deemed unavoidable, the Design-Build Firm shall schedule a meeting with the DCIC at least 4 weeks prior to any activities with potential to disturb existing MWs to determine scheduling and proper abandonment of the MWs. The CAR Contractor will be responsible for abandoning the MWs and coordinating with the regulatory agencies, as deemed necessary.

The Design-Build Firm shall indemnify the Department against any and all claims arising from Design-Build Firm's handling, storage, transportation or disposal of contaminated materials. The Design-Build Firm shall also be solely and totally responsible, at its own cost, for completely assessing and remediating any contamination caused by its own activities in accordance with applicable environmental regulatory requirements. This includes but is not limited to spillage/leakage of contaminants from equipment and/or portable tanks used in constructing the Project.

**END TSM&O SPECIFIC**

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

The Design-Build Firm shall prepare signing and pavement marking plans in accordance with Department criteria.

The Design-Build Firm shall make use of the Signing Concept Plan included in Reference Document 1 as a starting point for the design. The location of signs in the Signing Concept Plan are to be used as a guide. The Design-Build Firm shall utilize the Florida Administrative Code, Chapter 14.51 (Florida's Highway Guide Sign Program) and the FDOT Traffic Engineering Manual regarding sign spacing and sequencing. Refer to Section S of this RFQ for additional requirements for Toll Amount, Lane Status, and DMS sign structures.

The Design-Build Firm shall coordinate with Florida's Turnpike Enterprise (FTE) to determine if sign structures can be placed in locations that accommodate the design of the future widening of the Sawgrass Expressway (SR 869) from west of US 441 (SR 7) to Powerline Rd (SR 845) (FPID 437153-1). This coordination shall also include determination of signs and structures that will be owned and maintained by FTE.

All new overhead static sign structures shall be designed and constructed to accommodate an additional 25% increase in the final sign panel area, to accommodate potential future sign retrofits. All Toll Amount sign structures and foundations shall be designed to accommodate a three (3) destination Toll Amount sign plus an additional 25% increase in panel area. If a three destination Toll Amount sign is not being proposed in the Signing Concept Plan, then the dimensions to be used for the calculations of a three destination Toll Amount sign shall be assumed to be 32 feet wide by 24 feet high. The Design-Build Firm is responsible to determine the dimensions of the 125% panel that will create the worst case loading scenario. A note shall be added to each sign structure cross section and to the structural Table of Variable notes that the design accounts for the 25% increase in area.

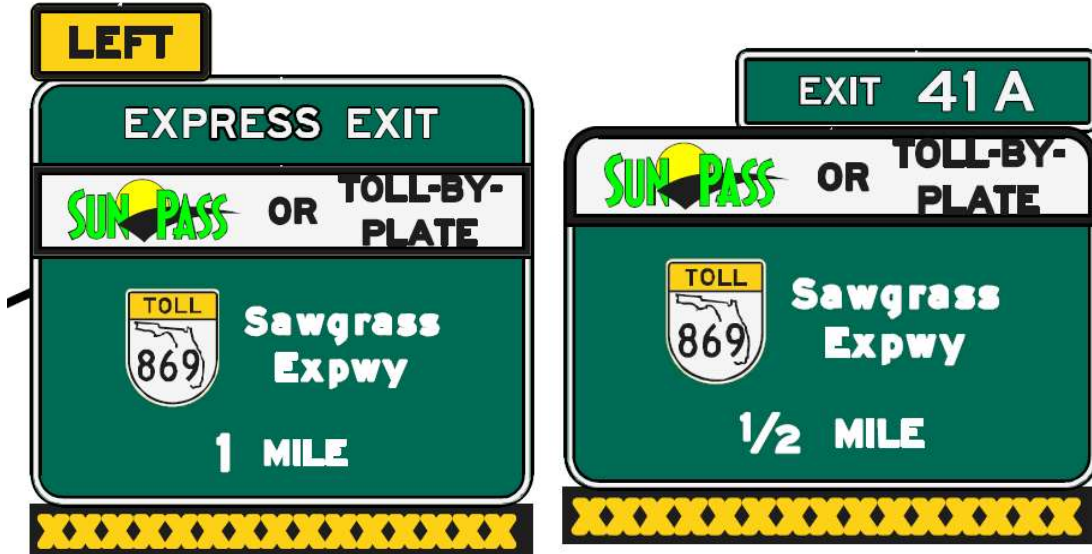
The Design-Build Firm shall be responsible for the design of all new sign supports (post, overhead span, overhead cantilever, bridge mount and any applicable foundations). The type of overhead sign structures to accommodate static signs, dynamic signs, or combination of static and dynamic signs shall be determined by the Design-Build Firm. Butterfly sign structures are not permitted for median mounted signs. The Design-Build Firm shall show all details (anchor bolt size, bolt circle, bolt length, etc.) as well as all design assumptions (wind loads, support reactions, etc.) used in the analysis. Any existing sign structure to be removed shall not be relocated and reused, unless approved by the Department.

All proposed overhead sign structures having median uprights shall be constructed such that the above ground portion of the median foundation system fits entirely within the approximate 2.0 foot to 2.5 foot width of the barrier wall. Bulb-out of the barrier wall is not allowed. All proposed overhead sign structure uprights shall be located outside the required clear zone in accordance with Chapter 215 of the FDOT FDM. At locations where clear zone requirements cannot be met, the Design-Build Firm shall provide written justifications to the Department for approval.

Any existing sign structure to be removed in the median shall include the reconstruction of the median barrier wall to remove any bulb-out.

Not all of the sign (e.g., regulatory, warning, informational, recreational, post interchange sequence, etc.) assemblies, pavement messages, and delineators that the Design-Build Firm shall provide are shown in the Signing Concept Plan included in Reference Document 1. All required signs, pavement messages, and delineators shall be shown in the design plans.

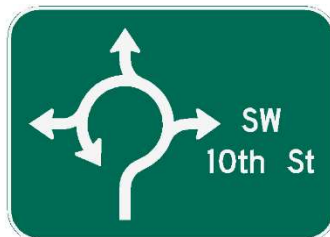
The destination on the guide signs from I-95 Express Lanes, I-95 General-Purpose Lanes, and arterials to the SW 10<sup>th</sup> Street Connector lanes shall include Sawgrass Expressway name and shield as shown below. The static sign width shall match the width of the lane status DMS.



The destination on the guide signs from Sawgrass Expressway to the SW 10<sup>th</sup> Street Connector lanes shall include destinations for Newport Center Drive and the I-95 shield as shown below. The static sign width shall match the width of the lane status DMS.



The signing on the southern two approaches to the Newport Center Dr roundabout shall include trailblazer signs for I-95 and Sawgrass Expressway. These approaches shall also include a roundabout guide sign with the legend for SW 10<sup>th</sup> Street as shown in the example below. The northern two approaches to the roundabout shall include a roundabout guide sign with no road name destinations.



It shall be the Design-Build Firm's responsibility to field inventory and show all existing signs within the Project limits and address all signage within the Project limits. Existing single and multi-post sign assemblies impacted by construction shall be entirely replaced and upgraded to meet current standards. Existing sign assemblies not impacted by construction can remain.

All proposed sign panels shall comply with the requirements of the current MUTCD and FDM, unless otherwise directed by the Department. A minimum vertical clearance of 18.5 feet shall be provided for all overhead sign structures measured from the highest elevation over the entire roadway width of the pavement and shoulder to the lowest point of a static sign panel (including luminaires where applicable).

The Design-Build Firm shall maintain the existing sign lighting during construction (or shall provide temporary lighting when existing lighting can no longer be maintained).

Reuse of existing sign structures for new sign panels will require the Design-Build Firm to provide signed and sealed documentation demonstrating that the existing structures satisfies the FDM and the governing standards per the RFQ. Should an existing sign structure not satisfy current criteria with the larger sign panels, including an additional 25% increase in panel sizes, the sign structure shall be replaced. The following existing sign structures are exempt from the additional 25% increase in panel size requirement:

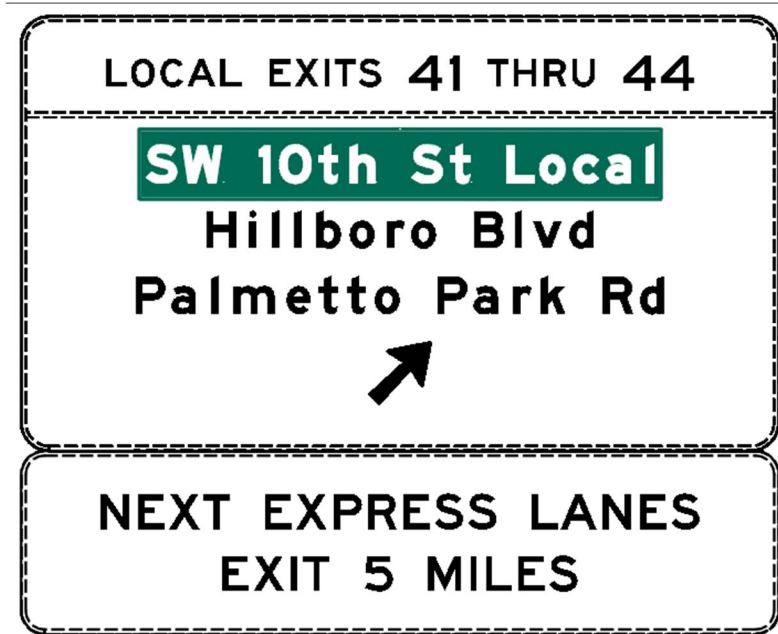
- The four northbound Toll Amount Sign retrofits within the Phase 3A-1 project limits at stations 2078+50, 2114+95, 2184+80, and 2215+80. The signs were retrofitted with the Phase 3B-1 project. Refer to the 3A-1 S&PM plans and 3B-1 S&PM plans included in Reference Document 4 for more information
- The two northbound Toll Amount Sign retrofits within the Phase 3A-2 project limits at station 2393+00 and 2416+00. Refer to the 3A-2 S&PM As-Builts included in Reference Document 4 for more information
- The two southbound Toll Amount Sign Retrofits within the Phase 3B-1 project limits at station 3174+50 and 3203+00. Refer to the 3B-1 S&PM plans included in Reference Document 4 for more information.
- The two southbound Toll Amount Sign Retrofits within the Phase 3B-2 project limits at station 3293+80 and 3320+49. Refer to the 3B-2 S&PM plans included in Reference Document 4 for more information.

Any existing sign structure to be replaced shall be constructed to maintain a continuous shoulder width (i.e. no reduced shoulder or median barrier wall bulb-out are allowed).

Existing sign structures to remain must be located outside of the proposed clear zone. No proposed barrier or extension of an existing barrier will be allowed exclusively for the protection of a sign structure. Any deviation from this stipulation must be approved by the Department.

All local business (logo) signs and recreational signs shall remain, be relocated, or replaced. Signs to remain shall adhere to the horizontal clearance criteria set forth in the FDM and shall not be placed behind a barrier whose sole purpose is to shield the sign columns. The Design-Build Firm shall be responsible for determining which signs can remain, which signs can be relocated, and which signs must be replaced, based on the Design-Build Firm's review to ensure compliance with the FDM, MUTCD, and all other governing regulations noted in the RFQ.

An overlay with the message "SW 10th St Local" will be required for the three existing to remain NB Express Lane Local Exit Sign panels as shown below:



The Design-Build Firm shall provide Wrong way signage as part of Wrong Way Vehicle Detection Systems (WWVDS) at the following off- ramps:

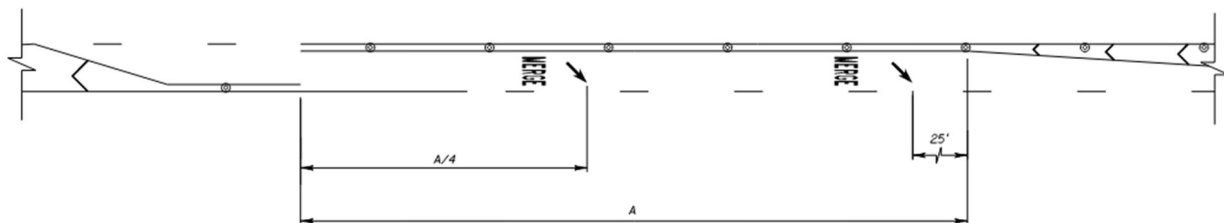
- Ramp 1229 – I-95 NB @ SW 10<sup>th</sup> Street
- Ramp 1227 – I-95 NB @ W. Hillsboro Boulevard
- Ramp 1228 – I-95 SB @ W. Hillsboro Boulevard
- Ramp 1215 – I-95 SB @ SW 10<sup>th</sup> Street

The design and installation of the WWVDS shall meet or exceed the FDOT Standard Specifications, FDOT Design Manual, and the additional requirements contained herein.

The completion of final pavement markings shall be required prior to Final Acceptance by the Department.

A minimum of two sets of Advanced Pavement Messages and Shields shall be provided for all ramps from SW 10<sup>th</sup> Street to I-95. All SW 10<sup>th</sup> Street Connector entrances from arterials shall have a minimum of one Sawgrass Expressway Pavement Shield.

A minimum of two sets of “merge” pavement messages and arrows shall be installed at Express Lane ingress and egress slip ramps as shown below.



Colored stamped asphalt shall be included in all proposed crosswalks along local SW 10<sup>th</sup> St and cross-streets, except the northbound and southbound ramp terminal intersections of local SW 10<sup>th</sup> St at I-95 ramps.

The pattern and colors of the stamped asphalt crosswalks shall be coordinated by the Design-Build Firm and approved by the Department, in coordination with the City of Deerfield Beach.

The Design-Build Firm shall submit a Signing Master Plan for review and concurrence in writing from the Department prior to any 90% design submittal for review.

### **Q. Lighting Plans**

The Design-Build Firm shall design and prepare Lighting Plans for the I-95 Express Lanes, General Purpose Lanes, Auxiliary Lanes, I-95/10<sup>th</sup> Street Connector Direct Connector ramps, impacted segments of interchange ramps, impacted segments of cross streets beneath I-95, and impacted segments of SW 10<sup>th</sup> Street (from the Sawgrass Expressway to east of SW Natura Blvd.) utilizing light emitting diode (LED) type luminaires in accordance with the FDM, Standard Specifications for Road and Bridge Construction, and Standard Plans.

Decorative light fixtures and poles shall be incorporated into the proposed lighting for following roadway facilities within the Project limits using the FP&L LED Roadway Lighting Solutions Catalog.

- Local SW 10<sup>th</sup> Street and Shared Use Path
- Newport Center Drive and SW 12th Avenue where the roads are being reconstructed and curb/gutter and sidewalk are being added
- Military Trail and Powerline Road impacted by the Project construction within the City's Right-of-Way

The Design-Build Firm shall utilize governing regulations to complete the Lighting Plans with notes as per the FDM. The Design-Build Firm shall make use of the Lighting Design Analysis Report (LDAR) included in Reference Document 1 as a starting point for the design.

A LDAR including photometric printouts shall be submitted by the Design-Build Firm to ensure sufficient illumination over the entire corridor including analysis for bridge underdeck lighting. The LDAR shall be based on Department guidelines and current conventional lighting design criteria listed in the FDM. The LDAR shall provide illumination values for all areas analyzed for the Project. A Lighting Justification Report will not be required.

The existing lighting poles constructed by I-95 Phase 3 Express Lane projects at the south (FPID 433108-5 3A-2 Project) and north (FPID 433108-6 3B-1 Project) borders of the Project may remain if they are not impacted by this Project. Except for the unimpacted Phase 3 lighting poles, the Design-Build Firm shall remove all existing light poles, foundations, junction boxes, conductors, and any other existing components or features required to be removed as part of the existing lighting system along the I-95 mainline, ramps and SW 10<sup>th</sup> Street. The existing light pole foundations shall be removed to 4 feet below the adjacent finished grade. The limits of removal of existing lighting and installation of the proposed new lighting along I-95 shall extend from south of NE 48<sup>th</sup> Street to north of the Hillsboro Blvd., including the connectors and ramps from and to SW 10<sup>th</sup> Street. The limits of removal of existing lighting and installation of the proposed new lighting along SW 10<sup>th</sup> Street shall extend from the Sawgrass Expressway to east of SW Natura Blvd.. The Design-Build Firm is responsible for locating all elements of the existing lighting systems within the limits of the Project.

Along the I-95 mainline and SW 10<sup>th</sup> Street, the existing lighting system that will be removed shall be replaced with an entirely new lighting system. The Shared Use Path shall also be illuminated if not covered by the local SW 10<sup>th</sup> Street lighting system.

The lighting system along the I-95 mainline and ramps/flyovers shall match existing 95 Phase 3 projects on the mounting height, type of luminaries and type of lighting poles.

For the lighting system along SW 10<sup>th</sup> Street, the maximum mounting height shall be 40 feet. The lighting color temperature shall follow Roadway Design Bulletin 22-02 to apply the Correlated Color Temperature (CCT) requirements of Table 231.2.3. Conventional lighting shall be used for SW 10<sup>th</sup> Street Connector Lanes, while decorative lighting shall be used for SW 10<sup>th</sup> Street local lanes and Shared Use Path (SUP). The Design-Build Firm shall coordinate with the Department, the City of Deerfield Beach and FP&L to determine the type of decorative light poles and luminaires from the FP&L LED Lighting Solutions Catalog that will be installed by FP&L and specified in the streetlighting Memorandum of Understanding to be finalized between the Department, the City of Deerfield Beach and FP&L. Decorative lighting shall have separate load center(s) including separate meter and service pole with conventional lighting used for the SW 10<sup>th</sup> Street Connector Lanes and I-95 lanes.

The Design-Build Firm shall design the lighting systems to minimize the light spilled at and beyond the right of way line along SW 10<sup>th</sup> Street. Illumination levels outside of the right of way should be less than 0.2 ft-c of spill-over light, with attention given to reducing impacts to the surrounding areas.

If wildlife areas or residential properties are within 1000 feet of the proposed lighting assemblies and have line-of-sight to a luminaire, the Design-Build Firm shall select a luminaire model that has original manufacturer's shielding options available for a potential future installation. If residential/commercial structures are directly adjacent to luminaires, determine type of shielding that would prevent light from entering nearby windows and living spaces and call for such shielding in the plans.

The Design-Build Firm shall provide a general overview of the light spill status to coordinate mitigation decisions with the District Design Office, and provide a brief summary of these coordination efforts, including the participants and results, in the LDAR per FDM 231.7. See FDM 231.2.1 for additional wildlife area requirements.

Daytime supplemental lighting may be required when the bridge structure limits natural sunlight penetration and limits a driver's visibility under the structure. The Design-Build Firm shall comply with the lighting requirements in the 2005 AASHTO Roadway Lighting Design Guide and the 2011 ANSI/IES RP-22-11 American National Standard Practice for Tunnel Lighting. These requirements apply to the SW 10<sup>th</sup> Street bridges spanning over I-95. Daytime supplemental lighting shall be provided by the Design-Build Firm at each underpass, as warranted. No daytime supplemental lighting is required for underpasses less than 80 feet in length. Daytime lighting shall be on a separate circuit from roadway lighting and underdeck lighting circuits. The LDAR shall include daytime lighting evaluation per the Turnpike Design Handbook (TDH).

LED source lighting shall meet all FDM requirements including illumination level, uniformity, and veiling luminance ratios. New high mast lighting systems will not be permitted.

The Design-Build Firm shall submit a Lighting Master Plan for review and concurrence in writing from the Department prior to any 90% design submittal for review.

Conventional lighting with an Aluminum Light Pole system shall be designed in accordance with applicable FDM criteria and with the following:

- A special spread footing foundation may be used whenever there is conflict with an underground utility and the standard concrete foundation.
- Existing underground and median barrier conduits shall not be re-used by the Design-Build Firm.

- All new conduit including a spare conduit crossing the existing roadways shall be installed by directional bore or jack and bore methods unless otherwise approved by the Department.
- The Design-Build Firm will be responsible to coordinate with FP&L for both existing service point upgrades and/or proposed service points. Location of load centers shall be accessible to maintenance personnel. The Design-Build Firm shall include all associated costs in their Work Package Proposal(s).
- The Design-Build Firm shall coordinate with the adjacent projects and investigate the existing or proposed lighting systems outside this Project limits to ensure that the proposed pole spacing will provide appropriate lighting levels between limits of existing or proposed lighting projects.
- All pull boxes shall have non-metallic covers. Pull boxes installed in the shoulder shall be Tier 22 load rated and shall include a conductor anti-theft system approved by the Department's Maintenance Office.
- Screw type foundations for light poles will not be permitted.
- One photoelectric cell shall be installed for each load center and shall be located adjacent to the load center panel.
- Allowable voltage drop from FP&L's transformer through the last luminaire on any one circuit shall be no more than 5%.
- The lighting design shall address the potential for light trespass beyond the right of way onto adjacent residential, hotel, and motel properties that are directly adjacent to the Project. The Design-Build Firm shall take the necessary measures to eliminate this condition with the use of shields or other similar fixture attachments.

The Design-Build Firm shall maintain existing lighting levels for the travel lanes throughout all phases of construction. Additional roadway lighting complying with FDM criteria shall be provided for the widened roadway and along temporary lanes used to carry traffic during all phases of construction. This may be accomplished by maintaining the existing lighting, providing temporary lighting, and/or activating the proposed lighting system.

The Design-Build Firm shall develop and submit for approval, a Load Center/Circuit/Pole Number identification plan that is compatible with the adjacent lighting systems maintenance identification scheme.

All existing lighting load centers shall be replaced with new lighting load centers per all current codes and criteria to coincide with the completely new lighting system for the construction limits as noted above.

Existing light poles, luminaire arms, luminaires, and load centers identified for removal shall be coordinated with the Department/City of Deerfield Beach as to whether these features will become the property of Design-Build Firm or salvaged, transported, and delivered to the Department or other agencies for future use.

The Design-Build Firm shall perform detailed field reviews for the portions of existing lighting on the cross streets to remain. Review and document all lighting (poles/luminaires, sign luminaires, etc.), circuiting, load centers, service points, utility transformers, etc., within the scope of work. This review includes conductors, conduit, grounding, enclosures, voltages, mounting heights, pull boxes, etc. This review also includes circuits outside the scope of work that originate or touch this Project's scope of work.

All deficiencies within the Project scope shall be identified and corrected. Any deficiencies outside the Project scope shall be brought to the attention of the Department.

After the field reviews are completed, all damaged and/or non-functioning equipment shall be documented



and forwarded to the Department prior to the start of construction. All damaged and/or non-functioning equipment within the scope of work are required to be replaced by new.

Where new electrical services are required, the Design-Build Firm shall coordinate the final locations of distribution transformers and service poles to minimize service and branch circuit conductors and conduit lengths.

The Design-Build Firm shall comply with the requirements of each jurisdictional authority within the construction limits. Compliance with the jurisdictional authority includes but is not limited to field reviews, technical meetings, special deliverables, etc. It is the Design-Build Firm's responsibility to verify and comply with all jurisdictional authority's requirements.

### **TSM&O SPECIFIC**

The Design-Build Firm shall design and prepare lighting plans for the two signalized intersections with mast arm replacements on SR 810/Hillsboro Boulevard at NW 41<sup>st</sup> Way and at Mall Entrance utilizing light emitting diode (LED) type luminaires in accordance with the latest FDOT Design Manual (FDM) and Standard Plans.

A Lighting Design Analysis Report (LDAR) including photometric printouts shall be submitted by the Design-Build Firm to ensure sufficient illumination for the two signalized intersections. The LDAR shall be based on Department guidelines and current signalized intersection retrofit lighting design criteria listed in the FDM.

The Design-Build Firm shall install additional light poles if the photometric analysis results on the luminaires on top of signal structures and retrofitted luminaires on the existing light poles within the vicinity of the two intersections cannot meet the signalized intersection lighting illumination criteria.

The Design-Build Firm shall maintain existing two signalized intersection lighting levels throughout all phases of construction.

### **END TSM&O SPECIFIC**

## **R. Signalization Plans**

The Design-Build Firm shall make use of the Signalization Concept Plan included in Reference Document 1 as a starting point for the design.

A new mast arm assembly, signal cabinet, pedestrian signal, and video detection equipment will be required for the following intersections:

- SW 10th St. / Waterways Blvd.
- SW 10th St. / Independence Dr.
- SW 10th St. / Powerline Rd.
- Powerline Rd. / Quiet Waters Business Park entrance
- SW 10th St. / SW 28 Ave
- SW 10<sup>th</sup> Street at Military Trail
- I-95 SB Off Ramp at SW 10<sup>th</sup> Street
- I-95 NB Off Ramp at SW 10<sup>th</sup> Street

- SW 10<sup>th</sup> Street at Natura Blvd
- I-95 NB Off Ramp at Hillsboro Boulevard

A Signal Truss assembly, signal cabinet, pedestrian signal, and video detection equipment will be required for the following intersection:

- SW 10<sup>th</sup> Street at Newport Center Drive

The Design-Build Firm shall be responsible for the design, development, construction, and testing required for the deployment of an Adaptive Traffic Control System (ATCS) including a vehicle preemption system with Transit Signal Prioritization and Preemption for the nine (9) signalized intersections along SW 10<sup>th</sup> Street. The existing ATCS equipment at the intersection of I-95/Hillsboro Boulevard installed under FPID 439891-5 may be reused. If damaged during construction, the Design-Build Firm shall replace the existing ATCS equipment at I-95 and Hillsboro Boulevard with new ATCS equipment specified herein.

The ATCS design of the new system shall be integrated with Broward County's existing devices and back-office ATMS software (currently Cubic™/Trafficware® Synchrongreen®). The design will include the necessary infrastructure and components to ensure proper connection of the new ATCS system to the existing components.

At a minimum, the work included in the ATCS scope consists of the following major components:

- Furnish and Install new NEMA TS2 Type 1 Size 6 cabinets including the Trafficware® 2070LN2 ITS Signal Controller with 1C Processor Module.
- Furnish and Install Global Traffic Technologies (GTT) Opticom model 764 phase selectors and GPS module.
- Install County pre-programmed network field switches hardware.
- Furnish and Install vehicle detection system, including Iteris® VantageNext with Vantage Vector Hybrid vehicle detection system. The advance detection shall be provided to cover all approaches from roadways classified as Arterials or higher, and I-95 off-ramp lanes. If line of sight of detection zone cannot be achieved from the signal structure, the detectors shall be installed on additional new poles.
- Provide and Install ATCS license for the Cubic™/Trafficware® Synchrongreen® Enterprise level which integrates directly with the existing ATMS.now central management system

Additional related signal equipment shall be provided as required to include, but not limited to, controller, detectors, pedestrian signals, signal pull boxes, and signal cables.

All signalization work shall be coordinated with Broward County Traffic Engineering Division.

The Design-Build Firm will be responsible to coordinate with FP&L for both existing service point upgrades and/or proposed service points. The Design-Build Firm shall include all associated costs in their Work Package Proposal(s).

The Design-Build Firm shall coordinate with Broward County Traffic Engineering Division to ensure the proprietary products certification process is implemented specifically for this Project for any proposed equipment not currently shown on the Department's Approved Products List (APL).

## **TSM&O SPECIFIC**

A new mast arm assembly, pedestal mounted signal, pedestrian signal, and video detection equipment will be required for the Hillsboro Boulevard and Deerfield Plaza intersection and Hillsboro Boulevard and NW 41 Way intersection. Additional related signal equipment shall be provided as required to include, but not limited to, controllers, cabinets, detectors, and signal cables.

Conceptual ATCS Plans have been provided (Reference Document 8.a) identifying ATCS devices and locations within the Project limits. No structural analysis was performed for the Conceptual ATCS Plans.

## **END TSM&O SPECIFIC**

### **S. Intelligent Transportation System Plans**

#### **1. General**

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

A Conceptual ITS Plan has been provided by the Department (refer to Reference Document 1) identifying ITS devices and locations within the Project limits. No structural analysis was performed in the development of the Conceptual ITS Plan.

The Design-Build Firm shall coordinate with Florida's Turnpike Enterprise (FTE) to determine if devices can be placed in locations that accommodate the future design for the Widen Sawgrass Expressway (SR 869) from west of US 441 (SR 7) to Powerline Rd (SR 845) Project (FPID 437153-1). The Design-Build Firm shall also coordinate with FDOT District Four and FTE on the fiber backbone tie-in point at the west end of the Project.

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

- Project Layout / Overview sheets outlying the locations of field elements
- Detail sheets on:
  - DMS Structure, DMS attachment, DMS display/layout
  - CCTV structure, CCTV attachment, CCTV operation/layout
  - MVDS structure, MVDS attachment, MVDS operation/layout
  - BTTS structure, BTTS attachment, BTTS operation/layout
  - Ramp Signal System (RSS) structure, RSS attachment, RSS operation/layout
  - Wrong Way Vehicle Detection System structure, attachment, and operation/layout
  - CV RSU structure, CV RSU attachment, CV RSU operation/layout
  - Fiber optic splice and conduit
  - Power Service Distribution
  - Wiring and connection details
  - Conduit, pull box, and vault installation

- 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 be responsible for ensuring project compliance with the Regional ITS Architecture and Rule 940 as applicable. This includes, but is not limited to, the development of a Concept of Operations (ConOps), the development of a Project Systems Engineering Management Plan (PSEMP), and Requirements Traceability Verification Matrix (RTVM) as well as coordination of document review. A preliminary ConOps and PSEMP are provided as part of Reference Document 5 for the Design-Build Firm's reference.

The Design-Build Firm shall be responsible for the design, construction, installation, and integration activities of the ramp signaling deployment at a minimum for the entrance ramp locations below:

- Southbound
  - Hillsboro Boulevard on-ramps
  - SW 10<sup>th</sup> Street on-ramps
- Northbound
  - Hillsboro Boulevard Westbound to Northbound ramp
  - Hillsboro Boulevard Eastbound to Northbound loop ramp
  - SW 10<sup>th</sup> Street Westbound to Northbound ramp

Based on the Project's final design, the Design-Build Firm shall conduct a detailed ramp signal traffic and safety analysis covering at a minimum, ramp signal warrants, required acceleration and queue storage distance, safety and traffic operational considerations and geometric constraints, and propose ramp signal locations, geometry, and field configurations. The Design-Build Firm shall document this analysis in a technical memorandum and submit to the Department for review and approval prior to construction. The Department has prepared a sample Ramp Signal Analysis Technical Memo as part of Reference Document 5 to serve as a general guidance and reference for this analysis.

The Design-Build Firm shall refer to Attachment J – ITS Deployment Requirements, Attachment K – Existing ITS Operations and Maintenance Requirements, and Attachment M – Connected Vehicle (CV) Deployment Requirements for the detailed ITS scope of work.

#### **TSM&O SPECIFIC**

A Conceptual ITS Plan has been provided by the Department (refer to Reference Document 8.a) identifying ITS devices and locations within the TSM&O limits. No structural analysis was performed in the development of the Conceptual ITS Plan.

The Design-Build Firm is responsible for ensuring project compliance with the Regional ITS Architecture and Rule 940 as applicable. This includes, but is not limited to, the development of a Concept of Operations (ConOps), the development of a Project Systems Engineering Management Plan (PSEMP), and requirements traceability verification matrix (RTVM) as well as coordination of document review. A preliminary ConOps PSEMP are provided in Reference Document 8.c for the Design-Build Firm's reference.

The Design-Build Firm shall refer to Attachment BB – ITS Deployment Requirements, Attachment CC –

Connected Vehicle System Deployment Requirements, Attachment DD – Connected Vehicle On-Board Units Minimum Technical Requirements, and Attachment EE – Broward County Adaptive Traffic Control System and Signal Fiber Interconnection Deployment Requirements for detailed description of work.

**END TSM&O SPECIFIC**

## **T. Landscape Opportunity Plans**

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

The Design-Build Firm shall provide the necessary site inventory and site analysis and shall prepare a “Landscape Opportunity Plan” (Opportunity Plan) as part of the roadway plan set. The Landscape Opportunity Concept Plan for the Project is provided under Reference Document 1. The Opportunity Plan shall consider the Design-Build Firm’s proposed roadway and drainage improvements, utilities, setbacks and clear zone dimensions, community commitments and other Project needs in identifying future landscape planting areas. Landscape opportunity areas should be prepared in accordance with the Department’s “Bold” initiative and all other FDOT requirements for Landscape Opportunity Plans.

The Opportunity Plans shall include the following:

1. Proposed improvements and existing elements to remain as associated with the Project.
2. Vegetation disposition depicting existing plant material to be removed, relocated or to remain.
3. Wetland jurisdictional lines.
4. Proposed drainage retention areas and easements.
5. Proposed utilities and existing utilities to remain.
6. Graphically depicted on-site and off-site desired or objectionable views.
7. Locations of landscape opportunity planting areas in a bubble format which identifies various vegetation groupings in a hatched or colorized manner. Examples are: “trees/palms/shrubs”, “shrubs only”, “buffer plantings”, etc.
8. Provided and labeled applicable clear zone, horizontal clearance, setback dimensions on the plans and in chart form which reflect AASHTO, FDOT and Department guidelines for landscape installation and maintenance operations, including those that have been coordinated with other disciplines
9. Outdoor advertising sign locations, owners and contacts and show 1000 ft. view zone per applicable State Codes and Rules.
10. Potential area(s) for wildflower plantings.

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

Landscape construction documents and landscape installation are not included in this Contract and shall be provided by others. In developing and refining the Opportunity Plan, the Design-Build Firm will be responsible for coordinating with the design teams that will be selected to prepare the landscape plans within the Project limits under FPID#s 436964-3 and 439891-2 in FY 2025.

Disciplines that will have greatest impact to preserving landscape opportunities include environmental, drainage, utilities, signing, lighting and ITS. The DBLA shall identify potential conflicts relating to preserving opportunity landscape areas and provide suggested resolutions to preserve them. If conflicts

cannot be resolved by the Design-Build Firm and the DBLA, they shall be discussed with the Department's Project Manager and District Landscape Architect for coordination and resolution.

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

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

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

### **Tree Disposition and Tree Relocation Landscape Plans**

To streamline the Design-Build Firm's effort, the Department has completed and provided a preliminary Trees Suitable for Relocation Survey. The Trees Suitable for Relocation Technical Memo, Trees Suitable for Relocation roll plots and corresponding Tree Charts, and GIS shapefiles of the full existing tree inventory and trees potentially suitable for relocation are provided under Reference Document 5.

It is anticipated that the condition and health of some trees will change from the time the inventory was conducted to when the work will actually take place. The Design-Build Firm shall re-survey the existing trees within the Project area to assess their condition. Existing trees to remain, to be removed or to be relocated shall be depicted in Tree Disposition Plans and Tree Relocation Landscape Plans to be prepared by the Design-Build Firm and in a format per the FDOT Design Manual. The Design Build Firm shall provide corresponding Tree Disposition Charts for the Tree Disposition Plans and Tree Relocation Landscape Plans. The Design-Build Firm shall conduct site visits with the Department to review all trees to remain, to be removed, and to be relocated prior to starting work and shall update the Tree Disposition Chart as needed during the preparation of the Tree Disposition Plans and Tree Relocation Landscape Plans. The Design-Build Firm shall develop each component design to preserve the maximum quantity of existing desirable trees and create areas for tree relocation within the Project limits where possible and work with the Department to identify other receiving sites. Trees that are designated as poor condition (or dead) on the Tree Disposition Charts, and trees that are determined to be in poor condition (or dead) by the Engineer at the time of construction shall be removed. Desirable trees shall include any tree that is determined to be in good or fair condition that is not a Florida Exotic Pest Council (FLEPPC) Category I or Category II invasive species during the site visits with the Department.

Existing trees required to be relocated shall include all desirable trees as previously defined and verified by the District Landscape Architect and Engineer prior to construction, which would be impacted by the proposed improvements associated with the overall Project.

Trees that have been determined by the DLA, DBLA, and Engineer of Record as suitable for relocation shall be relocated in the following preferential order of location:

1. All trees shall be relocated by the Design-Build Firm as per the Tree Relocation Landscape Plans prepared by the DBLA and approved by the DLA prior to tree relocation activities.
2. Coordinate with DLA for relocation receiving site(s) when they are not available within the Project limits.

Existing trees to be removed shall be limited to all FLEPPC Category I Invasive Species, impacted Category II Invasive Species, and any other impacted trees that are determined to be available for relocation as shown on the Tree Disposition Plans and Tree Disposition Chart and not desired by the Department or local municipalities.

The Design-Build Firm shall prepare the Tree Relocation Landscape Plans for review and approval by the Department prior to construction activities and perform all activities for all trees required to be relocated for the Project. The Tree Relocation Landscape Plans shall illustrate specific destination locations for impacted trees to be relocate with construction limits, when possible. In addition to the Department's Standards and Criteria, the following criteria shall be followed by the Design-Build Firm during the development of the Tree Relocation Plans:

1. Updated Tree Disposition Plans and corresponding tree chart clearly showing trees that are to remain, to be relocated, and trees to be removed.
2. The landscape relocation design must ensure proper setbacks from overhead utilities using the FP&L "Right Tree Right Place" guide.
3. Plant placement for mature growth shall allow for adequate setbacks from fences, structures, utilities, noise walls, drainage maintenance easements, guardrail and retaining walls for future maintenance needs.
4. All existing plant material identified to remain within the limits of construction shall be protected. The Design-Build Firm shall include details in the Tree Disposition Plans to ensure protection of the Critical Protection Zone (refer to FDOT Standard Plans Index 110-100, Tree Protection and Preservation) for all trees to remain or to be relocated. Such measures shall be coordinated with and approved by the DLA and shall be installed prior to commencement of clearing and grubbing activities.
5. No trees shall be relocated to areas within view zones of legally permitted outdoor advertising (ODA) signs. The DBLA shall research and confirm any legally permitted outdoor advertising billboard (ODA) within 1,000 feet of the Project limits. The ODA signs and view zones shall be shown on the plans.

The Tree Relocation Landscape Plans shall adhere to all requirements specified in the FDOT Tree Relocation Specifications and will include all landscape details required for tree relocation work including root and canopy pruning, removal, transporting, transplanting, staking and guying, and plant health maintenance which includes fertilization, weeding, watering, and pest management.

No staging of construction materials or equipment shall be allowed within the areas that are maintained by municipalities under the Landscape Maintenance Agreements with the Department.

#### Additional Trees to Remain

The Design-Build Firm shall strive to maximize the quantity of existing "desirable" trees to remain. Desirable trees that are proposed to be removed or relocated on the Tree Disposition Plans may be able to remain in place once the final scope of grading and roadway construction work has been determined. The Design-Build Firm shall strive to allow additional desirable trees to remain that were proposed to be

removed or relocated. All trees considered to be “desirable” must be approved by the Engineer and DLA prior to the start of construction. All proposed additional trees to remain shall be shown on the Tree Disposition Plans for review and approval by the DLA.

#### Maintenance Plan

The Design-Build Firm will be responsible for preparing a Maintenance Plan in accordance with the FDOT Design Manual. Although the Maintenance Plan will not be part of the construction contract documents and does not affect the Design-Build Firm’s responsibility after acceptance of the Project, it is intended to ensure that the DBLA, the Department’s Asset Maintenance contract, and the local maintaining agencies understand what practices will be necessary to maintain the landscape that satisfies the Project objectives once construction is completed.

#### Establishment and Maintenance Period

The Design-Build Firm shall maintain all existing and relocated landscape for an establishment period of one (1) year following final installation, or until Final Acceptance of the Project if installed within one (1) year of Final Acceptance, as outlined in the FDOT Standard Tree Relocation Specification. The limits of the landscape maintenance shall include all areas within the construction limits. All areas disturbed to perform this work must be restored and either mulched or sodded to match existing conditions. Replacement sod type shall match existing adjacent areas.

The Design-Build Firm shall be responsible for the removal and clean-up of all staking and guying systems and all other materials associated with the practice and installation of staking and/or guying systems from the relocated trees.

The Design-Build Firm shall prune all existing and relocated palm trees and all relocated canopy trees as necessary to remove all seed pods and dead, damaged and/or diseased fronds or branches and to improve branching structure per ANSI A300 Tree Pruning Standards. Pruning activities shall be supervised by an International Society of Arboriculture (ISA) Certified Arborist.

The Design-Build Firm shall utilize a Florida-licensed applicator with proper Right of Way endorsements (copies of which shall become part of the Project file) for all applications of herbicides, fertilizers, and pesticides.

#### Protected Species

The Department has been notified that there are existing trees west of the C-2 Canal that have protected orchid species living in them. The Design-Build Firm shall identify any protected plant species growing within existing trees within the Project limits. If any existing trees with protected plant species growing in them are to be removed, the Design-Build Firm will coordinate with the Department and the regulatory agencies with jurisdiction over the protected plant species to ensure appropriate actions are taken.