Florida Department of Transportation
District Six

LOW BID
DESIGN-BUILD
REQUEST FOR PROPOSAL

For

ITS Device Replacement Project, Miami-Dade and Monroe Counties

Financial Projects Number(s): 430291-3-92-01
Contract Number: E6L90
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ATTACHMENTS

The Attachments listed below are hereby incorporated into and made a part of this Request for Proposal (RFP) as though fully set forth herein.

- Project Advertisement
- Division I Design-Build Specifications
  - SP0030900D6-117 Public Records
  - SP0072700 Equal Employment Opportunity Requirements
  - SP0072800 Preference to State Residents
  - SP0072900 Legal Requirements and Responsibility to the Public - E-Verify
  - SP0073000 Legal Requirements and Responsibility to the Public - Scrutinized Companies
  - SP0080409 Contaminated Material - Mercury-Containing Devices and Lamps
  - SP0080307 Prosecution of Work – Regional Disputes Review Board
- Divisions II and III Special Provisions identified by the Department to be used on the Project: Mobilization (SP1010000DB)

REFERENCE DOCUMENTS

The following documents are being provided with this RFP. Except as specifically set forth in the body of this RFP, these documents are being provided for reference and general information only. They are not being incorporated into and are not being made part of the RFP, the contract documents or any other document that is connected or related to this Project except as otherwise specifically stated herein. No information contained in these documents shall be construed as a representation of any field condition or any statement of facts upon which the Design-Build Firm can rely upon in performance of this contract. All information contained in these reference documents must be verified by a proper factual investigation. The bidder agrees that by accepting copies of the documents, any and all claims for damages, time or any other impacts based on the documents are expressly waived.

- Dynamic Message Sign (DMS) 61 and DMS 62 site DMS structure as-built plans
- DMS 63 site DMS structure as-built plans
- DMS 64 and DMS 65 site DMS structure as-built plans
- DMS 66 and DMS 67 site DMS structure as-built plans
- DMS 68 and DMS 69 site DMS structure as-built plans
- DMS 70 and DMS 71 site DMS structure as-built plans
- As-built Plans – I-95 and 95 Express Record Sets and I-95 fiber conduit repair work drawings
- I-95 from Whatley to SR 112 Underground Splice Vault and Fiber Lateral Connectivity Verification Report
- E-6K77 I-95 Pavement Rehabilitation Project RFC Plans
- Sample Electronic Ball Markers Specification Sheet
- Sample DMS Preventive Maintenance Checklist
I. Introduction.

The Florida Department of Transportation (Department) has issued this Request for Proposal (RFP) to solicit competitive Bids and Proposals from Proposers for replacement of arterial incident management DMS along US 1 in the Florida Keys; replacement of fiber optic lateral cables and associated equipment, and fiber optic backbone migration from existing 96-count fiber optic backbone cable to existing 144-count fiber optic backbone cable for devices along I-95 corridors from Golden Glades Interchange area to SR 112 area.

The DMS replacement work includes replacement of 11 arterial incident management DMS and their corresponding sign structures at 6 locations along US 1 in the Florida Keys area (US 1 at approximate mile markers 7.5, 39.5, 91.5, 106, 113, and 126).

The fiber optic lateral cable replacement and fiber backbone migration work includes:

- Replacement of fiber optic lateral cables for 84 ITS cabinet sites identified in the “I-95 from Whatley to SR 112 Underground Splice Vault and Fiber Lateral Connectivity Verification Report” (hereafter referred to as Verification Report) which is attached as a reference document to this Request for Proposal;
- Installation of locate wire for the lateral cables;
- Installation of new fiber optic lateral cables and conduits as necessary and per attached reference document - Verification Report;
- Replacement of Managed Field Ethernet Switches (MFES);
- Replacement of all fiber optic related equipment such as patch panels, fiber jumpers, and connectors inside existing cabinet;
- Replacement of Uninterruptible Power Supply (UPS) and batteries at 35 ITS cabinet sites;
- Installation of new splice enclosures and splicing fiber optic lateral cables onto existing 144-count backbone;
- Installation of electronic locate ball markers inside existing fiber pull and splice boxes;
- Clean up of existing fiber pull boxes and splice boxes;
- Replacement of ITS cabinets at 2 sites;
- Removal of wireless radios at 3 locations;
- Establishment of communications between existing SR 112 communications hub and existing SR 836 communications hub;
- Installation of conduit and cabling infrastructure as necessary.

All ITS devices shall be integrated, tested and operated from the SunGuide® Transportation Management Center (TMC).

All ITS devices shall be new and listed on the Department’s Approved Product List (APL).

Description of Work

The Design-Build Firm shall perform the following work:

- Replace 11 arterial DMS located on US 1 at approximate mile markers 7.5, 39.5, 91.5, 106, 113, and 126, and associated DMS cabinets. The proposed arterial DMS shall be front access type, full-color, full matrix with a minimum character height of 18 inches using LED technology. The DMS shall support 3 lines messages, 18 characters per line and has a minimum display matrix of 96 rows by 352 columns. The pixel pitch for the proposed arterial DMS shall be 20 mm. The Design-Build Firm shall replace existing DMS structures with new arterial DMS structures to support the new DMS panels. Refer to Table 1 for locations of existing DMS sites and required replacement criteria.
• Replace existing fiber optic lateral cables and associated equipment, and migrate ITS devices along I-95 corridors from Golden Glades Interchange area to SR 112 area from existing 96-count fiber optic backbone cable to existing 144-count fiber optic backbone cable. The Design-Build Firm shall:
  o Replace existing fiber optic lateral cables with new 12-count fiber optic lateral cables;
  o Splice new 12-count fiber optic lateral cables onto 144-count fiber optic cable backbone;
  o Install new splice enclosures and splice trays as required for splicing new 12-count fiber optic lateral cables onto 144-count fiber optic cable backbone;
  o Install locate wire inside existing conduit for the fiber lateral cables;
  o Replace all fiber optic related equipment such as patch panels, fiber jumpers, connectors, etc. inside existing cabinet;
  o Replace existing Ethernet Switch with new MFES at all 84 sites. The Design-Build Firm shall integrate all MFES into District Six SunGuide® network;
  o Reuse existing infrastructure consisting of conduits, splice boxes and pull boxes except for the ones identified with deficiencies in the Verification Report. For the ones shown with deficiencies in the Verification Report, the Design-Build Firm shall replace with new infrastructure for installation of lateral fiber optic cables and locate wires. When using existing conduits, if the Design-Build Firm encounters any deficiencies, the Design-Build Firm shall repair portions of the conduits to rectify the deficiencies to allow the installation of the new fiber optic cable and locate wire system. When reusing existing pull boxes and/or splice boxes, if the Design-Build Firm encounters any damaged pull boxes and/or splice boxes, the Design-Build Firm shall rectify the deficiencies by replacing with new pull boxes and splice boxes to allow the installation of the new fiber optic cable and locate wire system.
  o Any conduits installed by the Design-Build Firm shall be 2-inch HDPE SDR 11 type.

• Replace UPS and batteries at 35 ITS cabinet sites. When replacing UPS and batteries, the Design-Build Firm shall retrofit existing cabinets (such as installing new mounting racks, etc.) and make necessary adjustments to the locations of other equipment inside the cabinet to accommodate the new UPS and batteries installation. When reusing existing cabinets, if the Design-Build Firm encounters any deficiencies, the Design-Build Firm shall rectify the deficiencies by replacing with new cabinets to allow the installation of new UPS and batteries. When doing so, the Design-Build Firm shall also relocate all other equipment inside existing cabinet to the new cabinet and make them operational. The Design-Build Firm shall also be responsible for sizing the UPS and batteries and submit to the Department for review and approval before installation in the field.

• Establish communications between existing SR 112 Communications Hub and SR 836 Communications Hub. The Design-Build Firm shall install 12-count fiber optic cables and 2 new 2-inch HDPE SDR 11 conduits from SR 112 Hub to the nearest splice box on the existing 96-count backbone on I-95 and splice the 12-count fiber optic cable onto existing 96-count backbone. The Design-Build Firm shall also terminate fibers at both hub switches and establish the communications path between SR 112 and SR 836 Communications Hubs.

• Clean the existing pull and splice boxes that will be used for the new lateral fiber optic cable and locate wire system shown in the Verification Report. The cleaning of the pull and splice boxes, includes removing excess dirt/sediment, restoring pea rocks or crushed stone to facilitate proper drainage, replacing or installing new ground rods, conducting cable management, removing debris or unwanted materials, and other activities. The Design-Build Firm shall also install electronic locate ball markers inside those pull and splice boxes. The sample specification sheets of the electronic locate ball markers are attached as reference document to the RFP. The Design-Build Firm shall furnish and install similar or approved equivalent model for pull and splice boxes locating. Currently most of the pull and splice boxes are buried for theft and vandalism protection. To facilitate locating the pull and splice boxes by the Design-Build Firm, the GPS coordinates of
pull and splice boxes to be cleaned will be provided to the Design-Build Firm during Construction. The Design-Build Firm shall excavate and remove any materials covering the existing pull and splice boxes and re-bury each individual pull and splice box in the manner similar to pre-construction condition after the work at each location is completed.

- Replace existing ITS cabinets at two sites (900-CCTV and 901-CCTV). If the new ITS cabinets are to be ground mounted, the Design-Build Firm shall also install concrete pads with a minimum thickness of six inches for the ITS cabinets and ensure there are no exposed conduits and all conduits will go inside the cabinet through the concrete pad. The new ITS cabinets shall be easily accessible by the ITS maintenance personnel, vehicles and equipment when performing maintenance activities. The Design-Build Firm shall relocate all existing equipment inside the existing cabinet to the new cabinet. The Design-Build Firm may reuse existing infrastructure such as conduits, cabling, mounting hardware, etc. for the new cabinets. However, if the Design-Build Firm encounters any deficiencies in reusing existing infrastructure, new infrastructure shall be installed for the successful installation of the new cabinets at no additional cost to the Department. The Design-Build Firm shall also integrate all equipment into SunGuide® network.

- Remove existing wireless radios and associated equipment at three sites (900-CCTV, 901-CCTV, and 022-CCTV).

- The Design-Build Firm shall coordinate with the Project CEI and the District Six ITS Office prior to disposal of any equipment to allow the Department to salvage existing equipment, components, devices, etc. as spare parts.

Table 1: DMS Replacement List

<table>
<thead>
<tr>
<th>Existing FDOT SunGuide® ID</th>
<th>Location Description</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMS 61</td>
<td>US 1 at approximate mile marker 126</td>
<td>- Remove existing DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install new DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Remove existing DMS and cabinets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install two new arterial DMS and associated cabinets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Replace existing accent lighting with new accent lighting</td>
</tr>
<tr>
<td>DMS 62</td>
<td>US 1 at approximate mile marker 113</td>
<td>- Remove existing DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install new DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Remove existing DMS and cabinet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install one new arterial DMS and associated cabinets</td>
</tr>
<tr>
<td>DMS 63</td>
<td>US 1 at approximate mile marker 106</td>
<td>- Remove existing DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install new DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Remove existing DMS and cabinets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install two new arterial DMS and associated cabinets</td>
</tr>
<tr>
<td>DMS 64</td>
<td>US 1 at approximate mile marker 91.5</td>
<td>- Remove existing DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install new DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Remove existing DMS and cabinets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install two new arterial DMS and associated cabinets</td>
</tr>
<tr>
<td>DMS 65</td>
<td>US 1 at approximate mile marker 39.5</td>
<td>- Remove existing DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install new DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Remove existing DMS and cabinets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install two new arterial DMS and associated cabinets</td>
</tr>
<tr>
<td>DMS 66</td>
<td>US 1 at approximate mile marker 7.5</td>
<td>- Remove existing DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install new DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Remove existing DMS and cabinets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install two new arterial DMS and associated cabinets</td>
</tr>
<tr>
<td>DMS 67</td>
<td>US 1 at approximate mile marker 91.5</td>
<td>- Remove existing DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install new DMS structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Remove existing DMS and cabinets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Install two new arterial DMS and associated cabinets</td>
</tr>
</tbody>
</table>
## Existing FDOT SunGuide® ID | Location Description | Work Description
---|---|---
DMS 71 | | • Remove existing DMS and cabinets
• Install two new arterial DMS and associated cabinets

Table 2 shows ITS devices/cabinets within the Project limits that need to be migrated to the existing 144-count fiber optic cable backbone. Existing FDOT SunGuide® ID’s are used as device names on Table 2.

### Table 2: I-95 Fiber Migration Locations

<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop</th>
<th>Other Devices Fed from This Cabinet</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>112ETR005</td>
<td>SR-112 EB at 12 AVE</td>
<td>1</td>
<td>112ETR010, FLD6DOT112WB003.8-TA2, CS-060</td>
<td>• Furnish and install new conduits from cabinet to the nearest splice box on the backbone;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Furnish and install new fiber lateral cables in new conduits;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Remove existing fiber lateral cables;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>NW10AVNTR015</td>
<td>NW 39th St and NW 10th Ave</td>
<td>1</td>
<td>NW10AVNTR020, FLD6DOTNW10NB000.2-TA2, NW10AVSTR005, NW10AVSTR010, FLD6DOTNW10SB000.2-TA2, NW39STETR005, NW39STETR010, FLD6DOTNW39EB000.1-TA2, CS-045, CS-050, CS-055</td>
<td>• Furnish and install new conduits from cabinet to the nearest splice box on the backbone;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Furnish and install new fiber lateral cables in new conduits;</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Remove existing fiber lateral cables;</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Other Devices Fed from This Cabinet&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Work Description</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------</td>
<td>-----------------</td>
<td>-------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>011-CCTV</td>
<td>I-95 at SR 112</td>
<td>1</td>
<td>DS-0030N, DS-0035S</td>
<td>Replace existing fiber patch panel with new fiber patch panel; Replace existing Field Ethernet Switch with new Field Ethernet Switch; Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>054-CCTV</td>
<td>I-95 at SR-112</td>
<td>1</td>
<td></td>
<td>Furnish and install new conduits from cabinet to the nearest splice box on the backbone; Furnish and install new fiber lateral cables in new conduits; Splice new fiber lateral cables into existing 144-count fiber backbone; Remove existing fiber lateral cables; Replace existing fiber patch panel with new fiber patch panel; Replace existing Field Ethernet Switch with new Field Ethernet Switch; Integrate the new Field Ethernet Switch into District Six SunGuide® network; Replace existing UPS and batteries with new UPS and batteries.</td>
</tr>
</tbody>
</table>

<sup>1</sup> Loop number

<sup>2</sup> Other devices fed from this cabinet
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop</th>
<th>Other Devices Fed from This Cabinet</th>
<th>Work Description</th>
</tr>
</thead>
</table>
| DS-0032N     | I-95 On Ramp at NW 46th St | 1    | DS-0037AS                           | • Replace existing fiber patch panel with new fiber patch panel;  
• Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Integrate the new Field Ethernet Switch into District Six SunGuide® network. |
| DS-0042AN    | I-95 South of NW 53rd St   | 2    | DS-0042BN, DS-0043AS, DS-0043BS     | • Furnish and install new fiber lateral cables in existing conduit;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Remove existing fiber lateral cables;  
• Replace existing fiber patch panel with new fiber patch panel;  
• Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
• Replace existing UPS and batteries with new UPS and batteries. |

---

**Device Name Location Description Loop Other Devices Fed from This Cabinet Work Description**

- Replace existing fiber patch panel with new fiber patch panel;
- Replace existing Field Ethernet Switch with new Field Ethernet Switch;
- Integrate the new Field Ethernet Switch into District Six SunGuide® network.

- Furnish and install new fiber lateral cables in existing conduit;
- Splice new fiber lateral cables into existing 144-count fiber backbone;
- Remove existing fiber lateral cables;
- Replace existing fiber patch panel with new fiber patch panel;
- Replace existing Field Ethernet Switch with new Field Ethernet Switch;
- Integrate the new Field Ethernet Switch into District Six SunGuide® network;
- Replace existing UPS and batteries with new UPS and batteries.
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Other Devices Fed from This Cabinet&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Work Description</th>
</tr>
</thead>
</table>
| CS-020      | I-95 at NW 54th St  | 2              | CS-025, CS-030, DS-0043N        | new Field Ethernet Switch;  
|             |                      |                |                                | • Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
|             |                      |                |                                | • Replace existing UPS and batteries with new UPS and batteries. |
| 012-CCTV   | I-95 at NW 54th St  | 2              | DMS 107, 087-CCTV               | • Furnish and install new fiber lateral cables in existing conduit;  
|             |                      |                |                                | • Splice new fiber lateral cables into existing 144-count fiber backbone;  
|             |                      |                |                                | • Remove existing fiber lateral cables;  
|             |                      |                |                                | • Replace existing fiber patch panel with new fiber patch panel;  
|             |                      |                |                                | • Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
|             |                      |                |                                | • Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
|             |                      |                |                                | • Replace existing UPS and batteries with new UPS and batteries.  
<p>|             |                      |                |                                | • Replace existing Field Ethernet Switch with new Field Ethernet Switch; |</p>
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop¹</th>
<th>Other Devices Fed from This Cabinet²</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMS 22</td>
<td>I-95 South of NW 62nd St</td>
<td>3</td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network;</td>
<td></td>
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<tr>
<td></td>
<td></td>
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<td>• Furnish and install new conduits from cabinet to the nearest splice box on the backbone;</td>
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<td></td>
<td>• Furnish and install new fiber lateral cables in new conduits;</td>
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<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td>• Remove existing fiber lateral cables;</td>
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<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td></td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td></td>
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<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
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</tr>
<tr>
<td>DMS 21</td>
<td>I-95 South of NW 62nd St</td>
<td>3</td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
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<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td>• Remove existing fiber lateral cables;</td>
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<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
<td></td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Other Devices Fed from This Cabinet&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Work Description</td>
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</tr>
</tbody>
</table>
| DS-0044AN    | I-95 South of NW 58th St   | 3                | DS-0044BN, DS-0045AS, DS-0045BS                 | • Furnish and install new fiber lateral cables in existing conduit;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Remove existing fiber lateral cables;  
• Replace existing fiber patch panel with new fiber patch panel;  
• Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Integrate the new Field Ethernet Switch into District Six SunGuide® network. |
| RMS-22       | I-95 SB AT NW 62nd ST      | 3                | DS-0046S                                       | • Furnish and install new fiber lateral cables in existing conduit;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Remove existing fiber lateral cables;  
• Replace existing fiber patch panel with new fiber patch panel;  
• Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
• Replace existing UPS and batteries with new UPS and batteries. |
| 063-CCTV     | I-95 at NW 62nd St         | 4                |                                                | • Furnish and install new fiber lateral cables in existing conduit;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;                                                                                                                                 |
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop</th>
<th>Other Devices Fed from This Cabinet²</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>013-CCTV</td>
<td>I-95 at NW 62nd St</td>
<td>4</td>
<td></td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>RMS-1</td>
<td>I-95 NORTH OF NW 62 ST</td>
<td>4</td>
<td>DS-0047N, DS-0049S, 071-CS</td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
</tr>
</tbody>
</table>

¹ Loop number indicates the loop associated with the device.
² Other Devices Fed from This Cabinet² refers to the devices that are fed from the same cabinet as the device in question.
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop</th>
<th>Other Devices Fed from This Cabinet</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>95XNBNW62ST0 040</td>
<td>I-95 at NW 62nd St</td>
<td>4</td>
<td>055-CCTV, CS-035</td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>95XSBNW62ST00 45</td>
<td>I-95 at NW 62nd St</td>
<td>4</td>
<td>034-CCTV, DS-0049S</td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
</tr>
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<td></td>
<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td>• Remove existing fiber lateral cables;</td>
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<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td></td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>RMS-2</td>
<td>I-95 SB AT NW 62nd ST</td>
<td>5</td>
<td>072-CS, DS-0049N</td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop</td>
<td>Other Devices Fed from This Cabinet</td>
<td>Work Description</td>
</tr>
<tr>
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</tr>
<tr>
<td>056-CCTV</td>
<td>I-95 at NW 69th St</td>
<td>5</td>
<td></td>
<td>• Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>DS-0050AS</td>
<td>I-95 South of NW 71st St</td>
<td>5</td>
<td></td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop</td>
<td>Other Devices Fed from This Cabinet</td>
<td>Work Description</td>
</tr>
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<td>------------------</td>
</tr>
</tbody>
</table>
| DS-0050N    | I-95 at NW 73rd St   | 5    |                                     | • Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
|             |                      |      |                                     | • Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
|             |                      |      |                                     | • Replace existing UPS and batteries with new UPS and batteries. |
| 014-CCTV    | I-95 at NW 75th St   | 5    |                                     | • Furnish and install new fiber lateral cables in existing conduit;  
|             |                      |      |                                     | • Splice new fiber lateral cables into existing 144-count fiber backbone;  
|             |                      |      |                                     | • Remove existing fiber lateral cables;  
|             |                      |      |                                     | • Replace existing fiber patch panel with new fiber patch panel;  
|             |                      |      |                                     | • Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
|             |                      |      |                                     | • Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
|             |                      |      |                                     | • Replace existing UPS and batteries with new UPS and batteries. |

Version 2019-01a dated 02/01/2019
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Other Devices Fed from This Cabinet&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS-0051N</td>
<td>I-95 North of NW 75th St</td>
<td>6</td>
<td>DS-0052N</td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>RMS-21</td>
<td>I 95 SB AT NW 79th ST</td>
<td>6</td>
<td>DS-0053S, DS-0054S</td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network;</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop¹</td>
<td>Other Devices Fed from This Cabinet²</td>
<td>Work Description</td>
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<tr>
<td>064-CCTV</td>
<td>I-95 at NW 79th St</td>
<td>6</td>
<td></td>
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</tr>
<tr>
<td>015-CCTV</td>
<td>I-95 at NW 79th St</td>
<td>6</td>
<td>DMS 106, 088-CCTV</td>
<td></td>
</tr>
<tr>
<td>057-CCTV</td>
<td>I-95 South of NW 81st</td>
<td>7</td>
<td></td>
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</tr>
</tbody>
</table>

- Replace existing UPS and batteries with new UPS and batteries.
- Furnish and install new fiber lateral cables in existing conduit;
- Splice new fiber lateral cables into existing 144-count fiber backbone;
- Remove existing fiber lateral cables;
- Replace existing fiber patch panel with new fiber patch panel;
- Replace existing Field Ethernet Switch with new Field Ethernet Switch;
- Integrate the new Field Ethernet Switch into District Six SunGuide® network;
- Replace existing UPS and batteries with new UPS and batteries.
- Furnish and install new fiber lateral cables in existing conduit;
- Splice new fiber lateral cables into existing 144-count fiber backbone;
- Remove existing fiber lateral cables;
- Replace existing fiber patch panel with new fiber patch panel;
- Replace existing Field Ethernet Switch with new Field Ethernet Switch;
- Integrate the new Field Ethernet Switch into District Six SunGuide® network.
- Furnish and install new fiber lateral cables in existing conduit;
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop</th>
<th>Other Devices Fed from This Cabinet</th>
<th>Work Description</th>
</tr>
</thead>
</table>
| RMS-3       | I-95 North of NW 83 ST | 7    | 073-CS, DS-0055AN, DS-0055BN, DS-0056N | • Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Remove existing fiber lateral cables;  
• Replace existing fiber patch panel with new fiber patch panel;  
• Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Integrate the new Field Ethernet Switch into District Six SunGuide® network. |
| DS-0057S    | I-95 North of NW 81st St | 7    | DS-0058S                            | • Furnish and install new conduits from cabinet to the nearest splice box on the backbone;  
• Furnish and install new fiber lateral cables in new conduits;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Remove existing fiber lateral cables;  
• Replace existing fiber patch panel with new fiber patch panel;  
• Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Integrate the new Field Ethernet Switch into District Six SunGuide® network. |


<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop</th>
<th>Other Devices Fed from This Cabinet</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS-0061N</td>
<td>I-95 South of NW 94th St</td>
<td>7</td>
<td></td>
<td>Replace existing fiber patch panel with new fiber patch panel; Replace existing Field Ethernet Switch with new Field Ethernet Switch; Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>RMS-20</td>
<td>I 95 SB AT NW 95th ST</td>
<td>7</td>
<td>DS-0059AS, DS-0060S</td>
<td>Furnish and install new fiber lateral cables in existing conduit; Splice new fiber lateral cables into existing 144-count fiber backbone; Remove existing fiber lateral cables; Replace existing fiber patch panel with new fiber patch panel; Replace existing Field Ethernet Switch with new Field Ethernet Switch; Integrate the new Field Ethernet Switch into District Six SunGuide® network; Replace existing UPS and batteries with new UPS and batteries.</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop</td>
<td>Other Devices Fed from This Cabinet²</td>
<td>Work Description</td>
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<tr>
<td>new Field Ethernet Switch;</td>
<td></td>
<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
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<tr>
<td>016-CCTV</td>
<td>I-95 at NW 95th St</td>
<td>8</td>
<td></td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
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<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td>• Remove existing fiber lateral cables;</td>
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<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network;</td>
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<td></td>
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<td></td>
<td>• Replace existing UPS and batteries with new UPS and batteries.</td>
<td></td>
</tr>
<tr>
<td>058-CCTV</td>
<td>I-95 South of NW 95th St</td>
<td>8</td>
<td></td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
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<td></td>
<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td>• Remove existing fiber lateral cables;</td>
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<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td></td>
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<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
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<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop</td>
<td>Other Devices Fed from This Cabinet</td>
<td>Work Description</td>
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<tr>
<td>065-CCTV</td>
<td>I-95 at NW 95th St</td>
<td>8</td>
<td></td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network; • Replace existing UPS and batteries with new UPS and batteries.</td>
</tr>
<tr>
<td>RMS-4</td>
<td>I 95 NB AT NW 95 ST ON RAMP</td>
<td>8</td>
<td>DS-0062N, 074-CS</td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>RMS-19</td>
<td>I-95 SB at NW 103rd ST</td>
<td>8</td>
<td>DS-0064S, DS-0068S</td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop¹</td>
<td>Other Devices Fed from This Cabinet²</td>
<td>Work Description</td>
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</tr>
</tbody>
</table>
| DS-0064N    | I-95 South of NW 103rd St | 8     | 059-CCTV                           | • Remove existing fiber lateral cables;  
|             |                      |       |                                     | • Replace existing fiber patch panel with new fiber patch panel;  
|             |                      |       |                                     | • Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
|             |                      |       |                                     | • Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
|             |                      |       |                                     | • Replace existing UPS and batteries with new UPS and batteries. |
| 017-CCTV    | I-95 at NW 103rd St | 9     | DMS 112, 089-CCTV                  | • Furnish and install new fiber lateral cables in existing conduit;  
|             |                      |       |                                     | • Splice new fiber lateral cables into existing 144-count fiber backbone;  
|             |                      |       |                                     | • Remove existing fiber lateral cables;  
|             |                      |       |                                     | • Replace existing fiber patch panel with new fiber patch panel;  
|             |                      |       |                                     | • Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
|             |                      |       |                                     | • Integrate the new Field Ethernet Switch into District Six SunGuide® network. |

¹ Loop refers to the specific loop number for each device placement.  
² Other Devices Fed from This Cabinet indicates the adjacent devices that will be impacted by the work described.
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Other Devices Fed from This Cabinet&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Work Description</th>
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</thead>
<tbody>
<tr>
<td>RMS-5</td>
<td>I-95 NORTH OF NW 103 ST</td>
<td>9</td>
<td>075-CS, DS-0070AN, DS-0070BN, DS-0071N</td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>079-CCTV</td>
<td>I-95 at NW 103rd St</td>
<td>9</td>
<td>066-CCTV, DS-0070S</td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
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<tr>
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<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td>• Remove existing fiber lateral cables;</td>
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<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop</td>
<td>Other Devices Fed from This Cabinet</td>
<td>Work Description</td>
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</tr>
<tr>
<td>DMS 1</td>
<td>I-95 North of NW 108th Ter</td>
<td>9</td>
<td></td>
<td>• Replace existing UPS and batteries with new UPS and batteries.</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td>• Furnish and install new conduits from cabinet to the nearest splice box on the backbone;</td>
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<tr>
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<td>• Replace existing splice box per Verification Report;</td>
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<td></td>
<td></td>
<td>• Furnish and install new fiber lateral cables in new conduits;</td>
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<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td>• Remove existing fiber lateral cables;</td>
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<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>DS-0072S</td>
<td>I-95 at NW 112th St</td>
<td>9</td>
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<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
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<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td>• Remove existing fiber lateral cables;</td>
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<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Other Devices Fed from This Cabinet&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Work Description</td>
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</tr>
<tr>
<td>DMS 20</td>
<td>I-95 South of NW 119th St</td>
<td>9</td>
<td>District Six SunGuide® network;</td>
<td>• Replace existing UPS and batteries with new UPS and batteries.</td>
</tr>
<tr>
<td>DS-0073N</td>
<td>I-95 South of NW 119th St</td>
<td>10</td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Remove existing fiber lateral cables;</td>
<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td></td>
<td></td>
<td></td>
<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
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</tr>
<tr>
<td>RMS-18</td>
<td>I 95 SB AT NW 119th ST</td>
<td>10</td>
<td>DS-0074S, DS-0075S</td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop</td>
<td>Other Devices Fed from This Cabinet</td>
<td>Work Description</td>
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<td>10</td>
<td></td>
<td>Splice new fiber lateral cables into existing 144-count fiber backbone; Remove existing fiber lateral cables; Replace existing fiber patch panel with new fiber patch panel; Replace existing Field Ethernet Switch with new Field Ethernet Switch; Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
</tbody>
</table>

018-CCTV    | I-95 at NW 119th St  | 10   |                                     | Splice new fiber lateral cables into existing 144-count fiber backbone; Remove existing fiber lateral cables; Replace existing fiber patch panel with new fiber patch panel; Replace existing Field Ethernet Switch with new Field Ethernet Switch; Integrate the new Field Ethernet Switch into District Six SunGuide® network. |

067-CCTV    | I-95 at NW 119th St  | 10   |                                     | Splice new fiber lateral cables into existing 144-count fiber backbone; Remove existing fiber lateral cables; Replace existing fiber patch panel with new fiber patch panel; |
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop</th>
<th>Other Devices Fed from This Cabinet</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS-0078N</td>
<td>I-95 North of NW 119th St</td>
<td>11</td>
<td></td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
</tr>
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<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network;</td>
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<tr>
<td></td>
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<td></td>
<td>• Replace existing UPS and batteries with new UPS and batteries.</td>
</tr>
<tr>
<td>RMS-17</td>
<td>I 95 SB AT NW 125th ST</td>
<td>11</td>
<td>DS-0076S, DS-0077S</td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td></td>
<td>• Replace existing fiber lateral cables;</td>
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<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td></td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network;</td>
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<td>• Replace existing UPS and batteries with new UPS and batteries.</td>
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<td></td>
<td>• Replace existing Field Ethernet Switch with</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop</td>
<td>Other Devices Fed from This Cabinet</td>
<td>Work Description</td>
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</tr>
<tr>
<td>019-CCTV</td>
<td>I-95 at NW 125th St</td>
<td>11</td>
<td>DS-0079N, DS-0080AN, DS-0080BN, 076-CS</td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network;</td>
</tr>
<tr>
<td>RMS-6</td>
<td>I-95 South of NW 131 St</td>
<td>11</td>
<td>DS-0079N, DS-0080AN, DS-0080BN, 076-CS</td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network;</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop</td>
<td>Other Devices Fed from This Cabinet</td>
<td>Work Description</td>
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<tr>
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</tr>
<tr>
<td>95XNBNW125ST0045</td>
<td>I-95 at NW 125th St</td>
<td>11</td>
<td>95XSBNW125ST050, CS-040, 060-CCTV</td>
<td>• Replace existing UPS and batteries with new UPS and batteries.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
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<td></td>
<td></td>
<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td></td>
<td>• Remove existing fiber lateral cables;</td>
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<td></td>
<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td></td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td></td>
<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>068-CCTV</td>
<td>I-95 at NW 125th St</td>
<td>11</td>
<td>035-CCTV</td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td></td>
<td>• Remove existing fiber lateral cables;</td>
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<td></td>
<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td></td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>DS-0081S</td>
<td>I-95 at NW 129th St</td>
<td>12</td>
<td></td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop</td>
<td>Other Devices Fed from This Cabinet</td>
<td>Work Description</td>
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</tr>
</tbody>
</table>
| RMS-16      | I-95 SB at NW 135th St | 12   | DS-0082S, DS-0083N                 | • Remove existing fiber lateral cables;  
|             |                      |      |                                     | • Replace existing fiber patch panel with new fiber patch panel;  
|             |                      |      |                                     | • Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
|             |                      |      |                                     | • Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
|             |                      |      |                                     | • Replace existing UPS and batteries with new UPS and batteries.  |
| 020-CCTV    | I-95 at Opa Locka Blvd | 12   |                                     | • Furnish and install new fiber lateral cables in existing conduit;  
|             |                      |      |                                     | • Splice new fiber lateral cables into existing 144-count fiber backbone;  
|             |                      |      |                                     | • Remove existing fiber lateral cables;  
|             |                      |      |                                     | • Replace existing fiber patch panel with new fiber patch panel;  
|             |                      |      |                                     | • Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
|             |                      |      |                                     | • Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
<p>|             |                      |      |                                     | • Replace existing UPS and batteries with new UPS and batteries.  |</p>
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop</th>
<th>Other Devices Fed from This Cabinet</th>
<th>Work Description</th>
</tr>
</thead>
</table>
| 061-CCTV    | I-95 at NW 135th St  | 12   | 069-CCTV                           | • Replace existing fiber patch panel with new fiber patch panel;  
|             |                      |      |                                     | • Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
|             |                      |      |                                     | • Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
|             |                      |      |                                     | • Replace existing UPS and batteries with new UPS and batteries.  |
| RMS-7       | I-95 North of OPA-LOCKA Blvd | 13   | 077-CS, DS-0084AN, DS-0084BN, DS-0085AN | • Furnish and install new fiber lateral cables in existing conduit;  
|             |                      |      |                                     | • Splice new fiber lateral cables into existing 144-count fiber backbone;  
|             |                      |      |                                     | • Remove existing fiber lateral cables;  
|             |                      |      |                                     | • Replace existing fiber patch panel with new fiber patch panel;  
|             |                      |      |                                     | • Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
|             |                      |      |                                     | • Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
<p>|             |                      |      |                                     | • Replace existing UPS and batteries with new UPS and batteries.  |</p>
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop</th>
<th>Other Devices Fed from This Cabinet</th>
<th>Work Description</th>
</tr>
</thead>
</table>
| DS-0086AS   | I-95 South of NW 143rd St | 13   | 037-CCTV, 038-CCTV                  | • Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
• Replace existing UPS and batteries with new UPS and batteries. |
| 036-CCTV    | I-95 at NW 144th St    | 13   | 037-CCTV, 038-CCTV                  | • Furnish and install new fiber lateral cables in existing conduit;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Remove existing fiber lateral cables;  
• Replace existing fiber patch panel with new fiber patch panel;  
• Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
• Replace existing UPS and batteries with new UPS and batteries. |
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop¹</th>
<th>Other Devices Fed from This Cabinet²</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS-0088S</td>
<td>I-95 at NW 146th St</td>
<td>13</td>
<td>DS-0089N</td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network; • Replace existing UPS and batteries with new UPS and batteries.</td>
</tr>
<tr>
<td>95SBNW147STLS 020</td>
<td>I-95 at NW 147th St</td>
<td>14</td>
<td>AVI-2</td>
<td>• Furnish and install new conduits from cabinet to the nearest splice box on the backbone; • Furnish and install new fiber lateral cables in new conduits; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel;</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop(^1)</td>
<td>Other Devices Fed from This Cabinet(^2)</td>
<td>Work Description</td>
</tr>
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</tr>
<tr>
<td>039-CCTV</td>
<td>I-95 at NW 150th St</td>
<td>14</td>
<td></td>
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</tr>
<tr>
<td>RMS-15</td>
<td>I 95 SB at NW 151st St</td>
<td>14</td>
<td>DS-0091S</td>
<td></td>
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<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop</td>
<td>Other Devices Fed from This Cabinet</td>
<td>Work Description</td>
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</tbody>
</table>
| 95SBNW151STLS 025   | I-95 at NW 151th St  | 14   | 040-CCTV, 070-CCTV                 | • Furnish and install new fiber lateral cables in existing conduit;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Remove existing fiber lateral cables;  
• Replace existing fiber patch panel with new fiber patch panel;  
• Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
• Replace existing UPS and batteries with new UPS and batteries. |
| 021-CCTV            | I-95 at NW 151st St  | 14   |                                     | • Furnish and install new fiber lateral cables in existing conduit;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Remove existing fiber lateral cables;  
• Replace existing fiber patch panel with new fiber patch panel;  
• Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Integrate the new Field Ethernet Switch into District Six SunGuide® network. |
| DS-0092N            | I-95 North of NW 151st St | 15   |                                     | • Furnish and install new fiber lateral cables in existing conduit;  
• Splice new fiber lateral cables into existing 144-count fiber backbone; |
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop</th>
<th>Other Devices Fed from This Cabinet</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS-0093S</td>
<td>I-95 North of NW 151st St</td>
<td>15</td>
<td>2</td>
<td>• Remove existing fiber lateral cables;</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td></td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>95XSBNW151STT R0065</td>
<td>I-95 at NW 151st St</td>
<td>15</td>
<td>041-CCTV</td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
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<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td>• Remove existing fiber lateral cables;</td>
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<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td></td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Other Devices Fed from This Cabinet&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Work Description</td>
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</tr>
<tr>
<td>DS-0093N</td>
<td>I-95 North of Biscayne Canal</td>
<td>15</td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
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<td></td>
<td>• Remove existing fiber lateral cables;</td>
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<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
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<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td></td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
<td></td>
</tr>
<tr>
<td>95SBNW159STLS030</td>
<td>I-95 at NW 159th St</td>
<td>15</td>
<td>042-CCTV, 062-CCTV</td>
<td>• Furnish and install new fiber lateral cables in existing conduit;</td>
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<td>• Splice new fiber lateral cables into existing 144-count fiber backbone;</td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
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<td></td>
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<td></td>
<td>• Remove existing fiber lateral cables;</td>
<td>• Integrate the new Field Ethernet Switch into District Six SunGuide® network;</td>
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<td></td>
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<td></td>
<td>• Replace existing fiber patch panel with new fiber patch panel;</td>
<td>• Replace existing UPS and batteries with new UPS and batteries.</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop¹</td>
<td>Other Devices Fed from This Cabinet²</td>
<td>Work Description</td>
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</tr>
</tbody>
</table>
| 901-CCTV            | US 441 at Tri-Rail          | 16    | DMS 9                               | • Replace existing pole-mount cabinet with new cabinet;  
• Furnish and install new conduits from new cabinet to the nearest splice box on the backbone;  
• Furnish and install new fiber lateral cables in new conduits;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Furnish and install new fiber patch panel;  
• Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Furnish and install new UPS and batteries;  
• Remove existing wireless radios on the pole;  
• Relocate all other equipment from existing cabinet to the new cabinet;  
• Integrate the new Field Ethernet Switch and associated devices into District Six SunGuide® network. |
| PARK&RIDEEBT R0005  | Park & Ride at Bus Access   | 16    | 052-CCTV, Warning Gates             | • Furnish and install new fiber lateral cables in existing conduit;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Remove existing fiber lateral cables;  
• Replace existing fiber patch panel with new fiber patch panel;  
• Replace existing Field Ethernet Switch with |
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop</th>
<th>Other Devices Fed from This Cabinet</th>
<th>Work Description</th>
</tr>
</thead>
</table>
| PARK&RIDE EBT R0010 | Park & Ride at Vehicle Access         | 16   | 051-CCTV                            | • Furnish and install new fiber lateral cables in existing conduit;  
  • Splice new fiber lateral cables into existing 144-count fiber backbone;  
  • Remove existing fiber lateral cables;  
  • Replace existing fiber patch panel with new fiber patch panel;  
  • Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
  • Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
  • Replace existing UPS and batteries with new UPS and batteries. |
| 900-CCTV            | SR 9 North of NW 155th Ln              | 16   | DMS 10                              | • Replace existing pole-mount cabinet with new cabinet;  
  • Furnish and install new conduits from new cabinet to the nearest splice box on the backbone;  
  • Furnish and install new fiber lateral cables in new conduits;  
  • Splice new fiber lateral cables into existing 144-count fiber backbone;  
  • Furnish and install new fiber patch panel; |
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop¹</th>
<th>Other Devices Fed from This Cabinet²</th>
<th>Work Description</th>
</tr>
</thead>
</table>
| 022-CCTV    | I-95 at US 441       | 16    | 023-CCTV, 900-CCTV, 901-CCTV         | • Furnish and install new fiber lateral cables in existing conduit;  
  • Splice new fiber lateral cables into existing 144-count fiber backbone;  
  • Remove existing fiber lateral cables;  
  • Replace existing fiber patch panel with new fiber patch panel;  
  • Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
  • Integrate the new Field Ethernet Switch into District Six SunGuide® network;  
  • Replace existing UPS and batteries with new UPS and batteries;  
  • Remove existing wireless radios on the pole. |
<p>| DS-0094S    | I-95 South of NW 165th St | 17    | DS-0095N                              | • Furnish and install new fiber lateral cables in existing conduit; |</p>
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop</th>
<th>Other Devices Fed from This Cabinet</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
<td>• Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>95XSBUS441TR0</td>
<td>I-95 at US 441</td>
<td>17</td>
<td>043-CCTV</td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>RMS-14</td>
<td>I-95 NORTH OF PARK &amp; RIDE</td>
<td>17</td>
<td>084-CS, DS-0096S</td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel;</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop</td>
<td>Other Devices Fed from This Cabinet</td>
<td>Work Description</td>
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</tr>
<tr>
<td>ESS 1 Camera (0190-095ESSNB06.6-CCTV)</td>
<td>I-95 NB at NW 69 Street</td>
<td>4</td>
<td></td>
<td>• Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>ESS 2 Camera (0191-095ESSNB08.0-CCTV)</td>
<td>I-95 NB South of NW 95 Street</td>
<td>8</td>
<td></td>
<td>• Furnish and install new fiber lateral cables in existing conduit; • Splice new fiber lateral cables into existing 144-count fiber backbone; • Remove existing fiber lateral cables; • Replace existing fiber patch panel with new fiber patch panel; • Replace existing Field Ethernet Switch with new Field Ethernet Switch; • Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
<tr>
<td>Device Name</td>
<td>Location Description</td>
<td>Loop</td>
<td>Other Devices Fed from This Cabinet</td>
<td>Work Description</td>
</tr>
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</tr>
</tbody>
</table>
| ESS 3 Camera (0192-095ESSSB08.5-CCTV) | I-95 SB North of NW 97 Street | 8    |  | • Furnish and install new fiber lateral cables in existing conduit;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Remove existing fiber lateral cables;  
• Replace existing fiber patch panel with new fiber patch panel;  
• Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Integrate the new Field Ethernet Switch into District Six SunGuide® network. |
| ESS 4 Camera (0193-095ESSNB10.0-CCTV) | I-95 NB South of NW 123 Street | 11   |  | • Furnish and install new fiber lateral cables in existing conduit;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Remove existing fiber lateral cables;  
• Replace existing fiber patch panel with new fiber patch panel;  
• Replace existing Field Ethernet Switch with new Field Ethernet Switch;  
• Integrate the new Field Ethernet Switch into District Six SunGuide® network. |
| ESS 5 Camera (0194-095ESSSB10.4-CCTV) | I-95 SB South of NW 131 Street | 12   |  | • Furnish and install new fiber lateral cables in existing conduit;  
• Splice new fiber lateral cables into existing 144-count fiber backbone;  
• Remove existing fiber lateral cables; |
<table>
<thead>
<tr>
<th>Device Name</th>
<th>Location Description</th>
<th>Loop(^1)</th>
<th>Other Devices Fed from This Cabinet(^2)</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Replace existing fiber patch panel with new fiber patch panel;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Replace existing Field Ethernet Switch with new Field Ethernet Switch;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Integrate the new Field Ethernet Switch into District Six SunGuide® network.</td>
</tr>
</tbody>
</table>

Notes
1. Refer to Verification Report for loop details;
2. The Design-Build Firm shall be responsible for reconnecting all existing devices confirmed as part of the field verification.

The cabinets/devices shown on Table 2 are provided for reference only. The Design-Build Firm shall be responsible for field verifying all existing devices which will be impacted by this Project.

For this Project, the Design-Build Firm shall coordinate with the Project CEI and the FDOT SunGuide® ITS Office prior to disposal of any equipment to allow the Department to salvage existing equipment, components, devices, etc. as spare parts. The Department shall have the first right of refusal to salvage any existing ITS infrastructure. Any equipment not deemed required by the Department, shall be disposed by the Design-Build Firm. The Design-Build Firm shall return salvaged equipment in the same condition prior to construction. If any salvaged equipment is damaged by the Design-Build Firm, the Design-Build Firm shall replace them with new ones at no additional cost to the Department.

The Design-Build Firm shall perform all work in a neat manner. The Design-Build Firm shall seal all conduit entrances to prevent the entry of water and debris.

For DMS sites, the Design-Build Firm shall install ITS components that are easily accessible by the ITS maintenance contractor staff, vehicles and equipment without the need for lane closures. The ITS component sites shall allow for safe staging areas for the ITS maintenance contractor vehicles and equipment when performing maintenance activities. A leveled concrete pad shall be provided around the ITS devices. The concrete pad shall provide sufficient surface area for a maintenance technician to access the cabinet or device and perform maintenance activities. The concrete pad shall have a minimum surface area of 42- square feet (6 feet x 7 feet typical) and minimum thickness of six (6) inches. Power and communication pull boxes shall be placed within the concrete pad area and flush to the top of the concrete surface.

The Design-Build Firm shall install new guard rail, barrier or other approved appropriate treatment to meet the FDOT criteria for DMS locations which are located within the clear zone.

It is the intent to always preserve existing vegetation including trees and palms that do not conflict with proposed improvements. Tree and palm protection shall comply with FDOT Standard Plans for Road and Bridge Construction (Standard Plans), Index -110-100.
A. Design-Build Responsibility

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

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

The Design-Build Firm shall examine the Contract Documents and the site of the proposed work carefully before submitting a Proposal for the work contemplated and shall investigate the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished and as to the requirements of all Contract Documents. Written notification of differing site conditions discovered during the design or construction phase of the Project will be given to the Department’s Project Manager.

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

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

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

B. Department Responsibility

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

II. Schedule of Events.

Below is the current schedule of the remaining events that will take place in the selection process. The Department reserves the right to make changes or alterations to the schedule as the Department determines is in the best interests of the public. Proposers will be notified sufficiently in advance of any changes or alterations in the schedule. Unless otherwise notified in writing by the Department, the dates indicated below for submission of items or for other actions on the part of a Proposer shall constitute absolute deadlines for those activities and failure to fully comply by the time stated shall cause a Proposer to be disqualified.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/18/2019</td>
<td>Planned Advertisement</td>
</tr>
<tr>
<td>3/4/2019</td>
<td>Official Advertisement</td>
</tr>
<tr>
<td>3/12/2019</td>
<td>Mandatory Pre-Proposal meeting at 3:00 p.m. local time in Florida Department of Transportation 1000 Northwest 111 Avenue Miami, Florida 33172</td>
</tr>
<tr>
<td>4/19/2019</td>
<td>Deadline for submittal of questions, for which a response is assured, prior to the submission of the Technical and Bid Price Proposals. All questions shall be submitted to the Pre-Bid Q&amp;A website.</td>
</tr>
<tr>
<td>4/19/2019</td>
<td>Final deadline for submission of requests for Design Exceptions or Design Variations</td>
</tr>
<tr>
<td>4/26/2019</td>
<td>Deadline for the Department to post responses to the Pre-Bid Q&amp;A website for questions submitted by the Design-Build Firms prior to the submittal of the Proposal.</td>
</tr>
<tr>
<td>5/3/2019</td>
<td>Technical Proposals and Price Proposals due in District Office by 10:00 a.m. local time</td>
</tr>
<tr>
<td>5/3/2019</td>
<td>Public announcing of Price Proposals at 11:00 a.m. local time in Florida Department of Transportation 1000 Northwest 111 Avenue Miami, Florida 33172</td>
</tr>
<tr>
<td>5/9/2019</td>
<td>Public Meeting of Technical Review Committee to determine Responsiveness of Technical Proposal(s) at 11:00 a.m. local time in Florida Department of Transportation 1000 Northwest 111 Avenue Miami, Florida 33172</td>
</tr>
<tr>
<td>5/20/2019</td>
<td>Public Meeting of Selection Committee to determine intended Award (Final Selection Posting) at 10:00 a.m. local time in Florida Department of Transportation 1000 Northwest 111 Avenue Miami, Florida 33172</td>
</tr>
<tr>
<td>5/20/2019</td>
<td>Posting of the Department’s intended decision to Award</td>
</tr>
<tr>
<td>5/28/2019</td>
<td>Anticipated Award Date</td>
</tr>
<tr>
<td>6/14/2019</td>
<td>Anticipated Execution Date</td>
</tr>
</tbody>
</table>

### III. Threshold Requirements.

**A. Qualifications**

Proposers are required to be pre-qualified in all work types required for the Project. The Technical qualification requirements of Florida Administrative Code (F.A.C.) Chapter 14-75 and all qualification requirements of F.A.C. Chapter 14-22, based on the applicable category of the Project, must be satisfied.

**B. Joint Venture Firm**

Two or more Firms submitting as a Joint Venture must meet the Joint Venture requirements of Section 14-22.007, 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 Proposals.
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. Price Proposal Guarantee

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

D. Pre-Proposal Meeting

Attendance at the pre-proposal meeting is mandatory. Any Proposer failing to attend will be deemed non-responsive and eliminated from further consideration. The purpose of this meeting is to provide a forum for the Department to discuss with all concerned parties the proposed Project, the design and construction criteria, and method of compensation, instructions for submitting proposals, Design Exceptions, Design Variations, and other relevant issues. In the event that any discussions at the pre-proposal meeting require, in the Department's opinion, official additions, deletions, or clarifications of the Request for Proposal, the Design and Construction Criteria, or any other document, the Department will issue a written addendum to this Request for Proposals as the Department determines is appropriate. No oral representations or discussions, which take place at the pre-proposal meeting, will be binding on the Department. Proposers shall direct all questions to the Departments Question and Answer website: https://fdotwp1.dot.state.fl.us/BidQuestionsAndAnswers/

Failure by a Proposer to attend or be represented at the pre-proposal meeting will constitute a non-responsive determination of their bid package. Bids found to be non-responsive will not be considered. All Proposers must be present and signed in prior to the start of the mandatory pre-proposal meeting. The convener of the meeting will circulate the attendee sign in sheet at the time the meeting was advertised to begin. Once all Proposers have signed, the sign in sheet will be taken and the meeting will “officially” begin. Any Proposer not signed in at the “official” start of the meeting will be considered late and will not be allowed to propose on the Project.

During and after the meeting, it is the responsibility of the Project Manager/Contracting Unit to ensure that each Proposer develops their Technical Proposal with the same information. If a Proposer receives information from the Department relating to the Project, the Department will ensure that all Proposers receive the same information in a timely fashion. The Project file will clearly document all communications with any Firm regarding the design and construction criteria by the Contracting Unit or the Project Manager.

E. Question and Answer

The Design-Build Firm shall submit questions to the Departments Q&A website in accordance with section 2-4 of the Division I Design-Build Specifications.
F. Protest Rights

Any person who is adversely affected by the specifications contained in this Request for Proposal must file a notice of intent to protest in writing within seventy-two hours of the posting of this Request for Proposals. Pursuant to Sections 120.57(3) and 337.11, Florida Statutes, and Rule Chapter 28-110, 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 notice of intent and the formal written protest to:

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

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

G. Non-Responsive Proposals

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

Other conditions which may cause rejection of Proposals include evidence of collusion among Proposers, obvious lack of experience or expertise to perform the required work, submission of more than one Proposal for the same work from an individual, firm, joint venture, or corporation under the same or a different name (also included for Design-Build Projects are those Proposals wherein the same Engineer is identified in more than one Proposal), failure to perform or meet financial obligations on previous contracts, employment of unauthorized aliens in violation of Section 274A (e) of the Immigration and Nationalization Act, or in the event an individual, firm, partnership, or corporation is on the United States Department of Labor’s System for Award Management (SAM) list.

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

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

Any proposal submitted by a Proposer that did not sign-in at the mandatory pre-proposal meeting will be non-responsive.
H. Waiver of Irregularities

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

1. Any design submittals that are part of a Proposal shall be deemed preliminary only.

2. Preliminary design submittals may vary from the requirements of the Design and Construction Criteria.

3. In no event will any such elections by the Department be deemed to be a waiving of the Design and Construction Criteria.

4. The Proposer who is selected for the Project will be required to fully comply with the Design and Construction Criteria for the Price Bid, regardless that the Proposal may have been based on a variation from the Design and Construction Criteria.

5. Proposers shall identify separately all innovative aspects as such in the Technical Proposal. An innovative aspect does not include revisions to specifications or established Department policies. Innovation should be limited to Design-Build Firm’s means and methods, roadway alignments, approach to Project, use of new products, new uses for established products, etc.

6. The Proposer shall obtain any necessary permits or permit modifications not already provided.

7. Those changes to the Design Concept may be considered together with innovative construction techniques, as well as other areas, as the basis for grading the Technical Proposals in the area of innovative measures.

I. Modification or Withdrawal of Proposal

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

J. Department’s Responsibilities

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

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

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

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

IV. Disadvantaged Business Enterprise (DBE) Program

A. DBE Availability Goal Percentage:

The Department of Transportation has an overall, race-neutral DBE goal. This means that the State’s goal is to spend a portion of the highway dollars with Certified DBE’s as prime Design-Build Firms or as subcontractors. Race-neutral means that the Department believes that the 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 on the bid blank/contract front page under “% DBE Availability Goal”. The Department has determined that this DBE percentage can realistically be achieved on this Project based on the number of DBE’s associated with the different types of work that will be required.

Under 49 Code of Federal Regulations Part 26, if the 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 all of our Design-Build Firms to actively pursue obtaining bids and quotes from Certified DBE’s.

The Department is reporting to the Federal Highway Administration the planned commitments to use DBE’s, as well as actual dollars paid to DBE’s. 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 a consultant, referred to as DBE Supportive Services Provider, to provide managerial and technical assistance to DBE’s. This consultant is also required to work with prime Design-Build Firms, who have been awarded contracts, to assist in identifying DBE’s that are available to participate on the Project. The successful Design-Build Firm should meet with the DBE Supportive Services Provider to discuss the DBE’s that are available to work on this Project. The current DBE Supportive Services Provider for the State of Florida can be found in 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 DBE’s and Non-DBE’s.

A Bid Opportunity List should be submitted through the Equal Opportunity Compliance system which is
available at the Equal Opportunity Office Website. This information should be entered into the Equal Opportunity Compliance System within 3 business days of submission of the bid or proposal.

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

A. **Governing Regulations:**

The services performed by the Design-Build Firm shall be in compliance with all applicable Manuals and Guidelines including the Department, FHWA, AASHTO, and additional requirements specified in this document. Except to the extent inconsistent with the specific provisions in this document, the current edition, including updates, of the following Manuals and Guidelines shall be used in the performance of this work. Current edition is defined as the edition in place and adopted by the Department at the date of advertisement of this contract with the exception of the Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications, Manual on Uniform Traffic Control Devices (MUTCD), and FDOT Standard Plans with applicable Interim Revisions. The Design-Build Firm shall use the edition of the Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications, FDOT Standard Plans and applicable Interim Revisions in effect at the time the bid price proposals are due in the District Office. The Design-Build Firm shall use the 2009 edition of the MUTCD (as amended in 2012). It shall be the Design-Build Firm's responsibility to acquire and utilize the necessary manuals and guidelines that apply to the work required to complete this Project. The services will include preparation of all documents necessary to complete the Project as described in Section I of this document.

1. Florida Department of Transportation Design Manual (FDM)  

2. Florida Department of Transportation Specifications Package Preparation Procedure  

3. Florida Department of Transportation Standard Plans for Road and Bridge Construction  
   [http://www.fdot.gov/design/standardplans/](http://www.fdot.gov/design/standardplans/)

4. Standard Plans Instructions (Refer to Part I, Chapter 115, FDM  

5. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications  
   [http://www.fdot.gov/programmanagement/default.shtm](http://www.fdot.gov/programmanagement/default.shtm)

6. Florida Department of Transportation Surveying Procedure 550-030-101  

7. Florida Department of Transportation EFB User Handbook (Electronic Field Book)  

8. Florida Department of Transportation Drainage Manual  

9. Florida Department of Transportation Soils and Foundations Handbook  
   [http://www.fdot.gov/structures/Manuals/SFH.pdf](http://www.fdot.gov/structures/Manuals/SFH.pdf)
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

12. AASHTO – A Policy on Geometric Design of Highways and Streets

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/

    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

19. Florida Department of Transportation Design Bulletins and Update Memos

20. Florida Department of Transportation Utility Accommodation Manual
    https://www.fdot.gov/programmanagement/utilities/Default.shtm

21. AASHTO LRFD Bridge Design Specifications
    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

    http://www.fdot.gov/traffic/TrafficServices/Studies/TEM/tem.shtm

27. Florida Department of Transportation Intelligent Transportation System Guide Book
B. Innovative Aspects:

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

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

C. Geotechnical Services:

1. General Conditions:

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

D. **Department Commitments:**

There are no Department commitments for this Project.

E. **Environmental Permits:**

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

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

2. **Permits:**

No environmental permits are required for this Project.

F. **Survey:**

The Design-Build Firm shall coordinate with the Department, research existing Department records and obtain any existing available survey (including Right-of-Way survey) information. Any information obtained from the Department is for reference only. The Design-Build Firm shall verify the accuracy of such survey information obtained from the Department and make assumptions and develop plans based on verification of existing conditions. For locations where survey information is necessary for the Project work, and where existing survey information is not available and/or not accurate, then 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.

The Project shall be constructed and operated entirely within the existing FDOT right-of-way. No permits are anticipated during the RFP development. However, should a permit be needed during construction, the Design-Build Firm shall be responsible for obtaining all such permits for the Project as necessary. Such permits must be granted to the Department. The Design-Build Firm shall be responsible for all costs associated with developing the necessary documentation for the permit process approval.

G. **Verification of Existing Conditions:**

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

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

1. Component Submittals:

The Design-Build Firm may submit components of the contract plans set instead of submitting the entire contract plan set; however, sufficient information from other components must be provided to allow for a complete review. In accordance with the FDOT Design Manual, components of the contract plans set are roadway, signing and pavement marking, ITS, accent lighting, 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.

2. Phase Submittals:

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 Department’s Project Manager will initial, date and stamp the signed and sealed plans and specifications as “Released for Construction”.

90% Phase Submittal

- 4 copies of 11” X 17” plans (all required components)
- 4 signed and sealed geotechnical report
- 4 copies of signed and sealed geotechnical report
- 4 copies of design documentation (including PSEM, RTVM, ConOps, Transition Plan and other documents as needed by FDM)
- 4 copies of Technical Special Provisions
- Independent Peer Review Firm’s comments, design verification calculations, and the EOR’s response to the Independent Peer Reviewer’s comments
- 2 CD’s containing the above information in .pdf format

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.

Final Submittal

- 2 sets of signed and sealed 11” X 17” plans (all required documents)
- 2 copies of signed and sealed 11” X 17” plans
- 2 sets of signed and sealed design documentation
- 2 copies of signed and sealed design documentation
- 2 sets of final documentation (including PSEM, RTVM, ConOps, Transition Plan and other documents as needed by FDM)
- 1 signed and sealed copy of Construction Specifications Package or Supplemental Specifications Package
- 2 copies of signed and sealed Construction Specifications Package or Supplemental Specifications Package
2 sets of electronic copies of Technical Special Provisions on CD
Independent Peer Reviewer’s signed and sealed cover letter that all comments have been
addressed and resolved.
Independent Peer Review Firm’s analysis of the adequacy EOR’s response to the
cOMments previously provided by the Department and the signed and sealed Peer Review
Certification letter.
Independent Peer Review Firm’s comments, design verification calculations, and the
EOR’s response to the Independent Peer reviewer’s comments
2 CD’s containing the above information in .pdf format

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) have been resolved to the Department’s satisfaction
as a requirement before obtaining “Released for Construction” plans.

3. Requirements to Begin Construction:

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 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 Engineer of Record 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.

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 DMS structures
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 utility
agreements and permits, if applicable; 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
Department Design Manual.

The Design-Build Firm shall complete the As-Built Plans as the Project is being constructed. All changes
made subsequent to the “Released for Construction” Plans shall be signed/sealed by the EOR. The As-Built Plans shall reflect the “Released for Construction” design and shall include all changes initiated by the Design-Build Firm or the Department in the form of revisions. The As-Built Plans shall be submitted a minimum of 30 calendar days prior to Project completion for Department review and acceptance as a condition precedent to the Departments issuance of Final Acceptance. The submittal shall include As-Built plans, as described above, and surveys meeting the requirements of Design-Build Division I Specification 7-2.3, As-Built Drawings and Certified Surveys.

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-Builts plans, drawings and Certified Surveys
- 3 sets of 11 ”X 17” copies of the signed and sealed As-Built plans, drawings and Certified Surveys (including as-built channel survey)
- 3 sets of final documentation (if different from final component submittal)
- CADD Files
- 2 Final Project DVD’s

4. Milestones:

No milestone submittals are required for this Project.

5. Railroad Submittals:

No railroad submittals are required for this Project.

I. Contract Duration:

The Department has established a Contract Duration of 500 calendar days for the subject Project.

J. Project Schedule:

The Design-Build Firm shall submit a Schedule, in accordance with Subarticle 8-3.2 (Design-Build Division I Specifications). The Design-Build Firm’s Schedule shall allow for up to fifteen (15) calendar days (excluding weekends and Department observed Holidays) review time for the Department’s review of all submittals. The Department will perform the review of Foundation Construction submittals in accordance with Section 455.

No special events have been identified for the Project at the time of the RFP development. However, the Design-Build Firm shall coordinate and seek approval from the Department’s Project Manager, MOT specialist, and SunGuide® TMC for performing work that may impact motorists during special events (i.e. sports events in major stadiums, concerts, boat shows etc.) as determined by the Department. No lane closures shall be allowed on days of such special events.
The minimum number of activities included in the Schedule shall be those listed in the Schedule of Values and those listed below:

- Anticipated Award Date
- Design Submittals
- Shop Drawing Submittals
- Other Contractor-Initiated Submittals including RFI’s, RFM’s, RFC’s, and NCR’s
- Design Survey (where applicable)
- Submittal Reviews by the Department
- Design Review / Acceptance Milestones
- Materials Quality Tracking
- Geotechnical Investigation
- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Foundation Design
- Foundation Construction
- Signing and Pavement Marking Design
- Signing and Pavement Marking Construction
- Intelligent Transportation System Design
- Intelligent Transportation System Construction
- Accent Lighting Design
- Accent Lighting Construction
- Maintenance of Traffic Design
- Maintenance of Traffic Set-Up (per duration)
- Holidays and Special Events (shown as non-work days)
- Additional Construction Milestones as determined by the Design-Build Firm
- Integration of new DMS, UPS, MFES, Hub Switches, and fiber optic cable lateral work into SunGuide® TMC
- Testing of new DMS, UPS, MFES, Hub Switches, and fiber optic cable lateral work.
- Training
- Final Completion Date for All Work

K. Key Personnel/Staffing:

The Design-Build Firm’s work shall be performed and directed by key personnel identified in the Technical Proposal by the Design-Build Firm. 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. Any changes in the indicated 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 Technical Proposal. The Design-Build Firm shall have available professional staff meeting the minimum training and experience set forth in Florida Statute Chapter 455.

L. 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 Technical Proposal 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 Technical Proposal.

M. Meetings and Progress Reporting:

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

- Department technical issue resolution
- Local government agency coordination
- System Integration Meetings

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

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

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

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

System Integration Meetings will be held on mutually agreeable dates.

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

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

N. Quality Management Plan (QMP):

1. Design:

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

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

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

1. **Construction:**

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

The sampling, testing and reporting of all materials used shall be in compliance with the Sampling, Testing and Reporting Guide (STRG) provided by the Department. The Design-Build Firm will use the Department’s database(s) to allow audits of materials used to assure compliance with the STRG. The Department has listed the most commonly used materials and details in the Department’s database. When materials being used are not in the Department’s database list, the Design-Build Firm shall use appropriate material details from the STRG to report sampling and testing. Refer to the State Materials Office website for instructions on gaining access to the Department’s databases: [http://www.fdot.gov/materials/quality/programs/qualitycontrol/contractor.shtm](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.

The Department shall maintain its rights to inspect construction activities and request any documentation from the Design-Build Firm to ensure quality products and services are being provided in accordance with the Department’s Materials Acceptance Program.

**O. 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.

**P. Engineers Field Office:**

No Engineers Field Office is required for this Project.

**Q. Schedule of Values:**

The Design-Build Firm is responsible for submitting estimates requesting payment. Estimates requesting payment will be based on the completion or percentage of completion of tasks as defined in the schedule of values. Final payment will be made upon final acceptance by the Department of the Design-Build Project. Tracking DBE participation will be required under normal procedures according to the Construction Project Administration Manual. The Design-Build Firm must submit the schedule of values.
to the Department for approval. No estimates requesting payment shall be submitted prior to Department approval of the schedule of values.

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

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 MicroStation and GEOPAK as its standard graphics and roadway design platform as well as 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 available in the FDOT CADD Software Suite. 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 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 MicroStation and/or AutoCAD design files format.

As part of the As-Built Set deliverables, field conditions shall be incorporated into MicroStation and/or AutoCAD design files. Use the cloud revision utility as well as an “AB” revision triangle to denote field conditions on plan sheets.

S. Construction Engineering and Inspection:

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

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

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, etc. in accordance with the latest Specifications.

U. 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:

The Design-Build Firm shall consider and include in the Construction Plans and Bid Price Proposal, 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.

V. 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 Construction Project Manager. All issues are to be directed to the Construction Project Manager. If the issue cannot be resolved by the Construction Project Manager in coordination with the Resident Engineer and Design Project Manager as applicable, the 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. Once 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 shall provide a similar issue escalation process for their organization with personnel of similar levels of responsibility.

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

VI. Design and Construction Criteria.

A. General:

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

B. Geotechnical Services:

Drilled Shaft Foundations for Miscellaneous Structures

The Design-Build Firm shall design and construct the drilled shaft in accordance with FDOT criteria, and be responsible for the following:

1. Evaluating geotechnical conditions to determine the drilled shaft diameter and length and construction methods to be used.
2. Performing the subsurface investigation and drilling pilot holes prior to establishing the drilled shaft tip elevations and socket requirements.
3. Determining the locations of the load test shafts and the types of tests that will be performed.
4. Performing pilot borings for test holes (also known as test shafts or method shafts) and load test shafts and providing the results to the Department at least one (1) working day before beginning construction of these shafts.
5. Preparing and submitting a Drilled Shaft Installation Plan for the Department’s acceptance.
6. Constructing the method shaft (test hole) and load test shafts successfully and conducting thermal integrity tests on these shafts.
7. Providing all personnel and equipment to perform a load test program on the load test shafts.
8. Determining the production shaft lengths.
9. Documenting and providing a report that includes all load test shaft data, analysis, and recommendations to the Department.
10. Constructing all drilled shafts to the required tip elevation and socket requirement in accordance with the specifications.
11. Inspecting and documenting the construction of all drilled shafts in accordance with the specifications.
12. For drilled shafts for miscellaneous structures, perform CSL or Thermal Integrity testing on any shaft suspected of containing defects.
13. Repairing all detected defects and conducting post repair integrity testing using 3D tomographic imaging and gamma-gamma density logging.
14. Submitting Foundation Certification Packages in accordance with the specifications.
15. Providing safe access, and cooperating with the Department in verification of the drilled shafts, both during construction and after submittal of the certification package.

Spread Footings Foundations (if applicable for DMS locations)

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.

C. Utility Coordination

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

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

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

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

The Design-Build Firm shall be responsible for identifying all the UA/O’s within the Project limits as part of the Project’s utility coordination efforts. No utility relocation work is anticipated on the Project. The Design-Build Firm shall perform all project activities within the existing constraints as a result of the utilities.

Two full business days prior to digging, the Design-Build Firm shall call Sunshine 811 and the Utility Owner and request utility locations. The Design-Build Firm’s representative shall be present when utility companies locate their facilities.

Two full business days prior to digging, the Design-Build Firm shall notify the Department and call the District Maintenance office, telephone number (305) 640-7160 and request lighting conduits locations.

D. Roadway Plans:

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

Design Analysis:

Any deviation from the Department’s design criteria will require a Design Variation and any deviation from AASHTO will require a Design Exception. If a Design-Build Firm requests a Design Variation or Design
Exception, it must be discussed prior to the submission of the Proposal. All such Design Variations and Design Exceptions must be approved or disapproved prior to the submission of the Proposal.

E. Design Documentation, Calculations, and Computations:

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

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

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

1. Structural, power and other ITS related elements
2. Accent lighting photometric calculations
3. Documentation of decisions reached resulting from meetings, telephone conversations or site visits

F. Structure Plans:

The Design-Build Firm shall prepare a component set of Structures Plans as part of the Plans Package for review and approval by the Department.

1. Structures Design Analysis:
   a. The Design-Build Firm shall submit to the Department final signed and sealed design documentation prepared during the development of the plans.
   b. The Design-Build Firm shall insure that the final geotechnical recommendations and reports required for DMS structures foundation design are submitted with the 90% structure plans.

DMS Structures:

The Design-Build Firm shall be responsible for designing, detailing, and installing six (6) new DMS structures with new foundations for the DMS locations listed in Table 1 as required for the project. The design of the proposed DMS structures shall comply with FDOT Structures Manual Volume 3, January 2019 and Standard Plans, FY 2019-20. The proposed new DMS structures shall match the structure configuration/form, the shape of structural components, and aesthetics of the existing structures being replaced. All structural steel shall be galvanized per FDOT Standard Specifications. The new structures shall be cleaned and painted with inorganic zinc coating system in accordance with Section 560 and Section 975 of the Standard Specifications. The color of coating shall match that of each existing structure being replaced. The Design-Build Firm shall submit the paint color code for each proposed new DMS structure to the Department for review and approval prior to applying the paint to the structure. All calculations and plans for the proposed new DMS structure (including foundations, DMS panel vertical supporting members
and mounting brackets, etc.) shall be submitted to the Department for review and approval prior to the fabrication of the structures. The DMS structures shall accommodate DMS panels for the ultimate or interim condition where applicable, whichever requires the greatest foundation and structure size. The Design-Build Firm shall request structure identification numbers from the Department during final design.

1. **DMS 61 and 62**

Replace existing DMS structure with an in kind balanced cantilever frame structure having dual curved posts. The Design-Build Firm shall relocate the marlin sculptures and SunGuide logo plaques from the existing structure onto the new structure. The Design-Build Firm shall either relocate existing “wave” shape metal plate from the existing structure onto the new structure or install a new “wave” shape metal plate in kind onto the new structure if necessary. In addition, the Design-Build Firm shall remove the dedication plaques on the existing structure with care without damaging it and return to District Six SunGuide® TMC.

The Design-Build Firm shall be responsible for designing and detailing for the connections of the marlin sculpture and “wave” shape metal plate and submit the calculations/plans to the Department for review and approval prior to construction. The Design-Build Firm shall ensure that no damages occur to the marlin sculpture and “wave” shape metal plate during the removal and relocation process. If damaged, the Design-Build Firm shall replace with new marlin sculpture and “wave” shape metal plate in kind at no additional cost to the Department.

Existing DMS structure as-built plans are attached in the reference document for Design-Build Firm’s use. Figure 1 below shows existing DMS 61 and 62.

![Figure 1. Existing DMS 61 and 62](image)

2. **DMS 63**
Replace existing DMS structure with an in kind cantilever frame structure. Existing DMS structure as-built plans are attached in the reference document for Design-Build Firm’s use. Figure 2 below shows existing DMS 63.

![Figure 2. Existing DMS 63](image)

3. **DMS 64 and 65**

Replace existing DMS structure with an in kind balanced cantilever frame structure having dual curved posts. Existing DMS structure as-built plans are attached in the reference document for Design-Build Firm’s use. Figure 3 below shows existing DMS 64 and 65.

![Figure 3. Existing DMS 64 and 65](image)

4. **DMS 66 and 67**


Replace existing DMS structure with an in kind balanced cantilever frame structure. Existing DMS structure as-built plans are attached in the reference document for Design-Build Firm’s use. Figure 4 below shows existing DMS 66 and 67.

Figure 4. Existing DMS 66 and 67

5. DMS 68 and 69

Replace existing DMS structure with an in kind balanced cantilever frame structure. Existing DMS structure as-built plans are attached in the reference document for Design-Build Firm’s use. Figure 5 below shows existing DMS 68 and 69.

Figure 5. Existing DMS 68 ad 69
6. **DMS 70 and 71**

Replace existing DMS structure with an in kind balanced cantilever frame structure. Existing DMS structure as-built plans are attached in the reference document for Design-Build Firm’s use. Figure 6 below shows existing DMS 70 and 71.

![Figure 6. Existing DMS 70 and 71](image)

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 V. A.

G. **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 Bid Price Proposals were due in the District Office, along with any approved Developmental Specifications and Technical Special Provisions, that are not part of this RFP. 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:


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

**H. 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 Department’s Design Manual. 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. The Department shall review the Shop Drawing(s) to evaluate compliance with Project requirements and provide any findings to the Design-Build Firm. The Department’s procedural review of Shop Drawings is to assure that the Design-Build Firm’s EOR has approved and signed the drawing, the drawing has been independently reviewed and is in general conformance with the plans. The Department’s review is not meant to be a complete and detailed review. Upon review and approval of the Shop Drawing, the Department will initial, date, and stamp the drawing “Released for Construction” or “Released for Construction as Noted”.

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

**I. 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.

**J. Stormwater Pollution Prevention Plans (SWPPP)**

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

The Design-Build Firm must develop a Transportation Management Plan in accordance with the Department’s FDOT Design Manual.

1. Traffic Control Restrictions:

For weekdays, there will be NO LANE CLOSURES allowed between the hours of ___ 5:00 ___ AM to ___ 10:00 ___ PM except for sites specified in this document. 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 except for sites specified in this document. There will be no DETOURS allowed between the hours of ___ 5:00 ___ AM and ___ 10:00 ___ PM except for sites specified in this document. All lane closures, including ramp closures, must be reported to the local emergency agencies, the media and the District Six public 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.

The Design-Build Firm shall submit all required lane closure information to the Department’s Project Manager and the District Six MOT specialist for approval a minimum of fourteen (14) days in advance of the proposed lane closure via the District Six Lane Closure Information System (LCIS) (www.fdotlcis.com).

The Design-Build Firm shall coordinate and seek approval from the Department’s Project Manager, MOT specialist, and SunGuide® TMC for performing work that may impact motorists during special events (i.e. sports events in major stadiums, concerts, boat shows etc.) as determined by the Department. No lane closures shall be allowed on days of such special events.

The Design-Build Firm shall coordinate with, and seek approval from the SunGuide® TMC for the date and time of performing any lane closures for this Project. The SunGuide® TMC may require the Design-Build Firm to reschedule the lane closures as necessary to avoid special events as determined by the Department. The Design-Build Firm through the Project CEI shall provide at a minimum 72-hour advance notice to the SunGuide® TMC prior to performing any lane closures. No lane closures for this Project shall occur without approval from the District Six MOT specialist and the SunGuide® TMC.

Lane Closure shall occur only during non-peak hours on non-event days/nights.

The following restrictions shall apply for this Project along I-95 for performing work from Sunday to Thursday:

- Single lane closures are allowed from 10:00 PM to 5:00 AM
- Multiple lane closures are allowed from 11:00 PM to 5:00 AM
- Closure of all lanes will not be allowed

The following restrictions shall apply for this Project along I-95 for performing work from Friday to Saturday:

- Single lane closures are allowed from 10:00 PM to 8:00 AM
- Multiple lane closures are allowed from 11:00 PM to 8:00 AM
- Closure of all lanes will not be allowed

The following restrictions shall apply for this Project on US 1 at approximately mile marker 126 for performing work at DMS 61 and 62 site:

- Single lane closures are allowed from 10:00 PM to 5:00 AM Monday to Thursday
• Lane closure on weekends will not be allowed
• Closure of all lanes will not be allowed

The following restrictions shall apply for this Project on US 1 for performing work at other DMS sites:

• Single lane closures are allowed from 9:00 AM to 3:30 PM Monday to Thursday
• Lane closure on weekends will not be allowed
• Closure of all lanes will not be allowed

Overall Project ITS Work Downtime Requirements:

• The Design-Build Firm shall develop and submit a downtime transition plan for the DMS, ITS cabinet and UPS replacement sites and fiber transition plan for the Project to the Department for review and approval along with the design plan submittals (both at the 90% and final submittal phases). The Design-Build Firm’s downtime transition plan and fiber transition plan shall specify the Design-Build Firm’s approach for performing work, and coordination with the Department and others on the Project. Prior to submitting the downtime and fiber transition plans, the Design-Build Firm shall schedule a transition plan meeting with the Department to discuss the proposed approach and any specific requirements from the Department. The Design-Build Firm shall then submit the plans addressing those requirements discussed at the meeting with the Department.
• For DMS replacement sites, the Design-Build Firm shall:
  o Ensure that the downtime duration of DMS at the site, confirmation camera and other devices connected to the DMS cabinet shall not exceed twenty-one (21) days (from the initial time the existing DMS is turned off-line in the SunGuide® software by the Design-Build Firm’s Project work to the time the DMS is operational from the SunGuide® TMC).
  o Be liable for payment reductions of $1000.00 per day or part thereof for going over the allowable downtime duration. Definition of a day is any 24:00:00 period or part thereof. The payment reductions will be applied at the next estimate after the payment reductions occurred.
  o Install, integrate and test the new DMS site and ensure the site is fully operational from the SunGuide® TMC within the downtime duration. Upon completion of the downtime duration, the Design-Build Firm shall allow the Department to use the DMS. However, the Design-Build Firm shall be responsible for the DMS sites until Final Acceptance of the Project.
• The Design-Build Firm shall coordinate with the Department for 95 Express Lanes operations to identify and minimize impacts. The downtime transition plan and the fiber transition plan shall document the impacts and mitigation strategies employed by the Design-Build Firm to minimize 95 Express operations related issues and reduce the overall system downtime.
• The Design-Build Firm shall notify the FDOT District Six SunGuide® TMC at 305-470-5757, at a minimum of 72 hours in advance of taking any existing ITS equipment out-of-service.
• The Design-Build Firm shall submit all required information for SunGuide® and Operations Task Manager (OTM) integration and mapping at a minimum of one week prior to performing work at any fiber lateral migration site. For any site, the Design-Build Firm shall also identify and document all associated devices impacted by the fiber migration work at that site. This information is critical for ensuring that appropriate ITS maintenance tickets are generated during the downtime duration period.
• The attached Verification Report reference document also shows network dependency diagram for ITS devices impacted by the fiber lateral migration work. The Design-Build Firm shall be responsible for field verifying the accuracy of the network dependency diagram and notify Department in writing if any information provided is inaccurate or outdated. Once network dependency diagram is verified, the Design-Build Firm shall start fiber migration work from ITS cabinet sites that are not providing communications to other cabinets (Master Sites) to minimize downtime.
• The Design-Build Firm shall prepare the cabinet, install conduits as necessary, install splice enclosure,
install and splice new fiber optic lateral cable into the backbone, and migrate ITS devices from existing connection to new connection at the end to minimize downtime.

- The Design-Build Firm shall coordinate with the Department over the priority of the fiber lateral migration work elements during the Project’s design phase. The current priority of work completion at the time of RFP development is:
  - Communications between SR 112 Hub and SR 836 Hub establishment
  - Toll Amount DMS and respective DMS confirmation camera
  - Lane Status DMS and respective DMS confirmation camera
  - Freeway DMS and respective DMS confirmation camera
  - Arterial DMS and respective DMS confirmation camera
  - Ramp Signal and respective confirmation camera
  - All other sites

The Department may request the Design-Build Firm to change the order of the work priority during the Project’s design phase. The Design-Build Firm shall adhere to the Department’s request for such change.

- The Design-Build Firm shall stagger and not perform fiber transition work at Toll Amount and Lane Status DMS sites at the same time. At a minimum, one lane status DMS shall be operational per entrance throughout the Project duration.

- For the I-95 NB and SB mainline toll amount DMS sites, during the Design-Build Firm’s work at a toll amount DMS site, if the other toll amount DMS site experiences unexpected operational issues, the Department may request the Design-Build Firm suspend their work and put the DMS back into operational state until the time the other toll amount sign is repaired or stable. The Design-Build Firm shall coordinate and support the Department for any such activities.

- The Design-Build Firm shall:
  - Ensure that the transition duration of each of the ITS cabinets connected to the 96-count fiber optic backbone cable to the 144-count fiber optic cable backbone shall not exceed four (4) hours (04:00:00) (from the initial time the existing ITS device is turned off-line in the SunGuide® software by the Design-Build Firm’s Project work to the time the ITS device is operational from the SunGuide® TMC).
  - Be liable for payment reductions of $1000.00 per hour or part thereof for going over the allowable downtime duration. The deductions will be applied at the next estimate after the overage occurred.
  - Integrate and test to ensure the existing ITS device is fully operational from the SunGuide® TMC within the downtime duration. The Design-Build Firm shall be responsible only for the work they performed at existing ITS devices until Final Acceptance of the Project. The Department is responsible for the maintenance of the existing ITS devices.

For any other ITS device which will be impacted by the replacement of any device as part of this Project, the downtime of the impacted devices shall follow the downtime requirements of the device to be replaced.

L. 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 be responsible for the design of all new or retrofit sign supports (post, overhead span, overhead cantilever, bridge mount and any applicable foundations). 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. Mounting types for various signs shall not be changed by the Design-Build Firm (i.e. if the proposed or existing sign is shown as overhead it shall be overhead and not
M. Lighting Plans:

For DMS 61 and 62 site, the Design-Build Firm shall remove the existing floodlights and all other components of the existing accent lighting system. The Design-Build Firm shall install new accent lighting system with LED floodlights for the marlin sculpture, the wave shape metal plates and the SunGuide® logo plaques, including the upright portion of the structure from the ground to the sculpture, without impacting the DMS. The light from the floodlights shall not reach the DMS. The Design-Build Firm shall install a new lighting control panel with main circuit breaker, surge protective devices (SPD), lighting contactor, photocell and Auto-Off-On selector, in a NEMA 4X type enclosure. The lighting control panel shall be fed from the ITS load center and shall be mounted on the structure of the ITS load center.

LED floodlights shall be rated for outdoor uplighting use and shall have a robust cast aluminum housing. LED floodlights shall also be UL listed for wet locations with thermal, shock and impact resistant lenses and SPD. The color temperature shall be 4,000 K. LED floodlights shall have a minimum five-year warranty. The exterior finish color shall be black.

The Design-Build Firm shall prepare lighting plans for DMS 61 and 62 structure accent lighting system in accordance with Department criteria. Plans shall also include all required mounting details and flood light aiming points based on the photometric calculations.

Existing luminaires, and load centers identified for removal shall be coordinated with the Maintaining Agency as to whether these features will become the property of Design-Build Firm or salvaged, transported, and delivered to the Maintaining Agency for future use.

The Design-Build Firm shall comply with the requirements of each jurisdictional authority within the Project limits. Compliance with the jurisdictional authority includes but is not limited to: field reviews, technical meetings, special deliverable, etc. It is the Design-build Firm’s responsibility to verify and comply with all jurisdictional authority’s requirements.

N. Intelligent Transportation System Plans

1. General

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

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

- Project Layout / Overview sheets outlying the locations of field elements
- Detail sheets on:
  - Tabulation of Quantities
  - DMS Structure, DMS attachment, DMS display/layout
  - CCTV operation/layout
  - MDVS 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 where applicable

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 or update of a concept of operations, the development or update of a project systems engineering management plan (PSEMP), and requirement traceability verification matrix (RTVM) as well as coordination of document review.

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

2. Design and Engineering Services:

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

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

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

• Replacement of any ITS System components that are impacted by the Design-Build Firm’s scope of work as approved by the Department. All equipment shall be new unless otherwise specified.
• Testing of Project work installed or modified by the Design-Build Firm.

General Requirements for DMS Replacement Sites:

The following requirements shall apply to all DMS replacement sites:

• The Design-Build Firm shall integrate the new DMS and other devices connected to the DMS cabinets with the SunGuide® TMC using the existing FDOT District 6 communications network and SunGuide® software.
• The Design-Build Firm shall ensure that the KAIC ratings of existing ITS circuit breakers and panels at existing load centers proposed for re-use shall be evaluated and shall be greater than the maximum available short circuit current at the load center. The Design-Build Firm shall install new power infrastructure or rectify existing ones if the existing power infrastructure does not meet such requirements.
• The Design-Build Firm shall perform evaluation of the existing conditions including utility coordination, review of existing structural plans, perform geotechnical investigations, review right-of-
way constraints, review constructability issues, investigate design exceptions and variation needs, investigate permits needs, review location with respect to signing and SunGuide® TMC operations, etc. prior to selecting the final DMS locations. If a new location is determined to be most feasible option, the Design-Build Firm shall seek approval from the Department on the new location of the DMS. The Design-Build Firm shall provide a fully functional and operational DMS that supports the SunGuide® TMC Operations.

- The Design-Build Firm shall coordinate with the local businesses, local residences and FDOT PIO prior to construction/staging activities in the Florida Keys area.
- At the time of this RFP development, there is ongoing FDOT microwave radio installation project in the Florida Keys area, which may install microwave radio equipment inside cabinet or antennas on existing structures at some of the DMS replacement locations. The Design-Build Firm shall relocate all such devices/equipment to the new cabinet/structure and shall coordinate with Department on detailed relocation requirements if those devices/equipment are installed at DMS replacement locations.
- All new DMS cabinets shall be ground mount and shall have a minimum concrete foundation of four (4) feet above grade to prevent flooding. The Design-Build Firm shall ensure DMS cabinets mounted on top of the concrete foundation are easily accessible by District Six ITS maintenance staff. The Design-Build Firm shall design and submit to Department for approval prior to construction. The Design-Build Firm shall ensure all such design and locations meet FDOT clear zone requirements and shall install guardrail as necessary to provide protection.

DMS 61 and 62

- The Design-Build Firm shall mount the new DMS 61 and 62 on a new DMS structure. The Design-Build Firm shall perform the geotechnical investigation; develop the structural design plans and documentation, and install the new DMS structure.
- The Design-Build Firm shall extend, adjust or modify the existing guardrail as necessary to provide protection to the new DMS structure and meet the FDOT clear zone requirements.
- The Design-Build Firm shall remove and dispose existing DMS, sign structure and cabinet. The location of the new DMS shall be within the proximity of the existing DMS.
- The Design-Build Firm shall install grounding and lightning protection for the new DMS structure.
- The Design-Build Firm shall install separate DMS controllers for each DMS.
- The Design-Build Firm shall install new ground-mount DMS cabinet, cabling between the cabinet and the DMS, UPS and batteries, SPD’s, and other ancillary equipment as necessary for a fully operational DMS.
- The Design-Build Firm shall integrate the new DMS with the SunGuide® TMC using the existing FDOT District 6 communications network and SunGuide® software. The Design-Build Firm shall maintain existing configuration of communications network for all devices at DMS 61 and 62 site. The Design-Build Firm may reuse existing communications infrastructure including MFES, fiber optic cable, antennas, radios, etc. However, when reusing existing communications infrastructure, if the Design-Build Firm encounters any deficiencies, the Design-Build Firm shall install new communications infrastructure as necessary to make the DMS and all attached devices at this location operational.
- During the removal of the existing cabinet and installation of the new cabinet, the Design-Build Firm shall ensure that no damage occurs to any existing equipment and infrastructure, including but not limited to communications equipment, conduits, pull boxes, foundations, communications and electrical power cables.
- The Design-Build Firm shall re-establish power connection to the new DMS and all associated devices at this location. The Design-Build Firm shall install new electrical infrastructure (service feeds, meter, disconnect switch, circuit breakers, panelboard, SPD’s, H-frame, pull boxes or other infrastructure) as
needed for fully operational DMS and all devices that are fed from the existing power service.

- The Design-Build Firm shall ensure that the proposed DMS 61 and 62 can be fully verified by existing DMS confirmation cameras. If the new DMS location/orientation does not allow the SunGuide® TMC Operators to view and read the entire messages on the new DMS, the Design-Build Firm shall install new DMS confirmation cameras. All such cameras shall be HD CCTV cameras with PTZ features and installed on a pole with a new camera lowering device. All such cameras shall be integrated into existing District Six SunGuide® network.

- The Design-Build Firm shall protect all existing ITS devices and infrastructure such as cameras, MVDS, and FDOT microwave communications equipment during DMS replacement work. If impacted by the project, the Design-Build Firm shall be responsible for restoring to condition prior to construction.

- The Design-Build Firm shall ensure that the proposed ground mount cabinet has provisions for a connection of an external power source, such as a portable generator, through a weatherproof, water-resistant and secure interface. The external connection shall include a manual transfer switch. The Design-Build Firm shall provide approximately twenty-five feet of pigtail terminated at one end with a three prong plug and rated for the cabinet maximum input wattage in each cabinet. The other end of the pigtail shall be terminated with a connector that matches with the generator (existing Department’s portable generators) and auxiliary power connection. A two-position manual transfer switch shall be furnished and installed. A generator connection panel consisting of, at a minimum, the manual transfer switch and three-prong, minimum thirty (30) amp twist-lock connector for generator hookup shall be included.

DMS 63

- The Design-Build Firm shall mount the new DMS 63 on a new DMS structure. The Design-Build Firm shall perform the geotechnical investigation; develop the structural design plans and documentation, and install the new DMS structure.

- The Design-Build Firm shall extend, adjust or modify the existing guardrail as necessary to provide protection to the new DMS structure and meet the FDOT clear zone requirements.

- The Design-Build Firm shall remove and dispose existing DMS, sign structure and cabinet. The location of the new DMS shall be within the proximity of the existing DMS.

- The Design-Build Firm shall install grounding and lightning protection for the new DMS structure.

- The Design-Build Firm shall install new ground-mount DMS cabinet, cabling between the cabinet and the DMS, UPS and batteries, SPD’s, and other ancillary equipment as necessary for a fully operational DMS.

- The Design-Build Firm shall integrate the new DMS with the SunGuide® TMC using the existing FDOT District 6 communications network and SunGuide® software. The Design-Build Firm shall maintain existing configuration of communications network for all devices at this location. The Design-Build Firm may reuse existing communications infrastructure including MFES, fiber optic cable, antennas, radios, etc. However, when reusing existing communications infrastructure, if the Design-Build Firm encounters any deficiencies, the Design-Build Firm shall install new communications infrastructure as necessary to make the DMS and all attached devices at this location operational.

- During the removal of the existing cabinet and installation of the new cabinet, the Design-Build Firm shall ensure that no damage occurs to any existing equipment and infrastructure, including but not limited to communications equipment, conduits, pull boxes, foundations, communications and electrical power cables.

- The Design-Build Firm shall re-establish power connection to the new DMS and all associated devices at this location. The Design-Build Firm shall install new electrical infrastructure (service feeds, meter, disconnect switch, circuit breakers, panelboard, SPD’s, H-frame, pull boxes or other infrastructure) as
needed for fully operational DMS and all devices that are fed from the existing power service.

- The Design-Build Firm shall ensure that the proposed DMS 63 can be fully verified by existing DMS confirmation camera. If the new DMS location/orientation does not allow the SunGuide® TMC Operators to view and read the entire messages on the new DMS, the Design-Build Firm shall install new DMS confirmation camera. All such camera shall be HD CCTV camera with PTZ features and installed on a pole with a new camera lowering device. All such cameras shall be integrated into existing District Six SunGuide® network.
- The Design-Build Firm shall protect all existing ITS devices and infrastructure such as cameras and FDOT microwave communications equipment during DMS replacement work. If impacted by the project, the Design-Build Firm shall be responsible for restoring to condition prior to construction. The Design-Build Firm shall relocate existing FDOT microwave communications equipment from existing cabinet to the new cabinet and shall coordinate with the Department on connection requirements. The Design-Build Firm shall also relocate antennas from existing DMS structure to the new structure and shall maintain the same mounting height and orientation.
- The Design-Build Firm shall ensure that the proposed ground mount cabinet has provisions for a connection of an external power source, such as a portable generator, through a weatherproof, water-resistant and secure interface. The external connection shall include a manual transfer switch. The Design-Build Firm shall provide approximately twenty-five feet of pigtail terminated at one end with a three prong plug and rated for the cabinet maximum input wattage in each cabinet. The other end of the pigtail shall be terminated with a connector that matches with the generator (existing Department’s portable generators) and auxiliary power connection. A two-position manual transfer switch shall be furnished and installed. A generator connection panel consisting of, at a minimum, the manual transfer switch and three-prong, minimum thirty (30) amp twist-lock connector for generator hookup shall be included.

DMS 64 and 65

- The Design-Build Firm shall mount the new DMS 64 and 65 on a new DMS structure. The Design-Build Firm shall perform the geotechnical investigation; develop the structural design plans and documentation, and install the new DMS structure.
- The Design-Build Firm shall extend, adjust or modify the existing guardrail as necessary to provide protection to the new DMS structure and meet the FDOT clear zone requirements.
- The Design-Build Firm shall remove and dispose existing DMS, sign structure and cabinet. The location of the new DMS shall be within the proximity of the existing DMS.
- The Design-Build Firm shall install grounding and lightning protection for the new DMS structure.
- The Design-Build Firm shall install separate DMS controllers for each DMS.
- The Design-Build Firm shall install new ground-mount DMS cabinet, cabling between the cabinet and the DMS, UPS and batteries, SPD’s, and other ancillary equipment as necessary for a fully operational DMS.
- The Design-Build Firm shall integrate the new DMS with the SunGuide® TMC using the existing FDOT District 6 communications network and SunGuide® software. The Design-Build Firm shall maintain existing configuration of communications network for all devices at DMS 64 and 65 site. The Design-Build Firm may reuse existing communications infrastructure including MFES, fiber optic cable, antennas, radios, etc. However, when reusing existing communications infrastructure, if the Design-Build Firm encounters any deficiencies, the Design-Build Firm shall install new communications infrastructure as necessary to make the DMS and all attached devices at this location operational.
- During the removal of the existing cabinet and installation of the new cabinet, the Design-Build Firm shall ensure that no damage occurs to any existing equipment and infrastructure, including but not limited to communications equipment, conduits, pull boxes, foundations, communications and
electrical power cables.

- The Design-Build Firm shall re-establish power connection to the new DMS and all associated devices at this location. The Design-Build Firm shall install new electrical infrastructure (service feeds, meter, disconnect switch, circuit breakers, panelboard, SPD’s, H-frame, pull boxes or other infrastructure) as needed for fully operational DMS and all devices that are fed from the existing power service.

- The Design-Build Firm shall ensure that the proposed DMS 64 and 65 can be fully verified by existing DMS confirmation cameras. If the new DMS location/orientation does not allow the SunGuide® TMC Operators to view and read the entire messages on the new DMS, the Design-Build Firm shall install new DMS confirmation cameras. All such cameras shall be HD CCTV cameras with PTZ features and installed on a pole with a new camera lowering device. All such cameras shall be integrated into existing District Six SunGuide® network.

- The Design-Build Firm shall protect all existing ITS devices and infrastructure such as cameras and FDOT microwave communications equipment during DMS replacement work. If impacted by the project, the Design-Build Firm shall be responsible for restoring to condition prior to construction. The Design-Build Firm shall relocate existing FDOT microwave communications equipment from existing cabinet to the new cabinet and shall coordinate with the Department on connection requirements. The Design-Build Firm shall also relocate antennas from existing DMS structure to the new structure and shall maintain the same mounting height and orientation.

- The Design-Build Firm shall ensure that the proposed ground mount cabinet has provisions for a connection of an external power source, such as a portable generator, through a weatherproof, water-resistant and secure interface. The external connection shall include a manual transfer switch. The Design-Build Firm shall provide approximately twenty-five feet of pigtail terminated at one end with a three prong plug and rated for the cabinet maximum input wattage in each cabinet. The other end of the pigtail shall be terminated with a connector that matches with the generator (existing Department’s portable generators) and auxiliary power connection. A two-position manual transfer switch shall be furnished and installed. A generator connection panel consisting of, at a minimum, the manual transfer switch and three-prong, minimum thirty (30) amp twist-lock connector for generator hookup shall be included.

DMS 66 and 67

- The Design-Build Firm shall mount the new DMS 66 and 67 on a new DMS structure. The Design-Build Firm shall perform the geotechnical investigation; develop the structural design plans and documentation, and install the new DMS structure.

- The Design-Build Firm shall extend, adjust or modify the existing guardrail as necessary to provide protection to the new DMS structure and meet the FDOT clear zone requirements.

- The Design-Build Firm shall remove and dispose existing DMS, sign structure and cabinet. The location of the new DMS shall be within the proximity of the existing DMS.

- The Design-Build Firm shall install grounding and lightning protection for the new DMS structure.

- The Design-Build Firm shall install separate DMS controllers for each DMS.

- The Design-Build Firm shall install new ground-mount DMS cabinet, cabling between the cabinet and the DMS, UPS and batteries, SPD’s, and other ancillary equipment as necessary for a fully operational DMS.

- The Design-Build Firm shall integrate the new DMS with the SunGuide® TMC using the existing FDOT District 6 communications network and SunGuide® software. The Design-Build Firm shall maintain existing configuration of communications network for all devices at DMS 66 and 67 site. The Design-Build Firm may reuse existing communications infrastructure including MFES, antennas, radios, etc. However, when reusing existing communications infrastructure, if the Design-Build Firm encounters any deficiencies, the Design-Build Firm shall install new communications infrastructure as necessary to make the DMS and all attached devices at this location operational.
• During the removal of the existing cabinet and installation of the new cabinet, the Design-Build Firm shall ensure that no damage occurs to any existing equipment and infrastructure, including but not limited to communications equipment, conduits, pull boxes, foundations, communications and electrical power cables.

• The Design-Build Firm shall re-establish power connection to the new DMS and all associated devices at this location. The Design-Build Firm shall install new electrical infrastructure (service feeds, meter, disconnect switch, circuit breakers, panelboard, SPD’s, H-frame, pull boxes or other infrastructure) as needed for fully operational DMS and all devices that are fed from the existing power service.

• The Design-Build Firm shall ensure that the proposed DMS 66 and 67 can be fully verified by existing DMS confirmation cameras. If the new DMS location/orientation does not allow the SunGuide® TMC Operators to view and read the entire messages on the new DMS, the Design-Build Firm shall install new DMS confirmation cameras. All such cameras shall be HD CCTV cameras with PTZ features and installed on a pole with a new camera lowering device. All such cameras shall be integrated into existing District Six SunGuide® network.

• The Design-Build Firm shall protect all existing ITS devices and infrastructure such as cameras and FDOT microwave communications equipment during DMS replacement work. If impacted by the project, the Design-Build Firm shall be responsible for restoring to condition prior to construction. The Design-Build Firm shall relocate existing FDOT microwave communications equipment from existing cabinet to the new cabinet and shall coordinate with the Department on connection requirements.

• The Design-Build Firm shall relocate existing police cabinet from existing DMS structure to proposed new DMS structure. Same mounting height shall be maintained.

• The Design-Build Firm shall ensure that the proposed ground mount cabinet has provisions for a connection of an external power source, such as a portable generator, through a weatherproof, water-resistant and secure interface. The external connection shall include a manual transfer switch. The Design-Build Firm shall provide approximately twenty-five feet of pigtail terminated at one end with a three prong plug and rated for the cabinet maximum input wattage in each cabinet. The other end of the pigtail shall be terminated with a connector that matches with the generator (existing Department’s portable generators) and auxiliary power connection. A two-position manual transfer switch shall be furnished and installed. A generator connection panel consisting of, at a minimum, the manual transfer switch and three-prong, minimum thirty (30) amp twist-lock connector for generator hookup shall be included.

DMS 68 and 69

• The Design-Build Firm shall mount the new DMS 68 and 69 on a new DMS structure. The Design-Build Firm shall perform the geotechnical investigation; develop the structural design plans and documentation, and install the new DMS structure.

• The Design-Build Firm shall extend, adjust or modify the existing guardrail as necessary to provide protection to the new DMS structure and meet the FDOT clear zone requirements.

• The Design-Build Firm shall remove and dispose existing DMS, sign structure and cabinet. The location of the new DMS shall be within the proximity of the existing DMS.

• The Design-Build Firm shall install grounding and lightning protection for the new DMS structure.

• The Design-Build Firm shall install separate DMS controllers for each DMS.

• The Design-Build Firm shall install new ground-mount DMS cabinet, cabling between the cabinet and the DMS, UPS and batteries, SPD’s, and other ancillary equipment as necessary for a fully operational DMS.

• At this site, the Design-Build Firm is not allowed to reuse existing conduits and shall install new conduits between the new ground-mount DMS cabinet and the new DMS.

• The Design-Build Firm shall integrate the new DMS with the SunGuide® TMC using the existing FDOT District 6 communications network and SunGuide® software. The Design-Build Firm shall
maintain existing configuration of communications network for all devices at DMS 68 and 69 site. The Design-Build Firm may reuse existing communications infrastructure including MFES, antennas, radios, etc. However, when reusing existing communications infrastructure, if the Design-Build Firm encounters any deficiencies, the Design-Build Firm shall install new communications infrastructure as necessary to make the DMS and all attached devices at this location operational.

- During the removal of the existing cabinet and installation of the new cabinet, the Design-Build Firm shall ensure that no damage occurs to any existing equipment and infrastructure, including but not limited to communications equipment, conduits, pull boxes, foundations, communications and electrical power cables.
- The Design-Build Firm shall re-establish power connection to the new DMS and all associated devices at this location. The Design-Build Firm shall install new electrical infrastructure (service feeds, meter, disconnect switch, circuit breakers, panelboard, SPD’s, H-frame, pull boxes or other infrastructure) as needed for fully operational DMS and all devices that are fed from the existing power service.
- The Design-Build Firm shall ensure that the proposed DMS 68 and 69 can be fully verified by existing DMS confirmation cameras. If the new DMS location/orientation does not allow the SunGuide® TMC Operators to view and read the entire messages on the new DMS, the Design-Build Firm shall install new DMS confirmation cameras. All such cameras shall be HD CCTV cameras with PTZ features and installed on a pole with a new camera lowering device. All such cameras shall be integrated into existing District Six SunGuide® network.
- The Design-Build Firm shall protect all existing ITS devices and infrastructure such as cameras and FDOT microwave communications equipment during DMS replacement work. If impacted by the project, the Design-Build Firm shall be responsible for restoring to condition prior to construction.
- The Design-Build Firm shall ensure that the proposed ground mount cabinet has provisions for a connection of an external power source, such as a portable generator, through a weatherproof, water-resistant and secure interface. The external connection shall include a manual transfer switch. The Design-Build Firm shall provide approximately twenty-five feet of pigtail terminated at one end with a three prong plug and rated for the cabinet maximum input wattage in each cabinet. The other end of the pigtail shall be terminated with a connector that matches with the generator (existing Department’s portable generators) and auxiliary power connection. A two-position manual transfer switch shall be furnished and installed. A generator connection panel consisting of, at a minimum, the manual transfer switch and three-prong, minimum thirty (30) amp twist-lock connector for generator hookup shall be included.

**DMS 70 and 71**

- The Design-Build Firm shall mount the new DMS 70 and 71 on a new DMS structure. The Design-Build Firm shall perform the geotechnical investigation; develop the structural design plans and documentation, and install the new DMS structure.
- The Design-Build Firm shall extend, adjust or modify the existing guardrail as necessary to provide protection to the new DMS structure and meet the FDOT clear zone requirements.
- The Design-Build Firm shall remove and dispose existing DMS, sign structure and cabinet. The location of the new DMS shall be within the proximity of the existing DMS.
- The Design-Build Firm shall install grounding and lightning protection for the new DMS structure.
- The Design-Build Firm shall install separate DMS controllers for each DMS.
- The Design-Build Firm shall install new ground-mount DMS cabinet, cabling between the cabinet and the DMS, UPS and batteries, SPD’s, and other ancillary equipment as necessary for a fully operational DMS.
- The Design-Build Firm shall integrate the new DMS with the SunGuide® TMC using the existing FDOT District 6 communications network and SunGuide® software. The Design-Build Firm shall maintain existing configuration of communications network for all devices at DMS 70 and 71 site. The
Design-Build Firm may reuse existing communications infrastructure including MFES, antennas, radios, etc. However, when reusing existing communications infrastructure, if the Design-Build Firm encounters any deficiencies, the Design-Build Firm shall install new communications infrastructure as necessary to make the DMS and all attached devices at this location operational.

- During the removal of the existing cabinet and installation of the new cabinet, the Design-Build Firm shall ensure that no damage occurs to any existing equipment and infrastructure, including but not limited to communications equipment, conduits, pull boxes, foundations, communications and electrical power cables.
- The Design-Build Firm shall re-establish power connection to the new DMS and all associated devices at this location. The Design-Build Firm shall install new electrical infrastructure (service feeds, meter, disconnect switch, circuit breakers, panelboard, SPD’s, H-frame, pull boxes or other infrastructure) as needed for fully operational DMS and all devices that are fed from the existing power service.
- The Design-Build Firm shall ensure that the proposed DMS 70 and 71 can be fully verified by existing DMS confirmation cameras. If the new DMS location/orientation does not allow the SunGuide® TMC Operators to view and read the entire messages on the new DMS, the Design-Build Firm shall install new DMS confirmation cameras. All such cameras shall be HD CCTV cameras with PTZ features and installed on a pole with a new camera lowering device. All such cameras shall be integrated into existing District Six SunGuide® network.
- The Design-Build Firm shall protect all existing ITS devices and infrastructure such as cameras and FDOT microwave communications equipment during DMS replacement work. If impacted by the project, the Design-Build Firm shall be responsible for restoring to condition prior to construction.
- The Design-Build Firm shall ensure that the proposed ground mount cabinet has provisions for a connection of an external power source, such as a portable generator, through a weatherproof, water-resistant and secure interface. The external connection shall include a manual transfer switch. The Design-Build Firm shall provide approximately twenty-five feet of pigtail terminated at one end with a three prong plug and rated for the cabinet maximum input wattage in each cabinet. The other end of the pigtail shall be terminated with a connector that matches with the generator (existing Department’s portable generators) and auxiliary power connection. A two-position manual transfer switch shall be furnished and installed. A generator connection panel consisting of, at a minimum, the manual transfer switch and three-prong, minimum thirty (30) amp twist-lock connector for generator hookup shall be included.

General Requirements for I-95 Fiber Optic Cable Lateral Replacement:

Background: The Department has conducted a field verification of existing connections between ITS cabinets and splice boxes connected to the existing 96-count backbone. The existing 144-count fiber optic backbone cable which was recently installed by another project shares the same splice boxes and duct banks with the 96-count fiber optic backbone cable. Before the 144-count fiber optic backbone cable was installed, the Department repaired the underground infrastructure for the backbone cable installation. The plans of that repair work are also provided as reference document to this RFP.

The drawings from the Verification Report, which shows the location of existing infrastructure (cabinets, pull and splice boxes, conduits, etc.) are not to scale and are provided for reference only. All the connection paths shown on the Verification Report are for illustrative purposes only and the Design-Build Firm shall field verify existing conditions before starting any lateral fiber optic cable installation work. The Design-Build Firm shall document all field conditions and any proposed lateral fiber optic cable path during the design phase and submit to the Department for review and approval before construction. The Design-Build Firm shall also install new infrastructure as necessary and per recommendations from the Verification Report to connect existing ITS cabinets with splice boxes on the 144-count fiber optic backbone cable. The Design-Build Firm shall be responsible for all locates for all new ITS infrastructure installed by the Design-
Build Firm through Final Acceptance of the Project.

The Verification Report shows ITS devices/cabinets grouped into different loops. The purpose of the loop is to group ITS devices within close proximity to better manage them. The Design-Build Firm shall use the same splicing scheme, buffer and strand color in kind to splice all cabinets within each loop using a daisy chain configuration. The Design-Build Firm shall coordinate with the Department for all fiber splicing details and submit for Department’s review and approval during design phase. No fiber splicing work shall start without prior approval from the Department. On the design plan submittals, the Design-Build Firm shall include fiber splice tables showing detailed splicing information.

High-level existing network dependency of ITS devices within the project limits are also included in the Verification Report and are provided for reference only. The Design-Build Firm shall field verify all existing network architecture and notify Department if any discrepancies are found. To minimize downtime, the Design-Build Firm shall start work at cabinets which are not serving as master cabinet to other locations. The Design-Build Firm shall submit downtime transition plan for review and approval prior to taking any cabinets down.

The Design-Build Firm shall transition the existing ITS devices and Express Lanes toll related devices and infrastructure from the 96-count fiber optic backbone to the 144-count fiber optic backbone within the downtime requirements described in the RFP. The Design-Build Firm may employ a different approach to complete the I-95 fiber optic cable backbone migration work. For any approach, the Design-Build Firm shall seek approval of their approach by submitting a fiber transition plan to the Department along with a detailed list of all activities, anticipated downtime scenarios and an emergency back-up plan for unanticipated issues.

At each cabinet, the Design-Build Firm shall terminate 8 fibers, 4 of which shall be connected to the MFES and the other 4 shall be left as spares.

The Design-Build Firm shall at a minimum use two splicers for maximizing efficiency and minimizing downtime.

The Design-Build Firm shall ensure that the new fiber optic cable lateral system is fully operational and tested per the FDOT standard specifications for road and bridge construction.

**Managed Field Ethernet Switch (MFES) Requirements:**

The Design-Build Firm shall provide ITS Express 8012-24+ MFES or an equivalent models (approved by the Department as part of the shop drawing reviews) that are field hardened, fully managed providing 8 10\/100\/1000 dual speed hybrid fiber SFP combo ports; and 16 Fast Ethernet copper ports 10\/100BaseTX; and supporting 100M\/1G\/10G optical bypass function of 2 port duplex or 4 port simplex fiber connection, 128-bit Encryption; Multiple fiber connector types (LC, SC, SFP Pluggable Optics); Bi-directional single strand fiber support; and long haul optics allowing Gigabit transmission.

During MFES integration stage, the Design-Build Firm shall bring all MFES to District Six and jointly configure the MFES with District Six Staff. Network engineers and technicians from the Design-Build Firm shall be present when jointly configuring those MFES. The Design-Build Firm shall coordinate with the Department at a minimum 72 hours prior to bringing MFES to District Six and jointly configuring them. The Design-Build Firm shall coordinate with the Department to obtain IP addresses and any other network configuration parameters for the new MFES and all connected ITS devices and equipment. For each MFES site, after MFES integration is completed, the Design-Build Firm shall ensure all ITS devices and equipment connected to the MFES are operational.
General Requirements for Pull and Splice Boxes Clean Up Work:

The Design-Build Firm shall clean existing pull and splice boxes that will be used for the new lateral fiber optic cable and locate wire system shown from the Verification Report. The cleaning of the pull and splice boxes includes removing excess dirt/sediment, restoring pea gravel or crushed stone to facilitate proper drainage, replacing or installing new ground rods, conducting cable management, removing debris or unwanted materials, sealing conduits and other activities. The Design-Build Firm shall also install locate balls inside those pull and splice boxes. The sample specification sheets of the electronic locate ball markers are attached as reference document to the RFP. The Design-Build Firm shall use similar or approved equivalent model for locating pull and splice boxes. The GPS coordinates of pull and splice boxes to be cleaned will be provided to the Design-Build Firm during Construction. The Design-Build Firm is responsible for disposal of all debris and/or sediment removed from pull and splice boxes used on the Project. Disposal of debris and sediment on Department’s right-of-way or adjacent properties is not allowed.

Below picture shows a sample pull box that needs to be cleaned

Below picture shows a sample pull box after the cleanup work is complete.
General Requirements for UPS and Batteries Replacement Work:

The Design-Build Firm shall retrofit existing cabinets (such as installing new mounting racks, shelves, etc.) and adjust locations of other equipment inside the cabinet to accommodate the new UPS and batteries installation. Below picture shows a sample cabinet requiring UPS and batteries replacement.

Below picture shows a sample cabinet with new UPS and batteries installed and cabinet management completed.
When reusing existing cabinet, if the Design-Build Firm encounters any deficiencies, the Design-Build Firm shall rectify the deficiencies by replacing with new cabinets to allow the installation of new UPS and batteries. When doing so, the Design-Build Firm shall also relocate all other equipment inside existing cabinet to the new cabinet and make them operational. The Design-Build Firm shall furnish and install new cabinets and relocate all equipment at no additional cost to the Department.

**General Requirements for ITS Facility Management (ITSFM):**

The Department uses ITSFM software system as a management tool for all ITS assets. The Design-Build Firm shall be responsible for all ITSFM-related work including but not limited to, data collection, and data input into ITSFM to ensure the Project’s ITS components are entered into the ITSFM system. The Design-Build Firm shall use GPS units that are compatible with ITSFM and meet all relevant accuracy requirements. The Design-Build Firm shall be responsible to obtain all necessary ITSFM user credentials such ITSFM viewer, maintainer, and editor for the successful completion of ITSFM updates at no additional cost to the Department. More information on ITSFM can be found at the link below:

https://www.fdot.gov/traffic/itsfm/

3. **Construction and Integration Services:**

The Design-Build Firm shall be responsible for all ITS construction and integration services relating to the Project.

During project construction phase, the Design-Build Firm shall protect and preserve the existing ITS infrastructure from damages which may cause failure or disruption of normal operation. If any ITS infrastructure is damaged by the Design-Build Firm, the Design-Build Firm shall repair or replace the ITS infrastructure.

Repair Plan Requirements: The Design-Build Firm shall submit an ITS infrastructure repair plan to the Department for review and approval within sixty calendar days of Project Contract’s NTP date. The repair plan
will outline the procedures and resources including the availability of parts, materials, equipment, staff, tools, etc. that the Design-Build Firm will utilize to enact repairs and/or replacement work.

Whenever actions of the Design-Build Firm cause other ITS infrastructure to fail or disrupt normal operations, the Design-Build Firm shall restore the ITS infrastructure to their normal operation within the allowable time in Table 3 at no expense to the Department. If the ITS infrastructure is not restored within the allowable time, an initial payment reduction will be assessed, followed by additional payment reductions for each additional time-period. The allowable time begins from the initial notification to the Design-Build Firm by the Department of the ITS infrastructure failure.

For fiber optic cable related downtime, the Design-Build Firm shall perform temporarily fusion splicing within the four-hour period to temporarily restore communications; however, the damaged fiber optic cable segment will be replaced from termination point to termination point with the same type of cable within ninety calendar days. The Design-Build Firm shall have on-stock all required devices, parts, equipment, staff, tools and other necessary logistical items to perform these repairs within the allowable time limit. If multiple systems are affected at the same time, the higher payment reduction will apply and will not end until the system and all components are properly operating. At the discretion of the Department, the payment reductions will not be assessed or time can be extended if the failure to have the ITS devices/communications infrastructure restored and operating properly is beyond the control of the Design-Build Firm. Lack of manpower or parts will not be considered as items beyond the control of the Design-Build Firm.

### Table 3: Allowable Downtime

<table>
<thead>
<tr>
<th>Allowable Time and Payment Reductions Item</th>
<th>Allowable Time</th>
<th>Payment Reductions for Repairs Not Completed During Allowable Time</th>
<th>Additional Time-Period</th>
<th>Payment Reductions for each Additional Time-Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Optic Cable Backbone</td>
<td>4 hours</td>
<td>$1,000.00</td>
<td>4 hours</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>CCTV Cameras</td>
<td>4 hours</td>
<td>$1,000.00</td>
<td>4 hours</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Ramp Signals</td>
<td>4 hours</td>
<td>$1,000.00</td>
<td>4 hours</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>MVDS</td>
<td>4 hours</td>
<td>$1,000.00</td>
<td>4 hours</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>DMS</td>
<td>4 hours</td>
<td>$1,000.00</td>
<td>4 hours</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Express Lanes DMS</td>
<td>2 hours</td>
<td>$2,000.00</td>
<td>2 hours</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>All Other Devices and Equipment</td>
<td>4 hours</td>
<td>$1,000.00</td>
<td>4 hours</td>
<td>$1,000.00</td>
</tr>
</tbody>
</table>

The Design-Build Firm shall start repairing or replacing those devices upon initial notification of ITS infrastructure failure by the Department. Before departing the field site, the Design-Build Firm shall notify the SunGuide® TMC immediately upon completion of the repair work to verify the operation of failed component(s) has been restored. The Design-Build Firm shall send a final acknowledgement to all parties listed in the initial notification with a work performed notice stating the TMC verification of failure repair and the TMC personnel who verified the work. This notification procedure shall be followed for each work site to which the Design-Build Firm is dispatched. Upon completion of the repair work, the Design-Build Firm shall perform diagnostic testing to ensure the System is fully operational and functional. The results of the tests shall be reported to the Department’s Project Manager (or his/her designee) for inspection. Work that is determined to be unacceptable shall be re-done by the Design-Build Firm at its own expense.

At the sole discretion of the Department, the Department may facilitate the repair or replacement of any ITS
infrastructure using the Department’s current ITS Maintenance contract. If the Department decides to utilize the ITS maintenance contract to enact the repairs, the Design-Build Firm will be responsible for the costs incurred by the Department/ITS Maintenance Contractor to perform the repair or replacement. Any costs associated with that repair will be deducted from the next invoice payment.

4. Testing and Acceptance:

All equipment furnished by the Design-Build Firm shall be subject to monitoring and testing to determine conformance with all applicable requirements. The Design-Build Firm is responsible for the coordination and performance of material inspection and testing, field acceptance tests, and system acceptance tests. The times and dates of tests must be accepted in writing by the FDOT Project Manager. The Design-Build Firm shall conduct all tests in the presence of the FDOT Project Manager or designated representative.

The Department’s representative will sign test results documentation at the end of each test. The signature of the Department’s representative implies proof of presence only. Five (5) copies of the documented test results shall be submitted to the Department for review and approval within fourteen (14) days following completion of the test.

The Design-Build Firm shall make a request in writing at least fourteen (14) days prior to the proposed testing, and coordinate the actual test dates with the Department. The Design-Build Firm shall be responsible for providing all testing equipment, conducting the tests and documenting the test results.

ITS Maintenance Requirements:

The Design-Build Firm shall be responsible for all work performed until Project’s Final Acceptance. The Design-Build Firm shall perform repairs to ITS device/equipment that are under the Design-Build Firm’s responsibility until Project’s Final Acceptance for the work performed by the Design-Build Firm. Upon completion of the DMS and fiber migration work and until the Project’s final acceptance, the Design-Build Firm shall allow the Department to operate all DMS and migrated ITS devices sites when they become operable from the SunGuide® TMC.

- During this period, all failures of the DMS (all work performed by the Design-Build Firm) will be reported to the Design-Build Firm by FDOT District Six SunGuide® TMC. The Design-Build Firm shall repair or replace any component or device that fails to function properly for any causes including but not limited to defective materials and workmanship, third-party damage, theft, vandalism, etc. The Design-Build Firm shall notify the Department to confirm the failed device recovery. If any spare parts supplied under the Project are used to replace failed components or devices, then the Design-Build Firm shall replace the required spare parts with new unused spare parts before the Final Acceptance of the Project. The Department will not provide any spare parts to the Design-Build Firm. The Design-Build Firm shall have spare parts in sufficient quantity to be responsive to the repair requirements. The Design-Build Firm shall comply with the following repair response times for DMS sites:
  - On-site arrival: Response within 4 hours from time of initial failure notification from the Department.
  - Repair time: Repair within 12 hours from time of initial failure notification when no lane closures are required. Repair within 48 hours, for locations that require any MOT/lane closures for performing repairs. The Design-Build Firm shall seek approvals from the CEI, SunGuide® TMC and District Six MOT specialist prior to performing any lane closure work. During holidays and the Department’s non-regular hours, the Contractor shall seek approval from the CEI prior to performing any lane closure work to perform emergency repairs.
  - For instances with repair time of 48 hours (48:00:00), the Design-Build Firm shall be liable for payment reductions of $1000.00 per day or part thereof for failure to comply to the repair response requirements stated in this RFP. The payment reductions will be applied at the next
estimate after the payment reductions occurred.

- For instances with repair time of 12 hours (12:00:00), the Design-Build Firm shall be liable for payment reductions of $500.00 per hour or part thereof for failure to comply to the repair response requirements stated in this RFP. The payment reductions will be applied at the next estimate after the payment reductions occurred.

- During this period, all failures of the impacted ITS device cabinet sites for the fiber backbone migration work will be reported to District Six ITS maintenance contractor. After ITS maintenance contractor troubleshoots the failed site and deems the failure is related to the work performed by the Design-Build Firm, the Design-Build Firm will be notified and shall repair or replace any component or device that fails to function properly due to defective materials and workmanship. The Design-Build Firm shall notify the Department to confirm the failed device recovery. If any spare parts supplied under the Project are used to replace failed components or devices, then the Design-Build Firm shall replace the required spare parts with new unused spare parts before the Final Acceptance of the Project. The Department will not provide any spare parts to the Design-Build Firm. The Design-Build Firm shall have spare parts in sufficient quantity to be responsive to the repair requirements. The Design-Build Firm shall comply with the following repair response times:
  - On-site arrival: Response within 1 hour from time of initial failure notification from the Department.
  - Repair time: Repair within 4 hours from time of initial failure notification when no lane closures are required. Repair within 24 hours, for locations that require any MOT/lane closures for performing repairs. The Design-Build Firm shall seek approvals from the CEI, SunGuide® TMC and District Six MOT specialist prior to performing any lane closure work. During holidays and the Department’s non-regular hours, the Contractor shall seek approval from the CEI prior to performing any lane closure work to perform emergency repairs.
  - For instances with repair time of 24 hours (24:00:00), the Design-Build Firm shall be liable for deductions of $1000.00 per day or part thereof for failure to comply to the repair response requirements stated in this RFP. The deductions will be applied at the next estimate after the overages occurred.
  - For instances with repair time of 4 hours (04:00:00), the Design-Build Firm shall be liable for deductions of $1000.00 per hour or part thereof for failure to comply to the repair response requirements stated in this RFP. The deductions will be applied at the next estimate after the overages occurred.

In some cases, depending on the criticality of the failure, the Department may determine to use ITS maintenance contractor to perform the repairs and bring devices back online. Any costs associated with that repair will be deducted from the next invoice payment.

The Design-Build Firm shall be responsible for performing Preventive Maintenance services at both DMS cabinet level and DMS sign enclosure/housing level for DMS at all DMS replacement sites when an existing DMS is taken off-line by the Design-Build Firm until Project’s Final Acceptance. The Design-Build Firm shall be responsible for all labor and material costs for performing the required Preventive Maintenance services. A sample DMS Preventive Maintenance checklist is attached in the reference document. The Design-Build Firm shall follow all Preventive Maintenance procedures shown in the checklist and document Preventive Maintenance results using the checklist. The frequency of Preventive Maintenance at both DMS cabinet level and DMS sign enclosure/housing level shall be once every three (3) months.

The Design-Build Firm shall provide Preventive Maintenance services during off-peak hours, from 10:00 AM to 3:00 PM or from 8:00 PM to 5:00 AM when the Preventive Maintenance activities involve MOT/lane closures or equipment downtime. The Department may change or extend these hours at its own discretion. The Design-Build Firm shall contact the District Six SunGuide® TMC at a minimum 7 days before the scheduled Preventive Maintenance date to report any downtime prior to performing the required preventive maintenance
services in the field.

Training:

The Design-Build Firm shall conduct at a minimum four (4) training sessions for the Department’s staff consisting of IT and ITS maintenance staff. The training session shall show how to operate, diagnose and maintain the DMS, MFES and UPS. The session shall provide “hands-on” use of the system and software, including standard troubleshooting procedures and the manufacturer recommended preventive maintenance requirements.

Each training session shall be available for up to ten (10) attendees. The duration of each training session shall be up to eight (8) hours including classroom (to be held at SunGuide® TMC) and field time. The Design-Build Firm shall furnish ten (10) sets of approved training materials for each session. All training materials, including any figures and drawings, shall also be submitted to the Department in an electronic format on CD/DVD. The Design-Build Firm shall coordinate and schedule training with the Department at a minimum one week prior to the training dates. The training shall be delivered on dates mutually agreeable to the Design-Build Firm and to the Department. The Design-Build Firm shall be responsible for providing the necessary audio-visual and demonstration equipment for training.

The instructor(s) shall have a minimum of four (4) years of experience in training personnel regarding DMS, MFES and UPS. The Design-Build Firm shall record a digital DVD format video of the lecture portions of the sessions and submit to the Department. The video recorded lectures will become the property of the Department.

Spare Parts (Operational Support Supplies):

The Design-Build Firm shall provide operational support supplies for the DMS as per the FDOT Standard Specifications for Road and Bridge Construction. In addition, the Design-Build Firm shall provide the equipment listed below as spare parts for the Project.

<table>
<thead>
<tr>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed Field Ethernet Switches (MFES)</td>
</tr>
<tr>
<td>UPS and Batteries for DMS</td>
</tr>
</tbody>
</table>

5. Existing Conditions

The Design-Build Firm shall refer to the ITS As-Built Plans and other documents provided with this RFP as Reference Documents for additional information and shall be responsible for field verifying all existing site conditions within the project limits.

VII. Technical Proposal Requirements:

A. General:

Each Design-Build Firm being considered for this Project is required to submit a Technical Proposal. The Proposal shall include sufficient information to enable the Department to evaluate the capability of the Design-Build Firm to provide the desired services for the Project.

B. Submittal Requirements:

The Technical Proposal shall be submitted using Form 700-010-21 Low Bid Design-Build Technical
Proposal.

The Technical Proposal shall be submitted electronically and attached to a single email. The Department has a 10MB limit on email. Emails that exceed this 10MB email server limit may be rejected by the Department's email server. It is solely the Design Build Firm's responsibility to ensure that the Technical Proposal is received by the Department's server by the due date and time. Bookmarks which provide links to content within the Technical Proposal are allowed. Bookmarks which provide links to information not included within the content of the Technical Proposal shall not be utilized. No macros will be allowed.

The maximum number of pages shall be 2, single-sided, typed pages including text, graphics, tables, charts, and photographs. Double-sided 8½" x 11" sheets will be counted as 2 pages. Larger sheets are prohibited.

Submit the Technical Proposal to: d6.designbuild@dot.state.fl.us

The minimum information to be included:

Section 1: Written Technical Proposal

- **Approach and Understanding of the Project:**
  
  Present a plan for completing the specified work. The plan should address all significant design and construction issues and constraints and should demonstrate efficient use of manpower, materials, equipment, construction schemes, and techniques for completing the project. Coordination with the Department CEI and SunGuide® TMC shall also be discussed in this section.

- **Staffing:**
  
  - Contractor Name & Applicable Prequalification Work Classes:
  - Construction Project Manager:
  - Construction Superintendent:
  - Consulting Engineer Name and Applicable Prequalified Work Types:
  - Subconsultant Name(s) and Applicable Prequalified Work Types:
  - Design Project Manager:
  - Design Engineer of Record:
  - MOT Certified Designer:
  - Specification Package Technician

- **Responsible Office:**
  
  Design-Build Firms being considered for this Project may have more than one office location. The office assigned responsibility for the work shall be identified in the Technical Proposal. If different elements of the work will be done at different locations, those locations shall be listed.

C. **Evaluation Criteria:**

The Department shall open all Bids received at a public Bid opening on the date found in Section II of this
RFP. The Technical Review Committee will review the Technical Proposal of the Lowest Bidder. The Technical Review Committee will then establish if the Technical Proposal of the Lowest Bidder is responsive or non-responsive based on the criteria described in this RFP. If the Proposal is responsive, that Design-Build Firm will be awarded the Project. If the Proposal is found to be non-responsive, the Technical Review Committee will review the Technical Proposal of the next Lowest Bidder and establish if the Technical Proposal is responsive or non-responsive based on the criteria described in this RFP, and so on.

D. Final Selection Process:

The Project shall be awarded to the responsive Bidder with the lowest Price Proposal.

VIII. BID PROPOSAL REQUIREMENTS.

A. Bid Price Proposal:

Bid Price Proposals shall be submitted on the Bid Blank form attached hereto and shall include one lump sum Price for the Project within which the Proposer will complete the Project. The lump sum price shall include all costs for all design, engineering services, Design-Build Firms quality plan, construction of the Project, and all other work necessary to fully and timely complete that portion of the Project in accordance with the Contract Documents, as well as all job site and home office overhead, and profit, it being understood that payment of that amount for that portion of the Project will be full, complete, and final compensation for the work required to complete that portion of the Project. One (1) USB drive and two (2) hard copies of the Bid Price Proposal shall be hand delivered in a separate sealed package to the following:

Ms. Suzanne Diaz  
Florida Department of Transportation  
1000 Northwest 111 Avenue  
Miami, Florida 33172

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