# NOTICE TO CONTRACTORS OFFICE OF THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION 801 N. BROADWAY AVENUE BARTOW, FLORIDA 33830

# July 19, 2022

District Procurement Office District One

# **ADDENDUM NUMBER TWO**

PROJECT DESCRIPTION: SR 25 (US 27) FROM N OF SR 540 TO N OF KOKOMO RD

FINANCIAL PROJECT NO.: 447437-1-52-01; 447437-1-52-02; 447437-1-52-03

COUNTY: Polk E1V51 CONTRACT NO.:

The following is a list of the revisions made to the Request for Proposal Package.

Request For Proposal	Page		
	2	Table of Contents updated	
	38	<ol> <li>Section VI, Design and Construction Criteria, Item R. Signalization and Intelligent Transportation System Plans, 1. General:         <ol> <li>Added: Note that the project intersections are within the operational area of the Polk County US 27 Adaptive Traffic Control System.</li> <li>Added: At the new signalized intersection, provide detection layout using 6' x 30' stop bar loops for all approach lanes, and 6' x 6' dilemma zone loops on the mainline through lanes. The new controller should be a Cubic Advanced Traffic Controller (ATC) or later model capable of operating the SynchroGreen adaptive traffic control firmware.</li> </ol> </li> </ol>	
	39	1. Removed MVDS structure, MDVS attachment, MDVS operation/layout	
	40	<ol> <li>Section VI, Design and Construction Criteria, Item R. Signalization and Intelligent Transportation System Plans, 2. Design Engineering Services:         <ol> <li>Removed: DMS – Includes sign approach structures, static signs, mounting brackets for travel time and full size DMS.</li> <li>Modified: CCTV – Includes mountings to install CCTV at the new signalized intersection of US 27 and Kokomo Road and integrate into the existing ITS network.</li> <li>Added: Locate the CCTV camera such that 100% CCTV camera coverage of the project signal is provided. 100% CCTV camera coverage shall be defined as the clear and unobstructed view for 1000 feet on the northbound and southbound US 27 approaches, and 500 feet on the westbound Kokomo Rd approach.</li> <li>Added: CCTV camera mounted to a concrete pole shall be a minimum of 35 feet above grade and a maximum of 40 feet above grade.</li> <li>Added: The CCTV camera may be mounted to a new signal structure provided the proposed location meets the CCTV camera coverage requirements.</li> </ol> </li> </ol>	

	6. Removed: MVDS – Includes concrete poles and mounting to delete all lanes along the project corridor. MVDS devices shall be placed at ½ mile intervals on each side of the roadway.
42	Section VI, Design and Construction Criteria, Item R. Signalization and Intelligent Transportation System Plans, 5. Existing Conditions:  1. 1st Bullet – Removed: Speed at one (1) mile intervals and replaced with placed at signalized intersections.  2. 1st Bullet – Removed: and communicate with Local Hubs along the corridor  3. 2nd Bullet – Removed  4. 3rd Bullet – Removed
all	Header updated to reference the Request for Proposal - Addendum No. 02 and date of July 14, 2022.

Attached to Addendum Two is the RFP dated July 14, 2022.

Acknowledge receipt of Addendum Number Two in the space provided on the proposal.

Jhoanna Garces de Beltre
Contracts Administrator

# PLEASE SIGN BELOW IN RECEIPT OF THIS NOTICE AND ADDITIONAL DOCUMENTS ANNOTATED ABOVE.

Signature	Date	
Company Name		



# Florida Department of Transportation District 1

# LOW BID DESIGN-BUILD REQUEST FOR PROPOSAL

For

SR 25 (US 27) from N. of SR 540 to N. of Kokomo Road, Polk County

Financial Projects Number(s): 447437-1-52-01; 447437-1-52-02 and 447437-1-52-03
Federal Aid Project Number(s): D122-041-B
Contract Number: E1V51

Addendum No 12

# **Table of Contents**

I.	Introduc	tion	4
	A.	Design-Build Responsibility	
	B.	Department Responsibility	
II.	Sahadula	of Events.	6
11.	Schedule	OI EVERUS.	0
III.	Threshol	ld Requirements	<u>7</u> 8
	A.	Qualifications	
	B.	Joint Venture Firm	
	C.	Price Proposal Guarantee	8
	D.	Pre-Proposal Meeting	8
	E.	Question and Answer	
	F.	Protest Rights	9
	G.	Non-Responsive Proposals	9
	H.	Waiver of Irregularities	10
	I.	Modification or Withdrawal of Proposal	
	J.	Department's Responsibilities	<u>10</u> 11
	K.	Design-Build Contract	11
	A. B. C.	DBE Availability Goal Percentage:  DBE Supportive Services Providers:  Bidders Opportunity List:	<u>11</u> 12
v.	Project F	Requirements and Provisions for Work	12
	A.	Governing Regulations:	
	B.	Innovative Aspects:	
	C.	Geotechnical Services:	
	D.	Department Commitments:	15
	E.	Environmental Permits:	15
	F.	Railroad Coordination:	<u>16</u> 17
	G.	Survey:	<u>16</u> 17
	H.	Verification of Existing Conditions:	
	I.	Submittals:	17
	J.	Contract Duration:	20
	K.	Project Schedule:	20
	L.	Key Personnel/Staffing:	21
	M.	Partner/Teaming Arrangement:	
	N.	Meetings and Progress Reporting:	
	O.	Quality Management Plan (QMP):	
	P.	Liaison Office:	23

Reques	t for Propos	al – Addendum No 42	
SR 25	(US 27) fron	n N. of SR 540 to N. of Kokomo Rd	July 614, 2022
		F. ' F'1100"	222
	Q.	Engineers Field Office:	
	R.	Schedule of Values:	
	S.	Computer Automation:	
	Т.	Construction Engineering and Inspection:	
	U.	Testing:	
	V.	Value Added:	<u>24</u> 25
	W.	Adjoining Construction Projects:	
	Χ.	Issue Escalation:	25
VI.	Design a	and Construction Criteria	<u>252</u> 6
	A.	General:	<u>25</u> 24
	B.	Vibration and Settlement Monitoring:	26
	C.	Geotechnical Services:	
	D.	Utility Coordination	28
	E.	Roadway Plans:	
	F.	Roadway Design:	
	G.	Geometric Design:	
	H.	Design Documentation, Calculations, and Computations:	
	I.	Structure Plans:	
	J.	Specifications:	34
	K.	Shop Drawings:	
	L.	Sequence of Construction:	
	M.	Stormwater Pollution Prevention Plans (SWPPP)	
	N.	Transportation Management Plan:	
	O.	Environmental Services/Permits/Mitigation:	
	P.	Signing and Pavement Marking Plans:	
	Q.	Lighting Plans:	
	R.	Signalization and Intelligent Transportation System Plans	
	S.	Landscape Opportunity Plans:	
VII.	Taabnia	al Proposal Requirements:	4242
V 11.	A.	General:	
	A. B.		
	в. С.	Submittal Requirements:  Evaluation Criteria:	
	D.	Final Selection Process:	
	<i>υ</i> .	rmai Selection Process:	<u>43</u> 44
VIII.	BID PR	OPOSAL REQUIREMENTS	<u>43</u> 44
	A.	Bid Price Proposal:	<u>43</u> 44

- 1. Provide a new load center per current codes and all applicable criteria.
- Identify an existing load center capable of feeding the existing and proposed lighting while
  meeting all current codes and all applicable criteria.

All modified load centers shall comply with all applicable criteria and shall be in like new condition.

Existing light poles, luminaire arms, 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 perform detailed field reviews. Review and document all lighting (poles/luminaires, sign luminaires, etc.), circuiting, load centers, service points, utility transformers, etc., within the limits of lighting construction. This review includes conductors, conduit, grounding, enclosures, voltages, mounting heights, pullboxes, etc.

All deficiencies within the limits of lighting construction shall be identified and corrected.

After the field reviews are completed, a list of all damaged and/or non-functioning equipment shall be documented and forwarded to the Department prior to the start of construction. All damaged and/or non-functioning equipment within the limits of lighting construction are required to be replaced or repaired to meet all applicable criteria and shall be in like-new condition.

Where new electrical services are required, the Design-Build Firm shall coordinate the final locations of distribution transformer and service pole to minimize service and branch circuit conductors and conduit lengths. Existing lighting shall be maintained until proposed lighting has completed its burn-in period. The Design-Build Firm shall coordinate with the local power company to determine new electrical service locations and shall be responsible for any Contributions in Aid of Construction (CIAC) cost associated with the new service location. Each service point shall be separately metered.

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.

#### R. Signalization and Intelligent Transportation System Plans

#### 1. General

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

Signalization plans are required for all existing and proposed signalized intersections within the Project limits. Impacts to existing traffic signals include physical conflict with or modification to existing signal equipment. Impacts to existing pedestrian signals include add or modify pedestrian crossing alignment, add or modify existing pedestrian equipment, extend or shorten existing pedestrian crossings, and begin/end points at an approach to a signalized intersection. Note that the project intersections are within the operational area of the Polk County US 27 Adaptive Traffic Control System. At the existing signalized intersections, the existing magnetometer vehicle detection devices shall be replaced with stop bar detection and dilemma-zone loops. At the new signalized intersection, provide detection layout using 6'x30' stop bar loops for all approach lanes, and 6'x6' dilemma zone loops on the mainline through lanes. The new

controller should be a Commander Cubic Advanced Traffic Controller (ATC) or later model capable of operating the SynchroGreen adaptive traffic control firmware.

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

- · Key Sheet
- Project Layout / Overview sheets outlying the locations of field elements
- · Detail sheets on:
  - CCTV structure, CCTV attachment, CCTV operation/layout
  - MVDS structure, MDVS attachment, 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

The Design-Build firm is responsible for ensuring project compliance with the Regional ITS Architecture and FDOT ITS Topic 750-040-003-c, Systems Engineering and ITS Architecture Procedure as applicable. This includes, but is not limited to, the development or update of a concept of operations, the development or update of a system engineering master plan (SEMP), and requirement traceability verification (RTVM) as well as coordination of document review.

The Design-Build Firm shall detail existing Signalization and 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 Signalization and 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 subsystems that remain or are re-deployed as the final project.

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

Replacement of any ITS System components that are impacted by the Design-Build Firm's scope
of work as approved by the Department. All equipment shall be new unless otherwise specified.

- DMS Includes sign support structures, static signs, and mounting brackets for travel time and full size DMS.
- CCTV Includes concrete poles, camera lowering devices and mountings to provide 100% install CCTV at the new traffic signalized, at the new intersection of US 27 and Kokomo Dr and integrate into the existing ITS networkeoverage of the project corridor.
  - Locate the CCTV camera such that 100% CCTV camera coverage of the project signal is
    provided. 100% CCTV camera coverage shall be defined as the clear and unobstructed view
    for 1000 feet on the northbound and southbound US 27 approaches, and 500 feet on the
    westbound Kokomo Rd approach.
  - CCTV camera mounted to a concrete pole shall be a minimum of 35 feet above grade and a maximum of 40 feet above grade.
  - The CCTV camera may be mounted to a new signal structure provided the proposed location meets the CCTV camera coverage requirements.
- MVDS—Includes concrete poles and mountings to detect all lanes along the project corridor.
   MVDS devices shall be spaced at ½ mile intervals on each side of the roadway.
- Removal of any ITS System components that are impacted by the Design-Build Firms scope of work as approved by the Department.
- Removal of the existing lateral drops from the backbone to the existing facilities that will or may be removed as part of this project. The lateral drops disconnected from the backbone shall be respliced "in-kind" to match respective fiber strand(s) and buffer tube(s) as approved by the Department. The existing lateral drop conduit(s), pull boxes and splice boxes shall be removed as described in Section C Utility Coordination of this RFP.
- Testing of fiber optic backbone and lateral drops furnished and installed or modified by the Design-Build Firm.
- Testing of the Intelligent Transportation System.
- Coordinate with the Design-Build Firm to avoid conflicts with landscape plans within the Department Right of Way. While procedures are being revised to facilitate this increased collaboration and cooperation, the Design-Build Firm is required to ensure that the design and construction of each ITS project and each landscape project is entirely coordinated with existing and proposed ITS facilities and landscapes. Both programs have been determined to be important components of the state transportation system.

# 3. Construction and Integration Services:

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

#### 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.

#### 5. Existing Conditions

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

The ITS components shall be defined as follows:

- Closed Circuit Television (CCTV) Camera System: The CCTV Camera System consists of pantilt-zoom (PTZ) cameras along the corridor that are typically spaced at one (1) mile intervalsplaced at signalized intersections. The CCTV cameras are used by Department staff for incident management and traffic monitoring. The cameras are integrated and communicate with Local Hubs along the corridor via the single mode FOC communications backbone installed along the corridor.
- Dynamic Message Sign System (DMS). The DMS consists of both mainline and arterial dynamic message signs (ADMS) and provide roadway information and travel times. The mainline DMS are located at select locations along the corridor. The ADMS are located on each approach of select major arterials throughout the roadway system. The mainline DMS are connected and communicate via the single mode FOC communications backbone installed along the corridor. The ADMS communicate with wireless radios to a hub site connected to the single mode FOC communications backbone installed along the corridor.
- Vehicle Detection Systems (VDS): The VDS consists of non-intrusive, microwave technology sensors used to collect vehicle volume, speed and occupancy data from mainline travel lanes. The detectors are typically located at approximately one half (1/2) mile intervals. The detectors are installed on stand alone concrete poles and/or attached to other ITS device structures in a side-fired configuration to detect data on a lane by lane basis. The VDS is used for incident detection by Department staff and communicate with the single mode FOC communications backbone installed along the corridor.
- Fiber Optic Network (FON): The FON infrastructure provides communications for ITS and Tolls
  components (Tolls components are located outside of this corridor). The FON is composed of
  the FOC communications backbone, lateral connections and communications equipment
  including but not limited to field and HUB Ethernet switches, port servers, routers, fiber patch
  panels installed at the various ITS device(s) serving as a local HUB.
- For clarification purposes, any reference in this RFP to the mainline fiber optic backbone that is installed along the corridor shall be defined as the "backbone". The fiber optic cable between the backbone and ITS components shall be defined as the "ITS lateral".
- The FOC communications backbone consists of a single mode fiber optic cable and four (4), 1.25-inch HDPE conduit, locate tone wire, warning tape, fiber route markers, pull boxes, and splice boxes. Three (3) of the four (4), 1.25-inch HDPE conduits are spare conduits. The backbone provides access points for the various ITS components along the corridor for network connectivity as previously described.
- The majority of ITS components are connected to the backbone through a lateral twelve (12) count single mode fiber optic cable inside two (2), 1.25-inch HDPE conduits of which one is a spare. ITS components on arterials, such as ADMS, connect with the backbone through a wireless access point (WAP) and LHUBs which are physically connected to the backbone through a lateral fiber optic cable connection.



# Florida Department of Transportation District 1

# LOW BID DESIGN-BUILD REQUEST FOR PROPOSAL

# For

# SR 25 (US 27) from N. of SR 540 to N. of Kokomo Road, Polk County

Financial Projects Number(s): 447437-1-52-01; 447437-1-52-02 and 447437-1-52-03

Federal Aid Project Number(s): D122-041-B

Contract Number: E1V51

Addendum No 2

# **Table of Contents**

I.	Introdu	ıction	4
	A.	Design-Build Responsibility	5
	B.	Department Responsibility	6
II.	Schedul	le of Events	6
TTT	TI I		-
III.		old Requirements.	
	A.	Qualifications	
	B.	Joint Venture Firm	
	C.	Price Proposal Guarantee	
	D. E.	Pre-Proposal Meeting	
	E. F.	Question and Answer	
	r. G.	Protest Rights Non-Responsive Proposals	
	G. Н.	* *	
	п. I.	Waiver of Irregularities  Modification or Withdrawal of Proposal	
	J.	Department's Responsibilities	
	J. К.	Design-Build Contract	
	IX.	Design Build Confider	11
IV.	Disadva	antaged Business Enterprise (DBE) Program	11
_ , •	A.	DBE Availability Goal Percentage:	
	B.	DBE Supportive Services Providers:	
	C.	Bidders Opportunity List:	
<b>T</b> 7	<b>D</b>		10
V.	_	Requirements and Provisions for Work	
	A.	Governing Regulations:	
	B.	Innovative Aspects:	
	C.	Geotechnical Services:	
	D.	Department Commitments:	
	E.	Environmental Permits:	
	F.	Railroad Coordination:	
	G.	Survey:	
	Н.	Verification of Existing Conditions:	
	I.	Submittals:	
	J.	Contract Duration:	
	K.	Project Schedule:	
	L.	Key Personnel/Staffing:	
	M.	Partner/Teaming Arrangement:	
	N.	Meetings and Progress Reporting:	
	O.	Quality Management Plan (QMP):	
	P.	Liaison Office:	23

	Q.	Engineers Field Office:	23
	R.	Schedule of Values:	
	S.	Computer Automation:	
	T.	Construction Engineering and Inspection:	
	U.	Testing:	
	V.	Value Added:	
	W.	Adjoining Construction Projects:	
	X.	Issue Escalation:	
VI.	Design a	and Construction Criteria	25
	A.	General:	
	B.	Vibration and Settlement Monitoring:	26
	C.	Geotechnical Services:	
	D.	Utility Coordination	28
	E.	Roadway Plans:	
	F.	Roadway Design:	
	G.	Geometric Design:	
	H.	Design Documentation, Calculations, and Computations:	
	I.	Structure Plans:	
	J.	Specifications:	
	K.	Shop Drawings:	35
	L.	Sequence of Construction:	
	M.	Stormwater Pollution Prevention Plans (SWPPP)	
	N.	Transportation Management Plan:	
	O.	Environmental Services/Permits/Mitigation:	
	P.	Signing and Pavement Marking Plans:	
	Q.	Lighting Plans:	
	R.	Signalization and Intelligent Transportation System Plans	
	S.	Landscape Opportunity Plans:	
VII.	Technica	al Proposal Requirements:	41
	A.	General:	
	B.	Submittal Requirements:	41
	C.	Evaluation Criteria:	43
	D.	Final Selection Process:	
VIII.	BID PRO	OPOSAL REQUIREMENTS	43
	Α.	Bid Price Proposal:	43

#### **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.

- A01 Project Advertisement
- A02 Division I Design-Build Specifications

Award and Execution of Contract – Public Records (SP0030900D1)

Legal Requirements and Responsibilities to the Public – E-Verify (SP0072900)

Legal Requirements and Responsibilities to the Public – Scrutinized Companies (SP0073000)

Contaminated Material - Mercury-Containing Devices and Lamps (SP0080409)

Title IV Assurance (SP0073100-7.22)

Damage Recovery (SP0081200-7.22)

A03 Divisions II and III Special Provisions identified by the Department to be used on the Project:

Mobilization (SP1010000DB)

Contractor Quality Control General Requirements (SP1050813DB)

Structures Foundations (SP4550000DB)

- A04 Typical Section Package
- A05 Pavement Design
- A06 D1 Guidelines for the Development of Traffic Signal Timings. April-2021
- A07 ITS Facility Management District One Implementation Plan
- A08 Right-of-Way Maps
- A09 Survey Data
- A10 SS 44743715201 Design-Exception Superelevation Approval Letter.pdf
- A11 SS 44743715201 Design-Exception Superelevation.pdf
- A12 SS 44743715201 Design-Variation CrossSlope Approval Letter.pdf
- A13 SS 44743715201 Design-Variation CrossSlope.pdf
- A14 SS 44743715201 Design-Variation LaneWidth Approval Letter.pdf
- A15 SS 44743715201 Design-Variation LaneWidth.pdf
- A16 SS\_44743715201\_Design-Variation-Memo\_KeyholeOmission.pdf

#### 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.

R01 As-built Plans.zip

R02 Kokomo Rd VVh Information.pdf

R03 UAO Greenlines.zip

R04 5-year Crash History.zip

R05 Through-Lane Cross Slope Analysis.pdf

R06\_43450615201-PLANS-05-LIGHTING.pdf R07\_43450615201-LIGHTING-ANALYSIS-REPORT.pdf R08\_19770715201-PLANS-01-ROADWAY.pdf R09\_19770615201-PLANS-01-ROADWAY.pdf R10\_43854515201-ITS Plans-As\_Builts.pdf

#### I. Introduction.

The Florida Department of Transportation (Department) has issued this Request for Proposal (RFP) to solicit competitive Bids and Proposals from Proposers for the design and construction of the resurfacing of SR 25 from N. of SR 540 (Cypress Gardens Blvd) to N. of Kokomo Rd (CR 546) in Polk County.

#### **Description of Work**

This project consists of the resurfacing of SR 25 (US 27) from north of SR 540 (Cypress Gardens Blvd/Waverly Rd) to north of CR 546 (Kokomo Rd).

SR 25 is on the Strategic Intermodal System (SIS) and the context classification and typical section varies throughout the project limits. North of SR 540 to south of Lincoln Ave, the context classification is C2 and the approved typical section consists of six 12-foot travel lanes, a 40-foot median, and flush shoulders. South of Lincoln Ave to north of Sunburst Rd, the context classification is C3C and the approved typical section consists of six varying width (11.5 to 12-foot) travel lanes, five-foot bicycle lanes in each direction, a 30-foot median, inside (Type E) and outside (Type F) curb and gutter, and an 8-foot sidewalk in each direction. North of Sunburst Rd to south of Crump Rd/W Main St, the context classification is C3C and the approved typical section consists of six 12-foot travel lanes, a 40-foot median, and shoulder gutter on the outside (Type E curb and gutter on the SB median, within the superelevated section). South of Crump Rd/W Main St to north of W. Lake St, the context classification is C3C and the approved typical section consists of six varying width (11.5 to 12-foot) travel lanes, five-foot bicycle lanes in each direction, a 40-foot median, inside (Type E) and outside (Type F) curb and gutter, and a 6-foot sidewalk in each direction. North of W Lake St to north of CR 546 (Kokomo Rd), the context classification is C2 and the approved typical section consists of six 12-foot travel lanes, a 40-foot median, and flush shoulders.

2-foot median paved shoulder shall be constructed (NB & SB) along SR 25 from MP 5.964 to MP 7.928 and MP 10.664 to MP 11.336, as shown in the Typical Section Package.

The proposed CR 546 (Kokomo Rd) intersection shall include widening for a right turn lane from westbound CR 546 to northbound SR 25 (650-foot length, including 50-foot taper). Right turn shall accommodate the turning movement of a WB-62FL design vehicle.

Keyhole widening shall be included at the northbound right turn lanes at Peace Creek Road and Kokomo Road to accommodate a 5-foot bicycle lane.

Pavement resurfacing and widening depths are included in the Approved Pavement Design.

Stormwater treatment and attenuation facilities shall be constructed to meet the requirements of the appropriate permitting agencies. The design of associated conveyance systems shall be compatible with the proposed typical section applicable locations and shall convey stormwater runoff into the stormwater management facilities.

Install signing and pavement markings to guide traffic into appropriate travel lanes.

Provide permanent lighting for all roadways and pedestrian cross walks at the existing Crump/W Main St signalized intersection and proposed CR 546 (Kokomo Rd) signalized intersection. Intersection lighting meeting FDM criteria was included in the 410666-3 project for the Dundee Rd signalized intersection. Existing non-LED lighting within the project limits shall be updated to LED.

The Design-Build Firm shall be responsible for signalization plans to address any additional loading proposed by the Design-Build Firm to the existing signal support structures at the Dundee Rd intersection and the Crump/W Main St intersection, and the proposed signal support structures at the CR 546 (Kokomo Rd) signalized intersection. The proposed CR 546 (Kokomo Rd) signalized intersection shall utilize strain pole structures.

#### A. Design-Build Responsibility

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

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

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

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

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

The Design-Build Firm shall examine 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 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.

The Design-Build Firm will provide litter removal and mowing within the project limits in accordance with Specification Section 107 with a 30-day mowing frequency and a 30-day litter removal frequency.

# **B.** Department Responsibility

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

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

The Department will determine the environmental impacts and coordinate with the appropriate agencies during the preparation of NEPA or SEIR Reevaluations. For federal projects, NEPA Reevaluations will be processed by the Department's EMO Office for approval by OEM pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016 and executed by the FHWA and the Department.

#### 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.

Date	Minimum # of Days	Event
May 6, 2022, Friday	0	Planned Advertisement
May 16, 2022, Monday	10	Current Advertisement
May 24, 2022, Tuesday	7	Virtual Mandatory Pre-Proposal meeting at 10:00 a.m. local time. All Utility Agency/Owners that the Department contemplates an adjustment, protection, or relocation is possible are to be invited to the Mandatory Pre-Proposal Meeting
July 15, 2022, Friday	52	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&A website.
July 8, 2022, Friday	0	Final deadline for submission of requests for Design
		Exceptions Design Variations
July 21, 2022, Thursday	6	Deadline for the Department to post responses to the Pre-Bid
		Q&A website for questions submitted by the Design-Build
		Firms prior to the submittal of the Proposal.
July 25, 2022, Monday	1	The Design Build firm must complete Low Bid Design-Build
		Qualification Validation Form No. 700-011-36, for all
		qualifying team members, at least 24 hours in advance of the
		scheduled letting. The Form shall be submitted to the
		appropriate district (to the Design-Build email account
		designated for submittals), who will confirm qualification for
		the prospective Design-Build Firm. The form must be
		submitted at least 24 hours in advance of the response deadline
		(Bids Due Date).
July 26, 2022, Tuesday	8	Technical Proposals and Price Proposals due in District Office
July 20, 2022, Tuesday	0	by 10:00 a.m. local time
July 26, 2022, Tuesday	0	Public announcing of Price Proposals at 11:00 a.m. local time
July 20, 2022, Tuesday	U	1
I-1-29 2022 Tl1	2	in 801 N. Broadway Ave, Bartow FL 33830
July 28, 2022, Thursday	2	Public Meeting of Technical Review Committee to determine
		Responsiveness of Technical Proposal(s) at 2:00 p.m. local
		time in 801 N. Broadway Ave, Bartow FL 33830
August 2, 2022, Tuesday	5	Public Meeting of Date Selection Committee to determine
		intended Award 801 N. Broadway Ave, Bartow FL 33830
August 2, 2022, Tuesday	0	Final Selection Posting Date
August 9, 2022, Tuesday	7	FHWA Concurrence to Award
August 16, 2022, Tuesday	7	Anticipated Award Date
August 30, 2022, Tuesday	14	Anticipated Execution Date

# **III.** Threshold Requirements.

#### A. Qualifications

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

#### B. Joint Venture Firm

Two or more Firms submitting as a Joint Venture must meet the Joint Venture requirements of Section 14-22.007, 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 nonresponsive and eliminated from further consideration. This public meeting will be conducted virtually via GoToMeeting, at the dates/times noted in the project Advertisement Schedule under the All-Advertisements link. If interested in attending public meetings, members of the public shall email the applicable District designated email account at least 24 hours in advance of the subject meeting (Saturdays, Sundays, and state holidays shall be excluded in the computation of the 24-hour time), to obtain the teleconference number and Access Code information in order to virtually attend. The designated email account for District 1 is d1.designbuild@dot.state.fl.us. The purpose of this meeting is to provide a forum for the Department to discuss with all concerned parties the proposed Project, the design and construction criteria, Critical Path Method (CPM) schedule, and method of compensation, instructions for submitting proposals, Design Exceptions, Design Variations, and other relevant issues. In the event that any discussions at the preproposal meeting require, in the Department's opinion, official additions, deletions, or clarifications of the Request for Proposal, the Design and Construction Criteria, or any other document, the Department will issue a written addendum to this Request for Proposals as the Department determines is appropriate. No oral representations or discussions, which take place at the pre-proposal meeting, will be binding on the Department. FHWA will be invited on Projects of Division Involvement (PoDIs), in order to discuss the Project in detail and to clarify any concerns. Proposers shall direct all questions to the Departments Question and Answer website:

#### https://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 accounted for prior to the start of the mandatory pre-proposal meeting. The convener of the meeting will call attendance at the time the meeting was advertised to begin. Once all Proposers have identified themselves with the firm they represent, 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 consultants, one is referred to as DBE Supportive Services provider (DBE/SS), to provide managerial and technical assistance to DBE's. This consultant works with potential DBEs, certified DBEs and prime contractors and consultants in an effort to increase DBE utilization. The other consultant is referred to as the Specialized Development Program provider (SDP). This consultant works with short-listed Design Build Firms prior to award, on projects over \$50 million dollars in an effort to identify DBE's with capacity to perform on the Project. The successful Design-Build Firm should meet with the DBE DBE/SS or SDP to discuss the DBE's that are available to work on this Project. The current Providers for the Florida can be found 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. All Contractors must enter their bid opportunity information in the Equal Opportunity Compliance (EOC) system within three business days of submission of the bid or proposal. The link to the EOC system is located in Chapter 1 Section 1.4, Directory of Compliance Websites & Addresses. Failure of bidders to enter Bid Opportunity List information is a violation of 49 C.F.R. 26.11 and grounds for compliance actions up to and including withholding of progress payments. Note: All registered primes submitting a bid will need to apply for EOC User ID and Password to gain access to the EOC system.

# 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.

- Florida Department of Transportation Design Manual (FDM)
   <a href="http://www.fdot.gov/roadway/FDM/">http://www.fdot.gov/roadway/FDM/</a>
   Note: the use of FDM Part 9 requires approval by the District Design Engineer
- 2. Florida Department of Transportation Specifications Package Preparation Procedure <a href="http://www.fdot.gov/programmanagement/PackagePreparation/Handbooks/630-010-005.pdf">http://www.fdot.gov/programmanagement/PackagePreparation/Handbooks/630-010-005.pdf</a>
- 3. Florida Department of Transportation Standard Plans for Road and Bridge Construction <a href="http://www.fdot.gov/design/standardplans/">http://www.fdot.gov/design/standardplans/</a>
- 4. Standard Plans Instructions (Refer to Part I, Chapter 115, FDM <a href="http://www.fdot.gov/roadway/FDM/">http://www.fdot.gov/roadway/FDM/</a>
- 5. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications <a href="http://www.fdot.gov/programmanagement/default.shtm">http://www.fdot.gov/programmanagement/default.shtm</a>
- 6. Florida Department of Transportation Surveying Procedure 550-030-101 <a href="https://www.fdot.gov/programmanagement/Implemented/SpecBooks/default.shtm">https://www.fdot.gov/programmanagement/Implemented/SpecBooks/default.shtm</a>
- 7. Florida Department of Transportation EFB User Handbook (Electronic Field Book)

- http://www.fdot.gov/geospatial/doc\_pubs.shtm
- 8. Florida Department of Transportation Drainage Manual http://www.fdot.gov/roadway/Drainage/ManualsandHandbooks.shtm
- 9. Florida Department of Transportation Soils and Foundations Handbook <a href="http://www.fdot.gov/structures/Manuals/SFH.pdf">http://www.fdot.gov/structures/Manuals/SFH.pdf</a>
- 10. Florida Department of Transportation Structures Manual <a href="http://www.fdot.gov/structures/DocsandPubs.shtm">http://www.fdot.gov/structures/DocsandPubs.shtm</a>
- 11. Florida Department of Transportation Computer Aided Design and Drafting (CADD)

  Manual

  <a href="http://www.fdot.gov/cadd/downloads/publications/CADDManual/default.shtm">http://www.fdot.gov/cadd/downloads/publications/CADDManual/default.shtm</a>
- 12. AASHTO A Policy on Geometric Design of Highways and Streets <a href="https://bookstore.transportation.org/collection-detail.aspx?ID=110">https://bookstore.transportation.org/collection-detail.aspx?ID=110</a>
- 13. MUTCD 2009 http://mutcd.fhwa.dot.gov/
- 14. Safe Mobility For Life Program Policy Statement <a href="http://www.fdot.gov/traffic/TrafficServices/PDFs/000-750-001.pdf">http://www.fdot.gov/traffic/TrafficServices/PDFs/000-750-001.pdf</a>
- 15. Traffic Engineering and Operations Safe Mobility for Life Program <a href="http://www.fdot.gov/traffic/TrafficServices/SafetyisGolden.shtm/">http://www.fdot.gov/traffic/TrafficServices/SafetyisGolden.shtm/</a>
- 16. Florida Department of Transportation American with Disabilities Act (ADA) Compliance Facilities Access for Persons with Disabilities Procedure 625-020-015

  <a href="https://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/?viewBy=0&procType=pr">https://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/?viewBy=0&procType=pr</a>
- 17. Florida Department of Transportation Florida Sampling and Testing Methods <a href="http://www.fdot.gov/materials/administration/resources/library/publications/fstm/disclaimer.shtm">http://www.fdot.gov/materials/administration/resources/library/publications/fstm/disclaimer.shtm</a>
- 18. Florida Department of Transportation Flexible Pavement Coring and Evaluation Procedure <a href="http://www.fdot.gov/materials/administration/resources/library/publications/materialsmanual/documents/v1-section32-clean.pdf">http://www.fdot.gov/materials/administration/resources/library/publications/materialsmanual/documents/v1-section32-clean.pdf</a>
- 19. Florida Department of Transportation Design Bulletins and Update Memos <a href="http://www.fdot.gov/roadway/Bulletin/Default.shtm">http://www.fdot.gov/roadway/Bulletin/Default.shtm</a>
- 20. Florida Department of Transportation Utility Accommodation Manual <a href="https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/programmanagement/utilities/docs/uam/uam2017.pdf?sfvrsn=d97fd3dd\_0">https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/programmanagement/utilities/docs/uam/uam2017.pdf?sfvrsn=d97fd3dd\_0</a>
- 21. AASHTO LRFD Bridge Design Specifications <a href="https://bookstore.transportation.org/category\_item.aspx?id=BR">https://bookstore.transportation.org/category\_item.aspx?id=BR</a>
- 22. Florida Department of Transportation Flexible Pavement Design Manual <a href="http://www.fdot.gov/roadway/PM/publicationS.shtm">http://www.fdot.gov/roadway/PM/publicationS.shtm</a>
- 23. Florida Department of Transportation Rigid Pavement Design Manual <a href="http://www.fdot.gov/roadway/PM/publicationS.shtm">http://www.fdot.gov/roadway/PM/publicationS.shtm</a>
- 24. Florida Department of Transportation Pavement Type Selection Manual <a href="http://www.fdot.gov/roadway/PM/publicationS.shtm">http://www.fdot.gov/roadway/PM/publicationS.shtm</a>

- 25. Florida Department of Transportation Right of Way Manual http://www.fdot.gov/rightofway/Documents.shtm
- 26. Florida Department of Transportation Traffic Engineering Manual <a href="http://www.fdot.gov/traffic/TrafficServices/Studies/TEM/tem.shtm">http://www.fdot.gov/traffic/TrafficServices/Studies/TEM/tem.shtm</a>
- 27. Florida Department of Transportation Intelligent Transportation System Guide Book <a href="http://www.fdot.gov/traffic/Doc\_Library/Doc\_Library.shtm">http://www.fdot.gov/traffic/Doc\_Library/Doc\_Library.shtm</a>
- 28. Federal Highway Administration Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Plans and Specifications <a href="http://www.fhwa.dot.gov/engineering/geotech/pubs/reviewguide/checklist.cfm">http://www.fhwa.dot.gov/engineering/geotech/pubs/reviewguide/checklist.cfm</a>
- 29. AASHTO Guide for the Development of Bicycle Facilities https://bookstore.transportation.org/collection\_detail.aspx?ID=116
- 30. Federal Highway Administration Hydraulic Engineering Circular Number 18 (HEC 18). <a href="http://www.fhwa.dot.gov/engineering/hydraulics/library\_arc.cfm?pub\_number=17">http://www.fhwa.dot.gov/engineering/hydraulics/library\_arc.cfm?pub\_number=17</a>
- 31. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways <a href="http://www.fdot.gov/roadway/FloridaGreenbook/FGB.shtm">http://www.fdot.gov/roadway/FloridaGreenbook/FGB.shtm</a>
- 32. Florida Department of Transportation Project Development and Environment Manual, Parts 1 and 2 <a href="http://www.fdot.gov/environment/pubs/pdeman/pdeman1.shtm">http://www.fdot.gov/environment/pubs/pdeman/pdeman1.shtm</a>
- 33. Florida Department of Transportation Driveway Information Guide <a href="http://www.fdot.gov/planning/systems/programs/sm/accman/pdfs/driveway2008.pdf">http://www.fdot.gov/planning/systems/programs/sm/accman/pdfs/driveway2008.pdf</a>
- 34. AASHTO Highway Safety Manual <a href="http://www.highwaysafetymanual.org/">http://www.highwaysafetymanual.org/</a>
- 35. Florida Statutes <a href="http://www.leg.state.fl.us/Statutes/index.cfm?Mode=View%20Statutes&Submenu=1&Ta">http://www.leg.state.fl.us/Statutes/index.cfm?Mode=View%20Statutes&Submenu=1&Ta</a> b=statutes&CFID=14677574&CFTOKEN=80981948
- 36. Florida Department of Transportation Equal Opportunity Construction Contract Compliance Manual <a href="http://www.fdot.gov/equalopportunity/contractcomplianceworkbook.shtm">http://www.fdot.gov/equalopportunity/contractcomplianceworkbook.shtm</a>

# **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:

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

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

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

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

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

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

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

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

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

Any additional mitigation required due to design modifications proposed by the Design-Build Firm shall be the responsibility of the Design-Build Firm and shall be satisfied through the purchase of mitigation bank credits. The Design-Build Firm shall purchase credits directly from a permitted mitigation bank. In the event that permitted mitigation credits are unavailable or insufficient to meet the project needs, the Design-Build Firm will be responsible for providing alternative mitigation consistent with the provisions of section 373.4137, Florida Statutes, and acceptable to the permitting agency(ies). The Design-Build Firm shall be solely responsible for all costs associated with permitting activities and shall include all necessary permitting activities in their schedule.

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

# F. Railroad Coordination: N/A

# G. Survey:

The Design-Build Firm shall perform all surveying (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.

# **H.** Verification of Existing Conditions:

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

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

#### I. Submittals:

#### 1. 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, signalization, ITS, lighting, landscape, architectural, and structural. 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.

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

#### 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".

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

# 90% Phase Submittal

1 copy of 11" X 17" plans (all required components)

1 copy of signed and sealed geotechnical report

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

1 copy of design documentation

1 copy of Technical Special Provisions

All of the information above shall be submitted electronically in .pdf format.

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

The 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**

1 set of signed and sealed 11" X 17" plans (all required documents)

1 copy of signed and sealed 11" X 17" plans

1 set of signed and sealed design documentation

1 copy of signed and sealed design documentation

1 copy of Settlement and Vibration Monitoring Plan (SVMP)

1 set of final documentation

1 signed and sealed copy of Construction Specifications Package or Supplemental Specifications Package

1 copy of signed and sealed Construction Specifications Package or Supplemental Specifications Package

1 electronic copy of Technical Special Provisions in .pdf format

All of the information above shall be submitted electronically in .pdf format.

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

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

#### 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.

The Design-Build Firm may choose to begin construction prior to completion of the Phase Submittals and the Department stamping the plans and specifications Released for Construction except for bridge construction. No permanent structures work, including fabrication of bridge members, may begin without signed and sealed plans or shop drawings (whichever controls the design and details utilized to construct/erect the specific structural component) that have been Released for construction. To begin construction the Design-Build Firm shall submit signed and sealed plans for the specific activity; submit a signed and sealed Construction Specifications Package or Supplemental Specifications Package; obtain regulatory permits as required for the specific activity; obtain 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 FDOT Design Manual.

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

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

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

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

- 1 set of 11" X 17" signed and sealed As-Builts plans, drawings and Certified Surveys
- 1 set of 11 "X 17" copy of the signed and sealed As-Built plans, drawings and Certified Surveys (including as-built channel survey)
- 1 set of final documentation (if different from final component submittal)
- 1 set of survey information, including electronic files and field books
- Deliver the final CADD.zip in accordance with the CADD Manual
- 1 Final Project submittal containing the information above shall be electronic in

#### 4. Milestones:

Component submittals, in addition to the plan submittals listed in the previous section will be required.

#### 5. Railroad Submittals: N/A

#### J. Contract Duration:

The Department has established a Contract Duration of 650 calendar days for the subject Project.

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

The Design-Build Firm shall submit a Schedule, in accordance with Subarticle 8-3.2 (Design-Build Division I Specifications). The Design-Build Firm's Schedule shall allow for up to fifteen (15) calendar days (excluding weekends and Department observed Holidays) review time for the Department's review of all submittals with the exception of Category 2 structures submittals.

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

The following Special Events have been identified in accordance with Specification 8-6.4:

Haines City Ironman Triathlon

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
- Submittal Reviews by the Department and FHWA
- Design Review / Acceptance Milestones
- Materials Quality Tracking
- Geotechnical Investigation
- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Embankment/Excavation
- Environmental Permit Acquisition
- Foundation Design
- Foundation Construction
- Substructure Design
- Substructure Construction
- Superstructure Design

- Superstructure Construction
- Walls Design
- Walls Construction
- Roadway Design
- Roadway Construction
- Signing and Pavement Marking Design
- Signing and Pavement Marking Construction
- Signalization and Intelligent Transportation System Design
- Signalization and Intelligent Transportation System Construction
- Lighting Design
- **Lighting Construction**
- Maintenance of Traffic Design
- Permit Submittals
- Maintenance of Traffic Set-Up (per duration)
- **Erosion Control**
- Holidays and Special Events (shown as non-work days)
- Additional Construction Milestones as determined by the Design-Build Firm
- Operational/Burn-In Testing
- Final Completion Date for All Work
- As-Built Plan Preparation

#### L. **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.

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

Partner/Teaming Arrangements of the Design-Build Firm (i.e., Prime Contractor or Lead Design Firm) cannot be changed after submittal of the 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.

#### N. **Meetings and Progress Reporting:**

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

- Department technical issue resolution
- Local government agency coordination

- Maintenance of Traffic Workshop
- Pavement Design Meeting
- Permit agency coordination
- Scoping Meetings
- System Integration Meetings

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

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

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

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

System Integration Meetings will be held on mutually agreeable dates.

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

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

# O. Quality Management Plan (QMP):

#### 1. Design:

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

The Design-Build Firm shall provide a Design Quality Management Plan, which describes the Quality Control (QC) procedures to be utilized to verify, independently check, and review all design drawings, specifications, and other documentation prepared as a part of the contract. In addition, the QMP shall establish a Quality Assurance (QA) program to confirm that the Quality Control procedures are followed. The Design-Build Firm shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. The QMP may be one utilized by the Design-Build Firm, as part of their normal operation or it may be one specifically designed for this Project. The Design-Build Firm shall submit a QMP within fifteen (15) working days following issuance of the written Notice

to Proceed. A marked up set of prints from the Quality Control review will be sent in with each review submittal. The responsible Professional Engineers or Professional Surveyor that performed the Quality Control review, as well as the QA manager will sign a statement certifying that the review was conducted.

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

#### 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: <a href="http://www.fdot.gov/materials/quality/programs/qualitycontrol/contractor.shtm">http://www.fdot.gov/materials/quality/programs/qualitycontrol/contractor.shtm</a>

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

#### P. Liaison Office:

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

#### Q. Engineers Field Office: N/A

#### **R.** 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.

# S. Computer Automation:

The Project shall be developed utilizing computer automation systems in order to facilitate the development of the contract plans. Various software and operating systems were developed to aid in assuring quality and conformance with Department policies and procedures. The Department supports MicroStation and GEOPAK as its standard graphics and roadway design platform as well as Autodesk'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.

# T. Construction Engineering and Inspection:

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

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

#### U. Testing:

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

#### V. Value Added:

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

- Roadway features
- Roadway drainage systems,
- And any other products or features the Design-Build Firm desires.

The Design-Build Firm shall develop the Value Added criteria, measurable standards, and remedial work plans in the Design-Build Firm's Technical Proposal for features proposed by the Design-Build Firm.

#### W. 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:

FPID 410666-3-52-01 (SR 542): SR 542 from Buckeye Loop Road to east of US 27

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.

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

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

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

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

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

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

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

# Driven Pile Foundations for Bridges - N/A

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

The Design-Build Firm shall determine whether the resistance factors used for drilled shaft design will be based on static/statnamic load testing. Prepare a Technical Special Provision (TSP) for tests other than the Modified Quick Test, such as Bidirectional (Osterberg Cell) Load Test or Statnamic Load Test. For Bidirectional Load Tests use the same loading and unloading intervals, as well as the same loading times specified for the Modified Quick Test. Comply with the instrumentation requirements of 455-2.4. Before the resistance factors for static/statnamic load testing may be used for drilled shafts in any areas of the Project, a minimum number of successful load tests must be performed in representative locations of that area for each structure.

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

- 1. Evaluating geotechnical conditions to determine the drilled shaft diameter and length and construction methods to be used.
- 2. Performing the subsurface investigation and drilling pilot holes prior to establishing the drilled shaft tip elevations and socket requirements. For redundant drilled shaft bridge foundations, perform at least one test boring in accordance with the Soils and Foundations Handbook at each bent/pier.
- 3. Determining the locations of the load test shafts and the types of tests that will be performed.
- 4. Performing pilot borings for test holes (also known as test shafts or method shafts) and load test shafts and providing the results to the Department at least one (1) working day before beginning construction of these shafts.
- 5. Preparing and submitting 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. Performing Non-Destructive Drilled Shaft Integrity Testing in accordance with 455-17.6.
- 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**

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

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

## Auger Cast Piles for Sound Barrier Walls - N/A

## **Specialty Geotechnical Services Requirements**

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

include the following:

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

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

## D. Utility Coordination

The Design-Build Firm shall utilize a single dedicated person responsible for managing all utility coordination. This person shall be contractually referred to as the Utility Coordination Manager 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 (UCM). 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 providing comments based on the compatibility of the permit as related to the Design-Build firm's plans.
- 4. Scheduling and conducting utility meetings, preparing and distributing minutes of all utility meetings, and ensuring expedient follow-up on all unresolved issues.
- 5. Distributing all plans, conflict matrices and changes to affected Utility Agency/Owners and making sure this information is properly coordinated.
- 6. Identifying, preparing, reviewing and facilitating any agreement required for any utility work needed through final approval and execution. The UCM shall also be responsible for monitoring and reporting the performance of all involved parties under said agreement.
- 7. Preparing, reviewing, approving, signing, coordinating the implementation of and

- submitting to the Department for review, all Utility Work Schedules.
- 8. Resolving utility conflicts.
- 9. Performing Constructability Reviews of plans prior to construction activities with regard to the installation, removal, temporary removal, de-energizing, deactivation, relocation, or adjustment of utilities.
- 10. Providing periodic Project updates to the Department Project Manager and District Utility Office as requested.
- 11. Coordinating with the Department on any issues that arise concerning reimbursement of utility work costs between the Department and the utility.

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

**Summary of Department Contemplated Adjustment, Protection, or Relocation** 

UAO	Contact	Phone	Email
	Information		
CenturyLink Local	Steve Mann	407-861-3533	Stephen.l.mann@lumen.com
			relocations@lumen.com
CenturyLink National	Ron Prario	407-754-0116	Ron.prario@lumen.com
City of Lake Wales	Sarah Kirkland	863-678-4182	skirkland@cityoflakewales.com
		x286	
City of Winter Haven	Mark Bombard	863-298-5351	mbombard@mywinterhaven.com
Crown Castle Fiber LLC	Christopher Perkins	813-947-6009	christopher.perkins@crowncastle.com
Duke Energy – Distribution	Mark Manner	863-678-4476	Mark.manner@duke-energy.com
Duke Energy – Transmission	Jenny Williams	813-909-1210	JEWilliams@pike.com
			DEFTransmissiongov@duke-
			energy.com
Florida Public Utilities	Foster Chatham	863-292-2933	fchatham@chpk.com
Company			
Frontier Florida, LLC	Fred Valdes	863-688-9714	<u>Fred.n.valdes@ftr.com</u>
Polk County – Utilities	Ryan Bengsch	863-298-4193	RyanBengsch@polk-county.net
Spectrum Sunshine State,	Darin Daniels	863-333-4764	darin.daniels@charter.com
LLC			
T-Mobile fka Sprint	Jon Baker	321-280-9596	Jon.baker@t-mobile.com
Town of Lake Hamilton	Nathan Lewellen	863-247-0606	nathan@townoflakehamilton.com
Town of Dundee	John Vice	863-514-6636	jvice@townofdundee.com
Uniti Fiber	Terry Young	251-422-3872	Terry.Young@uniti.com
Zayo Group, LLC	Tess Bentayou	813-363-6797	Tess.Bentayou@zayo.com

The Design-Build Firm may request the utility to be relocated however, these relocations require the Department's approval and the Department will not pay the Utility Agency/Owner (UAO) or the Design-Build Firm for the utility relocation work regardless of the UAO's eligibility for reimbursement.

The Department has not performed an assessment of potential utility conflicts associated with the improvements. We have provided the list of UAO's within each project's limits as the starting point for the Design-Build Firm to coordinate relocations and/or adjustments with the UAO's once the design has been developed. See Reference Document R03\_UAO Greenlines.zip for existing utility information.

Limited subsurface utility engineering (SUE) was performed on this project, as depicted in Reference Document R02\_Kokomo Rd VVh Information.pdf. The Design-Build Firm shall be responsible for determining the locations of UAO facilities within the project by SUE during the design phase, as necessary to resolve utility conflicts. The Design-Build Firm shall coordinate with each UAO prior to any and all work impacting utilities.

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

# E. 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, Environmental Permits and other necessary documents.

## **Design Analysis:**

The Design-Build Firm shall develop and submit a signed and sealed Typical Section Package, Pavement Design Package and Drainage Analysis Report for review and concurrence by the Department and FHWA on Projects of Division Involvement (PoDIs). The Pavement Design shall utilize the signed and sealed Approved Pavement Design Package (Attachment A05) as basis for the minimum allowable pavement design.

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. Design Exceptions will be disclosed to all the Design-Build Firms via an Addendum.

These packages shall include the following:

## F. Roadway Design:

See FDM Part 3; Chapter 301 for Roadway Design sheets, elements and completion level required for each submittal.

## 1. Typical Section Package:

- Transmittal letter
- Location Map
- Roadway Typical Section(s)
  - 1. Pavement Description (Includes milling depth)
  - 2. Minimum lane, shoulder, median widths

- 3. Slopes requirements
- 4. Barriers
- Right of Way Data Sheet
- Design Speed
- Target Speed

## 2. Pavement Design Package:

- Pavement Design
  - 1. Minimum design period
  - 2. Minimum ESAL's
  - 3. Minimum design reliability factors
  - 4. Resilient modulus for existing and proposed widening (show assumptions)
  - 5. Roadbed resilient modulus
  - 6. Friction Course
  - 7. Minimum structural asphalt thickness
  - 8. Minimum base group
  - 9. Subbase
  - 10. Cross slope
  - 11. Identify the need for modified binder
  - 12. Pavement coring and evaluation
  - 13. Identify if ARMI layer is required
  - 14. Minimum milling depth
  - 15. Resurfacing and overbuild thickness
  - 16. Widening thickness
- Pavement Design Summary Sheets
- Copy of the approved Typical Section Package
- Quality Control Checklist

The following documents are Attachments provided by the Department and shall be used by the Design-Build Firm in the development of the pavement design:

• Approved Pavement Design Package

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

## 3. **Drainage Analysis:**

The Design-Build Firm shall be responsible for designing the drainage and stormwater management systems. All design work shall be in compliance with the Department's Drainage Manual; Florida Administrative Code, chapter 14-86; Federal Aid Policy Guide 23 CFR 650A; and the requirements of the regulatory agencies. This work will include the engineering analysis necessary to design any or all of the following: cross drains, French drains, underdrains, edge drains, roadway ditches, outfall ditches, storm sewers, retention/detention facilities, interchange drainage and water management, other drainage systems and elements of systems as required for a complete analysis. Full coordination with all permitting agencies, the district Environmental Management section and Drainage Design section will be required from the outset. Full documentation of all meetings and decisions are to be submitted to the District Drainage Design section. These activities and submittals shall be coordinated through the Department's Project Manager.

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

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

The existing drainage consists of an open ditch system from the beginning of the project to MP 7.928. From MP 7.928 to MP 10.644, it consists of a closed system (curb inlets for MP 7.928 to MP 9.851, shoulder gutter with gutter inlets for MP 9.851 to MP 10.314, and curb inlets for MP 10.314 to MP 10.644. The existing drainage consists of an open ditch system from MP 10.644 to the end project.

The Design-Build Firm shall perform a drainage analysis and accommodate the drainage within the existing right-of-way at the keyhole widening locations (northbound right turn lanes to Peace Creek Road and Kokomo Road) and the widening for a right turn lane on Kokomo Road from westbound CR 546 to northbound SR 25.

Within the project limits, maintenance of stormwater management facilities during construction shall be the responsibility of the Design-Build Firm, except as otherwise expressly provided in the Contract Documents.

All connected outfalls of adjacent drainage systems or properties shall be maintained throughout the duration of the contract. Connected outfalls shall comprise all underground and above ground systems including over land flow.

Temporary drainage shall meet all FDOT criteria as specified in the Contract Documents. Temporary drainage calculations will be approved by FDOT prior to commencement of a given temporary traffic control phase. The Design-Build Firm shall make use of the criteria contained in the FDOT Drainage Manual for selection and placement of temporary barrier wall to satisfy spread requirements during construction as well as address other temporary drainage issues associated with temporary traffic control.

Perform design and generate construction plans documenting that the permitted systems function to criteria.

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

Existing cross drains violating clear zone criteria shall be extended outside of the clear zone. The extended cross drain material shall be the same material type as the existing cross drain. The placement of a permanent protection barrier (guardrail or barrier wall) for the sole purpose of protecting cross drains shall be avoided unless the culvert extension cannot be constructed outside of the clear zone.

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

Prior to proceeding with the Drainage Design, the Design-Build Firm shall meet with the District Drainage Engineer. The purpose of this meeting is to provide information to the Design-Build Firm that will better

coordinate the Preliminary and Final Drainage Design efforts. This meeting is <u>Mandatory</u> and is to occur fifteen (15) calendar days (excluding weekends and Department observed holidays) prior to any submittals containing drainage components.

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

## **G.** Geometric Design:

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

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

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

- The Design-Build Firm shall comply with the Typical Section Package included as Attachment A04. Changes to the approved Typical Section Package will require resubmittal for Department approval.
- Cross slope correction is not anticipated.
- Proposed improvements shall adhere to FDM Chapter 114 (including RDB22-01) for Resurfacing, Restoration, and Rehabilitation (RRR) projects.
- Existing sidewalk, curb ramps, and detectable warnings shall be analyzed and inventoried. Sidewalk, curb ramps, and detectable warnings, including pedestrian accommodations for driveways, found deficient per FDM Chapters 222 and 214 and Standard Plans Index 522-002 shall be reconstructed to meet criteria (i.e. unobstructed sidewalk width, cross slope, longitudinal grade, drop offs, shielding, pedestrian width at driveways, etc.). Existing sidewalk trip hazards (greater than 1/4") shall be reconstructed to provide a flush surface. Sidewalk and curb ramps shall be added to fill in any existing gaps in pedestrian facilities (west side of SR 25, approximate station 1714+50 LT to approximate station 1744+00 LT).
- Existing guardrail shall be reconstructed to adhere to Standard Plans Index 536-001.

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

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

The design notes and computation sheets shall be fully titled, numbered, dated, indexed, and signed by the designer and the checker. Computer output forms and other oversized sheets shall be folded to a standard size 8½" x 11". The data shall be in a hard-back folder for submittal to the Department. At the Project

completion, a final set of design notes and computations, signed by the Design-Build Firm, shall be submitted with the record set of plans and tracings.

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

- 1. Standards Plans and criteria used for the Project
- 2. Geometric design calculations for horizontal alignments
- 3. Vertical geometry calculations
- 4. Documentation of decisions reached resulting from meetings, telephone conversations or site visits

#### I. Structure Plans: N/A

## 1. Bridge Design Analysis:

a. The Design-Build Firm shall submit to the Department final signed and sealed design documentation prepared during the development of the plans.

### 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.

## J. Specifications:

Department Specifications may not be modified or revised. Technical Special Provisions shall be written only for items not addressed by Department Specifications and shall not be used as a means of changing Department Specifications.

The Design-Build Firm shall prepare and submit a signed and sealed Construction Specifications Package for the Project, containing all applicable Division II and III Special Provisions and Supplemental Specifications from the Specifications Workbook in effect at the time the 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:

 $\underline{http://www2.dot.state.fl.us/programmanagement/PackagePreparation/TrainingConsultants.aspx}$ 

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

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

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

## **K.** Shop Drawings:

The Design-Build Firm shall be responsible for the preparation and approval of Shop Drawings. Shop Drawings shall be in conformance with the FDM. When required to be submitted to the Department, Shop Drawings shall bear the stamp and signature of the Design-Build Firm's Engineer of Record (EOR), and Specialty Engineer as appropriate. All "Approved" and "Approved as Noted" Shop Drawings submitted to the Department for review shall also include Engineer of Record QA/QC Shop Drawing check prints along with the EOR stamped set(s). The Department shall review the Shop Drawing(s) to evaluate compliance with Project requirements and provide any findings to the Design-Build Firm. The Departments 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 Departments review is not meant to be a complete and detailed review, but the Department reserves the right to perform a more detailed review, as necessary. Upon review 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.

## L. Sequence of Construction:

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

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

## M. Stormwater Pollution Prevention Plans (SWPPP)

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

## N. Transportation Management Plan:

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

#### 1. Traffic Control Restrictions:

There will be NO SINGLE-LANE CLOSURES within 600' of a signalized intersection allowed between the hours of 6:00 AM to 8:30 PM. There will be NO DUAL-LANE CLOSURES allowed between the hours of 7:00 AM to 9:00 AM and 2:00 PM to 7:00 PM. There will be NO DUAL-LANE CLOSURES within 600' of a signalized intersection allowed between the hours of 5:00 AM to 11:00 PM. A lane may only be closed during active work periods. All lane closures, including ramp closures, must be reported to the local emergency agencies, the media and the District 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.

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

The Design-Build Firm will be responsible for preparing designs and proposing construction methods that are permittable. The Design-Build Firm will be responsible for any required permit fees. All permits required for a particular construction activity will be acquired prior to commencing the particular construction activity. Delays due to incomplete or erroneous permit application packages, agency rejection, agency denials, agency processing time, or any permit violations, except as provided herein, will be the responsibility of the Design-Build Firm, and will not be considered sufficient reason for a time extension or additional compensation.

As the permittee, the Department is responsible for reviewing, approving, and signing the permit application package including all permit modifications, or subsequent permit applications.

The Department has conducted an investigation of the Project site and determined that potential gopher tortoise habitats could be impacted by the Project. All coordination by the Design-Build Firm with the Department regarding gopher tortoises will be completed through the District Environmental Management Office, District Environmental Permit Office. If the Department has determined that suitable gopher tortoise habitat exists in the project area, then the Design-Build Firm shall be responsible for conducting the gopher tortoise burrow survey for the purpose of identifying potential gopher tortoise habitats that could be impacted by the Project including any areas to be used for construction staging. The habitat will be systematically surveyed according to the current Gopher Tortoise Permitting guidelines published by the Florida Fish and Wildlife Conservation Commission (FWC). The Department must verify the completeness and accuracy of the assessment prior to commencement of any permitting or construction activities. Any areas where the Design-Build Firm proposes to protect burrows to remain on-site with "exclusionary fencing" shall be reviewed and approved by the Department. The Design-Build Firm shall submit an "exclusionary fencing" plan for review prior to any "exclusionary fencing" installation. If there are unavoidable impacts to gopher tortoise burrows, the Design-Build Firm shall be responsible for preparing required documentation for the Department to obtain a FWC permit for the relocation of gopher tortoises and commensals from burrows which cannot be avoided. Preparation of complete permit packages will be the responsibility of the Design-Build Firm. As the "permittee", the Department is responsible for reviewing and approving the permit application package including all permit modifications, or subsequent permit applications. This applies whether the project is Federal, or state funded. Once the Department has approved the permit application, the Design-Build Firm is responsible for submitting the permit application to FWC. A copy of the permit and any subsequent reports to FWC must be provided to the District Environmental Management Office or District Environmental Permit Office, as appropriate. If FWC rejects or denies the permit application, it is the Design-Build Firm's responsibility to make whatever changes necessary to ensure the permit application is approved. Once the permit is obtained, the Design-Build Firm

shall notify the Department at least one week prior to the relocation of gopher tortoises. If gopher tortoise relocations are phased throughout the construction, the Design-Build Firm shall notify the Department at least one week prior to each relocation phase. The Department will provide oversight of the relocations and ensure permit compliance. The Design-Build Firm shall be responsible for any necessary permit extensions or re-permitting in order to keep the relocation permit valid throughout the construction period. The Design-Build Firm shall provide the Department with draft copies of requests to modify the permits and/or requests for permit extensions, for review and approval by the Department prior to submittal to the Agencies. The Design-Build Firm shall provide the appropriate reports as required by the permit conditions, including closing out the permit. The Design-Build Firm shall note that permits for gopher tortoise relocation for areas outside of the Department owned Right of Way (i.e., utility easements; license agreements) cannot be obtained with the Department as the "permittee", per FWC requirements. Should permits in areas outside of the Right of Way be required, the Department will still perform the oversight of the process as described above. The Design-Build Firm will be required to pay all permit fees including any and all fees associated with the relocation of gopher tortoises. Any fines levied by permitting agencies shall be the responsibility of the Design-Build Firm.

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

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

## P. Signing and Pavement Marking Plans:

The Design-Build Firm shall prepare signing and pavement marking plans in accordance with Department criteria.

The Design-Build Firm shall 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 changed to ground mount) unless approved by the Department. Any existing sign structure to be removed shall not be relocated and reused, unless approved by the Department.

It shall be the Design-Build Firm's responsibility to field inventory and show all existing signs within the Project limits and address all signage within the Project limits. Existing single and multi-post sign assemblies impacted by construction shall be entirely replaced and upgraded to meet current standards. Existing sign assemblies not impacted by construction can remain.

## Q. Lighting Plans:

The Design-Build Firm shall prepare lighting plans in accordance with Department criteria. The Design-Build Firm shall develop and submit for approval, a Load Center/Circuit/Pole Number identification plan that is compatible with the existing lighting systems maintenance identification scheme.

Where existing roadway lighting circuit sources (services, load centers, etc.) are being removed, the Design-Build Firm shall either:

- 1. Provide a new load center per current codes and all applicable criteria.
- 2. Identify an existing load center capable of feeding the existing and proposed lighting while meeting all current codes and all applicable criteria.

All modified load centers shall comply with all applicable criteria and shall be in like new condition.

Existing light poles, luminaire arms, 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 perform detailed field reviews. Review and document all lighting (poles/luminaires, sign luminaires, etc.), circuiting, load centers, service points, utility transformers, etc., within the limits of lighting construction. This review includes conductors, conduit, grounding, enclosures, voltages, mounting heights, pullboxes, etc.

All deficiencies within the limits of lighting construction shall be identified and corrected.

After the field reviews are completed, a list of all damaged and/or non-functioning equipment shall be documented and forwarded to the Department prior to the start of construction. All damaged and/or non-functioning equipment within the limits of lighting construction are required to be replaced or repaired to meet all applicable criteria and shall be in like-new condition.

Where new electrical services are required, the Design-Build Firm shall coordinate the final locations of distribution transformer and service pole to minimize service and branch circuit conductors and conduit lengths. Existing lighting shall be maintained until proposed lighting has completed its burn-in period. The Design-Build Firm shall coordinate with the local power company to determine new electrical service locations and shall be responsible for any Contributions in Aid of Construction (CIAC) cost associated with the new service location. Each service point shall be separately metered.

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.

## R. Signalization and Intelligent Transportation System Plans

#### 1. General

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

Signalization plans are required for all existing and proposed signalized intersections within the Project limits. Impacts to existing traffic signals include physical conflict with or modification to existing signal equipment. Impacts to existing pedestrian signals include add or modify pedestrian crossing alignment, add or modify existing pedestrian equipment, extend or shorten existing pedestrian crossings, and begin/end points at an approach to a signalized intersection. Note that the project intersections are within the operational area of the Polk County US 27 Adaptive Traffic Control System. At the existing signalized intersections, the existing magnetometer vehicle detection devices shall be replaced with stop bar detection and dilemma-zone loops. At the new signalized intersection, provide detection layout using 6'x30' stop bar loops for all approach lanes, and 6'x6' dilemma zone loops on the mainline through lanes. The new

controller should be a Commander Advanced Traffic Controller (ATC) or later model capable of operating the SynchroGreen adaptive traffic control firmware.

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

- Key Sheet
- Project Layout / Overview sheets outlying the locations of field elements
- Detail sheets on:
  - CCTV structure, CCTV attachment, CCTV operation/layout
  - Fiber optic splice and conduit
  - Power Service Distribution
  - Wiring and connection details
  - Conduit, pull box, and vault installation
  - Communication Hub and Field Cabinets
  - System-level block diagrams
  - Device-level block diagrams
  - Field hub/router cabinet configuration details
  - Fiber optic Splicing Diagrams
  - System configuration/Wiring diagram/Equipment Interface for field equipment at individual locations and communications hubs.
  - Maintenance of Communications (MOC) Plan

The Design-Build firm is responsible for ensuring project compliance with the Regional ITS Architecture and FDOT ITS Topic 750-040-003-c, Systems Engineering and ITS Architecture Procedure as applicable. This includes, but is not limited to, the development or update of a concept of operations, the development or update of a system engineering master plan (SEMP), and requirement traceability verification (RTVM) as well as coordination of document review.

The Design-Build Firm shall detail existing Signalization and 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 Signalization and 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 subsystems 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.

- CCTV Includes mountings to install CCTV at the new traffic signalized intersection of US 27 and Kokomo Dr and integrate into the existing ITS network.
  - Locate the CCTV camera such that 100% CCTV camera coverage of the project signal is provided. 100% CCTV camera coverage shall be defined as the clear and unobstructed view for 1000 feet on the northbound and southbound US 27 approaches, and 500 feet on the westbound Kokomo Rd approach.
  - CCTV camera mounted to a concrete pole shall be a minimum of 35 feet above grade and a maximum of 40 feet above grade.
  - The CCTV camera may be mounted to a new signal structure provided the proposed location meets the CCTV camera coverage requirements.
- Removal of any ITS System components that are impacted by the Design-Build Firms scope of work as approved by the Department.
- Removal of the existing lateral drops from the backbone to the existing facilities that will or may be removed as part of this project. The lateral drops disconnected from the backbone shall be respliced "in-kind" to match respective fiber strand(s) and buffer tube(s) as approved by the Department. The existing lateral drop conduit(s), pull boxes and splice boxes shall be removed as described in Section C Utility Coordination of this RFP.
- Testing of fiber optic backbone and lateral drops furnished and installed or modified by the Design-Build Firm.
- Testing of the Intelligent Transportation System.
- Coordinate with the Design-Build Firm to avoid conflicts with landscape plans within the
  Department Right of Way. While procedures are being revised to facilitate this increased
  collaboration and cooperation, the Design-Build Firm is required to ensure that the design and
  construction of each ITS project and each landscape project is entirely coordinated with existing
  and proposed ITS facilities and landscapes. Both programs have been determined to be important
  components of the state transportation system.

## 3. Construction and Integration Services:

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

## 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.

## 5. Existing Conditions

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

existing site conditions within the project limits.

The ITS components shall be defined as follows:

- Closed Circuit Television (CCTV) Camera System: The CCTV Camera System consists of pantilt-zoom (PTZ) cameras along the corridor that are typically placed at signalized intersections.
   The CCTV cameras are used by Department staff for incident management and traffic monitoring. The cameras are integrated via the single mode FOC communications backbone installed along the corridor.
- Fiber Optic Network (FON): The FON infrastructure provides communications for ITS and Tolls components (Tolls components are located outside of this corridor). The FON is composed of the FOC communications backbone, lateral connections and communications equipment including but not limited to field and HUB Ethernet switches, port servers, routers, fiber patch panels installed at the various ITS device(s) serving as a local HUB.
- For clarification purposes, any reference in this RFP to the mainline fiber optic backbone that is installed along the corridor shall be defined as the "backbone". The fiber optic cable between the backbone and ITS components shall be defined as the "ITS lateral".
- The FOC communications backbone consists of a single mode fiber optic cable and four (4), 1.25-inch HDPE conduit, locate tone wire, warning tape, fiber route markers, pull boxes, and splice boxes. Three (3) of the four (4), 1.25-inch HDPE conduits are spare conduits. The backbone provides access points for the various ITS components along the corridor for network connectivity as previously described.
- The majority of ITS components are connected to the backbone through a lateral twelve (12) count single mode fiber optic cable inside two (2), 1.25-inch HDPE conduits of which one is a spare. ITS components on arterials, such as ADMS, connect with the backbone through a wireless access point (WAP) and LHUBs which are physically connected to the backbone through a lateral fiber optic cable connection.

## S. Landscape Opportunity Plans: N/A

## 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: <u>D1.DesignBuild@dot.state.fl.us</u>

Ms. Jamie Reyes Attn: Jhoanna Garces de Beltre 801 N. Broadway Ave. Bartow, FL 33830 (863) 519-2279

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 on public involvement, railroad encroachments, and affected utilities 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
- Utility Coordination Manager

## • 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, geotechnical surveys, architectural services, engineering services, Design-Build Firms quality plan, construction of the Project, and all other work necessary to fully and timely complete that portion of the Project in accordance with the Contract Documents, as well as all job site and home office overhead, and profit, it being understood that payment of that amount for that portion of the Project will be full, complete, and final compensation for the work required to complete that portion of the Project. The Department will accept Bid Price Proposals by electronic mail at d1.designbuild@dot.state.fl.us.

Submit Bid Price Proposal and other related documents as described above to:

Ms. Jamie Reyes Attn: Jhoanna Garces de Beltre 801 N. Broadway Ave. Bartow, FL 33830 (863) 519-2279 D1.DesignBuild@dot.state.fl.us

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.