



*Florida Department of Transportation*

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GOVERNOR

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Tallahassee, FL 32399-0450

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SECRETARY

February 21, 2022

**ADDENDUM NO. 5**

To: ALL DESIGN BUILD FIRMS

FINANCIAL ITEM NUMBER: 415474-2-52-01, 415474-2-52-02, and 415474-2-56-01  
CONTRACT NUMBER: E3U76  
DESCRIPTION: Design Build for SR 30 (US 98) Brooks Bridge No. 570034

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PROPOSALS TO BE RECEIVED: May 4, 2022

This is your authorization to make the following changes to the Request for Proposal package you now have for the subject project:

Attached for your use is a redline revision to the RFP document previously distributed. The following is a summary of the revisions:

**Cover**

- Document denoted as Final RFP, Addendum 5

**Section I. Introduction, under "Lighting"**

- Corrected intent of Design-Build Firm's responsibly for lighting to be installed by Gulf Power

**Section I. Introduction, under "Aesthetics", "Roadway Lighting"**

- Modified location requirement of roadway lighting

**Section I. Introduction, under "Utilities"**

- Clarified AT&T's intent for subaqueous line post construction

**Section VI. Design and Construction Criteria, Subsection D. Utility Coordination**

- Removed duplicate language and clarified requirements

**Section VI. Design and Construction Criteria, Subsection F. Roadway Design, Subsection 3. Drainage Analysis**

- Clarified intent for shore protection

**Section VI. Design and Construction Criteria, Subsection I. Structure Plans, Subsection 2 Criteria, bullet dd.**

- Defined allowable deflection for custom fender system

**Section VI. Design and Construction Criteria, Subsection I. Structure Plans, Subsection 2 Criteria**

- Added bullet pp.

**Section VI. Design and Construction Criteria, Subsection I. Structure Plans, under “Bridge, and MSE wall surface finish requirements”**

- Clarified requirements

**Section VI. Design and Construction Criteria, Subsection N. Transportation Management Plan, Subsection 1. Traffic Control Restrictions**

- Removed language to clarify requirement

Please use this information when preparing your proposal.

All PROPOSAL HOLDERS please acknowledge receipt of the addendum on the Design Build Proposal of form (form no. 375-020-12), in the space provided.

Sincerely,



Ranae Dodson  
Procurement Manager

cc: Kerrie Harrell, Alaina Webb, File

Please sign below to acknowledge receipt of Addendum No. 5.

**Acknowledged by:** \_\_\_\_\_

*Florida Department of Transportation*  
*District 3*

**FINAL**

**DESIGN-BUILD**

**REQUEST FOR PROPOSAL**  
**for**

**SR 30 (US 98) Brooks Bridge No. 570034**

**Roadway Section No. 57030000**

**Bridge Replacement and Roadway Improvement Design and  
Construction**

**Okaloosa County**

**Financial Projects Number(s): 415474-2-52-01,  
415474-2-52-02, 415474-2-56-01**

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

**Contract Number: E3U76**

**[Addendum No. 1 – 09/13/2021](#)**

**[Addendum No. 2 – 09/16/2021](#)**

**[Addendum 3 – 10/07/2021](#)**

**[Addendum 4 – 12/21/2021](#)**

**[Addendum No. 5 – 02/21/2022](#)**

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## ATTACHMENTS

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

### Project Advertisement

#### Division I Design-Build Specifications

Award and Execution of Contract – Public Records (SP0030900DX)

Legal Requirements and Responsibility to the Public – Laws to be Observed –

Compliance with Federal Endangered Species Act and Other Wildlife Regulations (Manatee) (SP0070104-4)

Legal Requirements and Responsibility to the Public – Laws to be Observed –

Compliance with Federal Endangered Species Act and Other Wildlife Regulations (Sawfish) (SP0070104-5)

Legal Requirements and Responsibility to the Public – Laws to be Observed –

Compliance with Federal Endangered Species Act and Other Wildlife Regulations (Sea Turtle) (SP0070104-6)

Legal Requirements and Responsibility to the Public – Laws to be Observed –

Compliance with Federal Endangered Species Act and Other Wildlife Regulations (Sturgeon) (SP0070104-8)

Legal Requirements and Responsibility to the Public – Laws to be Observed –

Compliance with Federal Endangered Species Act and Other Wildlife Regulations (Seagrass Beds) (SP0070104-9)

Legal Requirements and Responsibility to the Public – Equal Opportunity Requirements (SP0072700)

Legal Requirements and Responsibility to the Public – Preference to State Residents (SP0072800)

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

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

Prosecution and Progress – Prosecution of Work – Partnering (SP0080306)

Prosecution and Progress – Limitations of Operations – Night Work Along Coastal Road (SP0080401)

Prosecution and Progress – Limitation of Operations – Contaminated Material (Mercury-Containing Devices and Lamps) (SP0080409)

**Prosecution and Progress - Damage Recovery**

**Incentive-Disincentive (SP0081300ID)**

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)

Value Added Bridge Component (SP475000DB)

Landscaping (SP5800000)

**Road Weather Information System (RWIS) (DEV 688)**

General

- A01 ~~Revised Revised~~ Pavement Design (~~Approved April 2021~~ ~~October 2021~~ ~~December 2021~~)
- A02 Right of Way Maps with CADD files
- A03 Approved Design Speed Variation (January 2020)
- A04 2021 FDM Section 121 BrProjDev-Calculations

Permit Applications

- A05 FDEP ERP and State 404 Application

PD&E Documents

- A06 FONSI and Environmental Assessment (April 2019)
- A07 Endangered Species Biological Assessment and Biological Opinion (October 2017)
- A08 Contamination Screening Evaluation Report (May 2016)

Reevaluation

- A09 Reevaluation

Utilities

- A10 UWHC Executed Agreement – Cox Communications
- A11 UWHC Executed Agreement – AT&T Florida
- A12 UWHC Executed Agreement – Uniti Fiber
- A13 UWHC Executed Agreement – Centurylink
- A14 UWHC Executed Agreement – Okaloosa County Water and Sewer
- A15 96<sup>th</sup> Communications Squadron Cyber Infrastructure Design Guide (February 2020)
- A16 96TW-2019-00302-00006 Brooks Bridge Cyber Infrastructure Relocation FDOT RFI with Addition 1

Species Protection

- A17 NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions (March 2006)
- A18 NMFS and FWS Construction Special Provisions, Sturgeon Protection Guidelines (September 2012)
- A19 FWC Manatee and Sea Turtle Construction Conditions for In-Water Work Associated with FDOT Projects [2012]

Bid Price Proposal Forms:

1. Design Build Proposal of Proposer (375-020-12)
2. ~~Revised~~ Design Build Bid Blank (375-020-17)
3. Design Build Bid or Proposal Bond (375-020-34)
4. Vendor Certification Regarding Scrutinized Companies List (No. 375-030-60)
5. Design Build Bid Proposal (700-010-65)

Other Contract Forms:

1. Design Build Contract Bond (No. 375-020-14)
2. Contract Affidavit (No. 375-020-30)
3. Design Build Contract (No. 375-020-13)
4. Stipend Agreement

## 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.

### Concept Plans and Design Documentation

- R01 Brooks Bridge Concept Plans (December 2020)
- R02 Brooks Concept CADD Files (Brooks Concept CADD.zip)
- R03 Typical Section Package (Approved February 2021)
- R04 Pond Siting Report Technical Memorandum (December 2020)
- R05 Drainage Design Documentation (December 2020)
- R06 Drainage Models (Brooks Drainage Models.zip)
- R07 Okaloosa County Water and Sewer Relocation Plans (April 2021)
- R08 Coastal Hydraulics Memorandum (September 2020)
- R09 Report of Geotechnical Exploration (BDR) (October 2018)
- R10 Report of Geotechnical Exploration (Ponds) (October 2018)
- R11 Report of Geotechnical Exploration (Pond 1) (July 2020)
- R12 Bridge Technical Memorandum (Single Alternative BDR) – Vol. I (January 2021)
- R13 Bridge Technical Memorandum (Single Alternative BDR) – Vol. II (January 2021)
- R14 Brooks Bridge BDR – Plans (January 2021)
- R15 Brooks Traffic Models (Brooks Traffic Models PDE.zip)

### General

- R16 Okaloosa County Water and Sewer Standard Specifications and Design Manual ([link only](http://www.co.okaloosa.fl.us/sites/default/files/doc/dept/ws/Spec_Manual.pdf)) ([http://www.co.okaloosa.fl.us/sites/default/files/doc/dept/ws/Spec\\_Manual.pdf](http://www.co.okaloosa.fl.us/sites/default/files/doc/dept/ws/Spec_Manual.pdf))
- R17 Preliminary Utility Information Package
- R18 Draft Submerged Aquatic Vegetation Report Addendum (November 2019)
- R19 Okaloosa County's Artificial Reef Permit Information
- R20 Project Traffic Forecasting Report (January 2021)
- R21 Brooks Bridge Utility Mapping Report (3/10/21)
- R22 Brooks Bridge Utility Mapping CADD (UTEXRD01.dgn)
- R23 Irrigation Plan for Conference Center
- R24 E2N80 Final As-Built Plans (Sidewalk)
- R25 SR 30 (US 98) Emergency Operations Plans Katrina

### Aesthetics

- R26 Brooks Bridge Aesthetics Online Meeting Results (April 2021)
- R27 Brooks Bridge Sample Aesthetics Interpretation and Views (July 2021)

### Existing Bridge Plans & Inspection Report



R28 Bridge Inspection Report (October 2020)  
R29 Existing Bridge As-Built Plans (1965)  
R30 Existing Bridge Plans (Black and White Copy)  
R31 Existing Crutch Bent Plans  
R32 Existing Pile Driving Records  
R33 Existing Dolphins and Fender System Plans  
R34 Old Swing Bridge Plans

Reference PD&E Documents

R35 Location Hydraulic Report (February 2018)  
R36 Pond Siting Report (October 2018)  
R37 Public Involvement Summary Report (December 2018)  
R38 Design Traffic Report (December 2016)  
R39 Preliminary Engineering Report (December 2018)  
R40 Wetlands Evaluation Report (October 2017)  
R41 Noise Study Report (January 2018)  
R42 Navigation Study (August 2015)  
R43 Essential Fish Habitat Report (July 2016)  
R44 Cultural Resources Assessment Survey (May 2016)  
R45 Conceptual Stage Relocation Plan (December 2018)  
R46 Air Screening Report (October 2017)

Reference Reevaluation Documents

R47 Contamination Technical Memorandum (January 2021)  
R48 Cultural Resource Assessment Survey Technical Memorandum  
R49 SHPO Concurrence to Cultural Resource Assessment Survey Technical Memorandum  
(1/14/21)

Other Reference Documents

R50 Hydrographical Conditions Survey

R51 Okaloosa County Preliminary Santa Rosa Blvd Concept

## 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 replacement of Brooks Bridge (Bridge No. 570034) over Santa Rosa Sound in Okaloosa County, Florida. This project will also include roadway widening, new roadway connections, and milling and resurfacing within the limits of SR 30 (US 98) from west of SR 145 (Perry Avenue) to Pier Road, side street reconstruction, intersection reconstruction, signalization, Intelligent Transportation Systems, stormwater ponds, storm-drainage, signing and pavement marking, and replacement of the fender system.

It is the Department's intent to promote the use of innovative design concepts, components, details, and construction techniques for bridge structures as discussed in Part 1, Chapter 121 of the FDOT Design Manual (FDM). The Design-Build Firm may submit a Technical Proposal that includes innovative concepts if they are discussed with the Department and approved in accordance with Part 1, Chapter 121 of the FDM using the Alternative Technical Concept (ATC) process.

The Design-Build Firm shall include a Landscape Architect duly authorized to practice Landscape Architecture in the State of Florida consistent with State Statute 481 part II. The Design-Build Firm's Landscape Architect (DBLA) shall review and identify future unencumbered landscape areas for this Project. This Project shall reserve landscape opportunities and implement the FDOT Highway Beautification Policy. Landscape construction will be performed by others and not included with this Project with the exception of required landscaping to be installed within the limits of the proposed roundabouts. Landscape opportunity areas shall be identified in the Design-Build Firm's Plans as "future landscape areas to be constructed by others". Coordination will be required by the Design-Build Firm and the District Landscape Architect. Coordination between Design-Build Firm's Landscape Architect, the District Landscape Architect and Engineer will be required during the Design-Build plans development process to ensure landscape opportunities are accommodated within the project limits. The DBLA shall be included in the project kick-off meeting and subsequent progress meetings.

Right-of-way acquisition is currently ongoing to acquire the needed right-of-way for the project as depicted by the latest right-of-way maps. The anticipated right-of-way clear date for the Project is October 22, 2022. This right-of-way clear date has been utilized to determine the maximum contract duration established in this RFP by the Department. The Design-Build Firm shall utilize this date in determining their schedule for the Project that will be submitted in accordance with the Design-Build Division I Specifications. The Design-Build Firm will be required to obtain a right-of-way certification from the Department for ANY construction activities prior to commencing work.

### **Description of Work**

The Design-Build Firm will be required to design and construct roadway widening on SR 30 from west of SR 145 to west of Pier Road and two new bridges spanning Santa Rosa Sound. Except as allowed by Section I.A. of this RFP, design and construction shall be consistent with the approved Environmental Assessment (EA) with Finding of No Significant Impact (FONSI) and Reevaluation. The project includes bridge replacement, roadway widening, milling and resurfacing, new roadway connections, side street reconstruction, intersection reconstruction, signalization, stormwater ponds, storm drain, and replacement of the fender system.

On the west (Fort Walton Beach) side of the bridge, side street work includes reconstruction/widening/milling and resurfacing of SR 145 (Perry Avenue) and Perry Avenue South,

realignment of Brooks Street, realignment of Florida Blanca Place, and construction of Pond 1. *See Figure 1.*



Figure 1: Fort Walton Beach Side Overview of Work

On the east (Okaloosa Island) side of the bridge, side street work includes reconstruction of Santa Rosa Boulevard, a new North Connection between SR 30 and Santa Rosa Boulevard on new alignment, reconstruction of the roundabout at the intersection of the North Connection and Santa Rosa Boulevard, a new Eastbound Connection between SR 30 and Santa Rosa Boulevard on new alignment, roundabout construction at the Eastbound Connection intersection with the Hotel Entrance Road, reconstruction of the Hotel Entrance Road, reconstruction of Business Access Road, and Ponds 2, 4, 7A and 8. *See Figure 2.*



Figure 2: Okaloosa Island Side Overview of Work

**Roadway Widening, Milling and Resurfacing on SR 30**

The required design speeds for SR 30 are 40 mph from west of SR 145 to the east end of the new bridges, and 45 mph from the east end of the new bridges to End Project. The maximum grade allowed on SR 30 shall not exceed 5%.

SR 30 will be widened **and reconstructed** from west of SR 145 to west of Pier Road. The typical section for the west bridge approach along SR 30 from SR 145 to the Begin Bridge will consist of six-11 ft travel lanes, a 10 ft median with 4 inch concrete cap, 10 ft inside shoulders, 10 ft outside shoulders, 38 in single-slope shoulder barrier on the inside and outside, 12 ft shared use paths on both sides of the roadway, 3.5 ft bridge ped./bicycle railing (aluminum) with 6 inch curb on both sides, and retaining wall. Some variation in the median width, inside shoulder width, and median barrier location will be allowed to accommodate transition from the existing roadway to the bridge typical section. At the intersection of SR 30 and SR 145, provide one 11 ft eastbound dedicated left turn lane and one 11 ft westbound right turn lane.

The typical section for the east road way approach along SR 30 from End Bridge to the new connections to Santa Rosa Boulevard will consist of six-11 ft travel lanes, a 22 ft curbed median, 10 ft outside shoulders, 38 in single-slope shoulder barrier on the outside, 12 ft shared use paths on both sides of the roadway, 3.5 ft bridge ped./bicycle railing (aluminum) with 6 inch curb on both sides, and retaining wall. Transition from the bridge typical section, including the transition of median width and transition from the bridge traffic railing to Type E curb shall occur within this typical section. At the intersection of SR 30 and New North Connection, provide one 11 ft westbound right turn lane. At the intersection of SR 30 and the Eastbound Connection, provide one 11 ft eastbound right turn lane and one 11 ft westbound dedicated left turn lane.

The typical section for SR 30 from the new connections to Santa Rosa Boulevard to west of Pier Road will consist of four 11 ft travel lanes, a 22 ft curbed median, a 10 ft shoulder (5 ft paved) in the eastbound direction, a 10 ft shoulder (5 ft paved) in the westbound direction, and a right turn lane in the eastbound direction serving business access roads. In addition, a left turn lane shall be provided in the westbound direction serving the commercial driveway at Station 143+00. Bicycles will be accommodated on a dedicated 5 ft bicycle lane/keyhole in the eastbound direction and on the 5' paved shoulder in the westbound direction. Pedestrians will be accommodated on the existing 5 ft sidewalk in the eastbound direction and 8 ft sidewalk in the westbound direction.

The typical section for SR 30 from west of Pier Road to Pier Road will consist of four 11 ft travel lanes, a raised 4 ft to 8 ft concrete traffic separator, a 10 ft shoulder (5 ft paved) in the eastbound direction, a 10 ft shoulder (5 ft paved) in the westbound direction, a 11 ft eastbound right turn lane serving Pier Road, and two 11 ft eastbound left turn lanes serving Pier Road with a minimum length to match the existing turn lanes. Bicycles will be accommodated on a dedicated 5 ft bicycle lane/keyhole in the eastbound direction and on the 5' paved shoulder in the westbound direction. Pedestrians will be accommodated on the existing 5 ft sidewalk in both the eastbound and westbound directions.

The Design Build Firm will be required to mill and resurface SR 30 from STA 100+00 west of SR 145 to the beginning of reconstruction west of SR 145, and to facilitate pavement marking transitions and match the project limit for the adjacent resurfacing project later defined in this RFP. The Design-Build Firm shall also mill and resurface SR 30 from the end of reconstruction west of Pier Road to east of Pier Road to facilitate pavement marking transitions to the existing roadway.

### **SR 30 Bridge Replacement over Santa Rosa Sound**

The existing SR 30 bridge spanning Santa Rosa Sound shall be replaced with two three-lane parallel bridges on independent foundations. Each bridge shall consist of three 11 ft travel lanes, 10 ft inside shoulders, 10 ft outside shoulders, 36 in single-slope traffic railing on the inside and outside, 12 ft shared use paths, and 3.5 ft ped./bridge railing (aluminum) with 6 inch curb on both sides.

The bridges shall begin west of Pond 1 in Fort Walton Beach and end east of Santa Rosa Blvd on Okaloosa Island.

A minimum of 10 feet of space shall be provided between the bridges for maintenance inspection purposes with the only exception being at the Begin Bridge first span where a minimum of 8-ft is required between the bridges. Greater horizontal separation between the bridges is preferred to facilitate maintenance activities.

The minimum vertical clearance of the main span over the navigation channel shall be 65 feet above the mean high-water elevation of Santa Rosa Sound at the main channel crossing.

A fender system shall be constructed parallel to the channel, and symmetrically around the centerline of the channel. A minimum 150-foot horizontal clearance in the main channel between the fenders is required. There are subaqueous utilities located within the limits of construction of the fender system. Design and construction of the fender system must be coordinated with subaqueous utility owners. Gulf Power (to remain in place and energized), AT&T Corporate (to remain in place) and Okaloosa Gas District (to remain in place and in service) have subaqueous facilities within the anticipated footprint of the new fender system and are to remain in place. The Design-Build firm's fender design shall avoid impacts to these subaqueous facilities.

**Roadway Widening on SR 145**

SR 145 (Perry Avenue SE) shall be milled, resurfaced, and widened from SR 30 to the Publix Entrance. The typical section will consist of milling and resurfacing the existing 12 ft lanes and widening adjacent to the northbound lanes to add a dedicated right turn lane into Publix, curb and gutter, and a ~~5 ft to~~ 6 ft concrete sidewalk adjacent to the northbound lanes. The existing sidewalk adjacent to the southbound lanes will remain. At the intersection with SR 30, lane requirements include a southbound shared left, right, thru lane and a southbound left turn lane. The required design speed for SR 145 is 30 mph.

**Roadway Widening on Perry Avenue South**

Perry Avenue South will be widened and reconstructed from Brooks Street to SR 30. The typical section will consist of reconstruction, widening and milling/resurfacing to provide five 11 ft lanes, a 7 ft buffered bicycle lane, 8 ft concrete sidewalk adjacent to the northbound lanes, curb and gutter, and 14 ft of pavement adjacent to the southbound lanes for replacement of existing on street parking. The existing sidewalk adjacent to the southbound lanes will remain. At the intersection with Brooks Street, lane requirements include a southbound right turn lane and a southbound left turn lane. At the intersection with SR 30, lane requirements include a northbound left turn lane, a northbound thru lane and a northbound right turn lane. The required design speed for Perry Avenue South is 30 mph.

The Design Build Firm will be required to mill and resurface portions of the existing on street parking area along Perry Avenue South.

**Brooks Street Realignment**

Brooks Street shall be realigned to accommodate the roadway widening on SR 30 and the bridge replacement. The typical section shall consist of two 11 ft travel lanes, curb and gutter, and an 8 ft sidewalk along the left side of the typical section adjacent to the curb. The required design speed for Brooks Street is 20 mph.

**Florida Blanca Realignment**

Florida Blanca Place shall be realigned to accommodate the roadway widening of SR 30 and the bridge replacement. The typical section shall consist of two 11 ft travel lanes, curb and gutter, and 6 ft sidewalk along the right side of the typical section adjacent to the curb. The required design speed for Florida Blanca Place is 20 mph.

**Business Access Road Reconstruction**

The Business Access Road that connects businesses adjacent to SR 30 to Santa Rosa Boulevard near the east bridge landing shall be reconstructed and realigned to preserve access for businesses, accommodate the construction of Pond 8, and allow replacement of the bridges. The typical section shall consist of two 12 ft travel lanes with curb and gutter. The required design speed for Business Access Road is 15 mph.

**Business Access Road shall be constructed in a closed loop configuration with a single point of access to Santa Rosa Blvd.**

**Alternative Business Access Road configuration, pavement design, or typical sections that meet design requirements and the needs of adjacent businesses may be implemented provided they have been approved by the Department. The Design-Build Firm will be required to adhere to Section VI. F. Subsection 2. of the RFP for the alternate pavement design proposed.**

### **Roadway Widening on Santa Rosa Boulevard**

Santa Rosa Boulevard will be widened to five lanes from west of the new Eastbound Connection to its intersection with the new North Connection. The typical section shall consist of four 11 ft travel lanes, a ~~15~~ **12** ft two way left turn lane, curb and gutter, 7 ft buffered bike ~~lanes~~ **lanes** on both sides, and 6 ft concrete sidewalk on both sides. Traffic signals shall be constructed at the intersection of Santa Rosa Boulevard and the Eastbound Connection. At the intersection with the new Eastbound Connection, lane requirements **also** include a northbound left turn lane, a northbound thru/right lane, and a southbound left turn lane. The required design speed for Santa Rosa Boulevard is ~~30~~ **35** mph.

**If the Design-Build Firm received an approved ATC regarding an alternate pavement design proposal, they will also be required to adhere to Section VI. F. Subsection 2. of the RFP for the alternate pavement design proposed.**

**Roadway and bicycle/pedestrian improvements on Santa Rosa Blvd outside of the Brooks Bridge project limits are being developed by Okaloosa County. The Design-Build Firm will be required to coordinate lane configuration, lane widths, and bicycle pedestrian facilities with the County during the design process. Okaloosa County's Santa Rosa Blvd preliminary concept has been included as a Reference Document in this RFP.**

### **New North Connection Roadway Construction**

A new North Connection will be constructed to connect SR 30 to Santa Rosa Boulevard. The typical section will consist of two 11 ft travel lanes, 7 ft buffered bike lanes on both sides, 6 ft sidewalk on both sides, and curb and gutter. A northbound right turn lane will be required to serve the loading dock at Emerald Coast Convention Center. A traffic channelization island will be constructed at the intersection of New North Connection and SR 30 to facilitate right in, right out traffic movements. The required design speed for North Connection is 30 mph.

### **Santa Rosa Boulevard Roundabout**

A roundabout shall be constructed at the intersection of Santa Rosa Boulevard and the New North Connection. The roundabout shall have a minimum inscribed circle diameter (ICD) of 130 ft. The roundabout typical section will consist of one 20 ft lane and 10 ft sidewalk within the limits of the roundabout. The center of the roundabout will consist of a 90 ft diameter truck apron and a 60 ft diameter central island. The minimum design vehicle for this roundabout is a WB-62FL. Landscaping is required in the central island in conformity with FDOT Design Manual 213.9 and 213.12. Landscaping shall be designed and installed in a similar style and quality as the landscaping at the existing Hilton Garden Inn and Holiday Inn Resort entrance roundabout. Irrigation shall be installed. Okaloosa County Convention Center has an existing irrigation system that includes elements within and adjacent to the existing roundabout on Santa Rosa Boulevard. In coordination with Okaloosa County, the Design-Build Firm will be allowed to modify the system to accommodate proposed irrigation for landscaping within the Santa Rosa Boulevard roundabout. Any proposed modification to the Convention Center irrigation system must be submitted to Okaloosa County for approval. Vertical obstructions shall be in place prior to opening roundabout to traffic.

### **Eastbound Connection Roadway Construction**

A new Eastbound Connection shall be constructed to connect Santa Rosa Boulevard and SR 30. The typical section shall consist of two to four 11 ft lanes in a similar configuration as shown in the Concept Plans, curb and gutter, a 7 ft minimum **e width** raised median with traffic separator, a 12 ft shared use path along the left side of the typical section, and a 6 ft concrete sidewalk along the right side of the typical section. At the intersection with SR 30, lane requirements include dual northbound right turn lanes. Left turns will

be restricted. At the intersection with Santa Rosa Boulevard, lane requirements include a westbound left turn lane with a minimum length of 410 ft, and a shared westbound left/right turn lane. The required design speed for the Eastbound Connection is 20 mph.

**Eastbound Connection Roundabout**

A roundabout shall be constructed to provide access to the Hotel Entrance Road. The roundabout shall have a minimum inscribed circle diameter (ICD) of 130 ft for westbound traffic and a 154 ft ICD for eastbound traffic. The roundabout typical section will consist of one 12 ft lane and 12 ft sidewalk in the westbound direction and two 12 ft lanes and 6 ft sidewalk in the eastbound direction. The center of the roundabout will consist of a 106 ft diameter truck apron and a 60 ft diameter central island. The minimum design vehicle for this roundabout is a WB-40. Landscaping and/or community aesthetic features are required in the central island in conformity with FDOT Design Manual 213.9 and 213.12. Landscaping shall be designed and installed in a similar style and quality as the landscaping at the existing Hilton Garden Inn and Holiday Inn Resort entrance roundabout. Irrigation shall be installed. Vertical obstructions shall be in place prior to opening roundabout to traffic.

**Hotel Entrance Roadway Construction**

A Hotel Entrance Road shall be constructed on the southern end of the Eastbound Connection roundabout to tie into access at the Holiday Inn Resort off SR 30. The typical section will consist of two 12 ft travel lanes, raised median varying in width from 0 to 7 feet adjacent to the roundabout, curb and gutter, and a 6 ft sidewalk adjacent to the northbound lane. The required design speed for the Hotel Entrance Road is 15 mph. The existing roundabout at the south end of the proposed Hotel Entrance Road shall be removed.

**Turn Lanes**

**A summary of required turn lanes are listed below. Turn lane widths and lengths shall be determined via applicable criteria, but shall at a minimum meet the requirements below.**

<u>Mainline</u>	<u>Direction</u>	<u>Cross Street</u>	<u>Width (Ft.)</u>	<u>Total Length including Taper (Ft.)</u>
<u>SR 30</u>	<u>EBL</u>	<u>Perry Ave.</u>	<u>11</u>	<u>220</u>
<u>SR 30</u>	<u>WBR</u>	<u>Perry Ave.</u>	<u>12</u>	<u>460</u>
<u>SR 30</u>	<u>WBR</u>	<u>North Connector</u>	<u>11</u>	<u>428</u>
<u>SR 30</u>	<u>WBL</u>	<u>EB Connector</u>	<u>11</u>	<u>365</u>
<u>SR 30</u>	<u>EBR</u>	<u>EB Connector</u>	<u>11</u>	<u>560</u>
<u>SR 30</u>	<u>EBR</u>	<u>Hotel Entrances/Pier Road</u>	<u>11</u>	<u>956</u>
<u>SR 30</u>	<u>WBL</u>	<u>Hotel Entrances (Sta. 143+00)</u>	<u>11</u>	<u>245</u>
<u>SR 30</u>	<u>EBL</u>	<u>Pier Road</u>	<u>11 (2)</u>	<u>412</u>
<u>N. Perry</u>	<u>NBR</u>	<u>Publix</u>	<u>12</u>	<u>200</u>
<u>N. Perry</u>	<u>SBL</u>	<u>SR 30</u>	<u>12</u>	<u>440</u>
<u>S. Perry</u>	<u>NBL</u>	<u>SR 30</u>	<u>11</u>	<u>170</u>
<u>S. Perry</u>	<u>NBR</u>	<u>SR 30</u>	<u>11</u>	<u>140</u>
<u>S. Perry</u>	<u>SBL</u>	<u>Brooks St.</u>	<u>11</u>	<u>173</u>
<u>Santa Rosa Blvd</u>	<u>SBL</u>	<u>EB Connector</u>	<u>15</u>	<u>228</u>
<u>Santa Rosa Blvd</u>	<u>NBL</u>	<u>EB Connector</u>	<u>15</u>	<u>116</u>



<u>North Connector</u>	<u>NBR</u>	<u>Convention Center Loading Dock</u>	<u>11</u>	<u>198</u>
<u>EB Connector</u>	<u>WBR/L</u>	<u>Santa Rosa Blvd</u>	<u>11</u>	<u>410</u>

Permanent Access

The Design-Build Firm shall provide permanent driveway access to all properties and businesses better than or equal to existing access regarding width and material type.

All median openings shall be provided as shown in the Concept Plans included in this RFP.

Drainage

The Design-Build Firm will develop a drainage system to convey, treat, and attenuate runoff from the project. The Design-Build Firm will provide stormwater treatment and attenuation. Five stormwater management ponds are anticipated within the project limits: Ponds 1, 2, 4, 7A, and 8. Pond 1 is located in Fort Walton Beach. Ponds 2, 4, 7A, and 8 are located on Okaloosa Island.

The Design-Build Firm shall provide maintenance access to the stormwater ponds as follows:

- Pond 1 - Access shall be provided via one 15-foot minimum-width curb cut **concrete** driveway adjacent to the pond and located along the west side of Brooks St. so as to provide safe ingress and egress by maintenance vehicles and equipment.
- Pond 2 - Access shall be provided via one 15-foot minimum width curb cut **concrete** driveway adjacent to the pond and located along the east side of the west Business Access Rd. so as to provide safe ingress and egress by maintenance vehicles and equipment.
- Pond 8 - Access shall be provided via one 15-foot minimum width curb cut **concrete** driveway adjacent to the pond and located along the north side of the Eastbound Connection roadway so as to provide safe ingress and egress by maintenance vehicles and equipment.
- Pond 4 - Access shall be via the WB SR 30 (US 98) roadway shoulder adjacent to south side of the pond. A paved maintenance access turnout is not required for this pond.
- Pond 7A - Access shall be provided via one 15-foot minimum width curb cut **concrete** driveway adjacent to the pond and located along the south side of Santa Rosa Blvd. so as to provide safe ingress and egress by maintenance vehicles and equipment.

Access to all ponds shall be appropriately designed and stabilized to withstand maintenance equipment and vehicles.

Utilization of linear ponds adjacent to SR 30 will not be allowed.

Within the limits of reconstruction, the Design-Build Firm shall replace the existing drainage system with a new drainage system. No existing drainage structures/pipes will be allowed to remain in service within the reconstruction limits upon final acceptance.

Stormwater has been observed to stage on the south side of SR 30 west of Pier Road. Design-Build Firm's drainage design should address this issue.

### **Signing and Pavement Marking**

The Design-Build Firm shall evaluate and provide guide signs, regulatory signs, warning signs, and pavement markings for all roads and driveways within the project limits. Pavement subject to temporary striping for maintenance of traffic beyond the limits of construction or widening shall be milled and resurfaced. All signs shall be new in conformance with MUTCD, TEM and Standard Plans and all applicable design bulletins.

### **Signalization and Intelligent Transportation Systems**

Three signalized intersections will be constructed, including full signalization at SR 30 and SR 145 (Perry Avenue), SR 30 and Eastbound Connection, and Santa Rosa Boulevard and Eastbound Connection. The existing traffic signals at the intersection of SR 30 and Santa Rosa Boulevard will be removed.

The signalized intersection at SR 30 and SR 145 shall incorporate pedestrian signals and crosswalks on the north, south, east and west sides of the intersection to facilitate the movement of pedestrians.

The signalized intersection at SR 30 and the Eastbound Connection shall incorporate pedestrian signals and crosswalks on the south side of SR 30 to facilitate the movement of pedestrians across the Eastbound Connection.

The signalized intersection at Santa Rosa Boulevard and the Eastbound Connection shall incorporate pedestrian signals and crosswalks on the south, north and east side of the intersection to facilitate movement of pedestrians across Santa Rosa Boulevard and the Eastbound Connection, respectively.

All new signalized intersections in this project shall be constructed with new mast arm pole, high-definition IP addressable CCTV camera, NEMA TS2 Type 1 Controller Cabinets and Advance Traffic Controllers compatible with the current operating software at the Okaloosa County Traffic Operations Center. Standalone CCTV camera with Camera Lowering Device (CLD) on both sides of the bridge on the roadway approach-departure portion to monitor traffic conditions on the bridge is required for this project.

A fully autonomous Road Weather Information System (RWIS) on or near the bridge is required in this project and shall be connected via fiber optic-based communication to the Okaloosa County Traffic Management Center with Center-to-Center connectivity to the D-3 RTMC in Chipley to receive all transmitted data for operations and maintenance. The standalone CCTV cameras with CLD and the RWIS sites will be monitored and maintained by the Department from the District RTMC in Chipley.

Induction loop detection shall be used for design of permanent vehicular detection at all signalized intersections.

The Design-Build firm shall design, construct, operate, and maintain a smart work zone (SWZ) to include CCTV cameras maintaining full coverage through the duration of construction.

### **Lighting**

The Design-Build Firm shall design and construct lighting along SR 30 within the limits of the new bridges and approaches within limits of retaining wall. Lighting constructed by Design Build Firm shall meet aesthetic requirements defined in the RFP. The Design-Build Firm shall design and construct the underdeck lighting for the portions of the project where US 98 is elevated at Santa Rosa Blvd. and at Brooks Street.

The Design-Build Firm shall design all remaining lighting which will be constructed by Gulf Power. See Figures 3 and 4 below depicting the approximate limits of lighting design and construction west and east of the proposed bridges. There is existing lighting on SR 30, Brooks Street, Florida Blanca Place, and Santa

Rosa Boulevard. The Design-Build Firm will be required to coordinate and complete the design **for /** replacement/relocation of any lighting on these streets disturbed during construction. The Design-Build Firm shall coordinate design of the lighting to be installed by others with Gulf Power. The Design Build Firm shall also coordinate with the City of Fort Walton Beach and Okaloosa County, as appropriate.

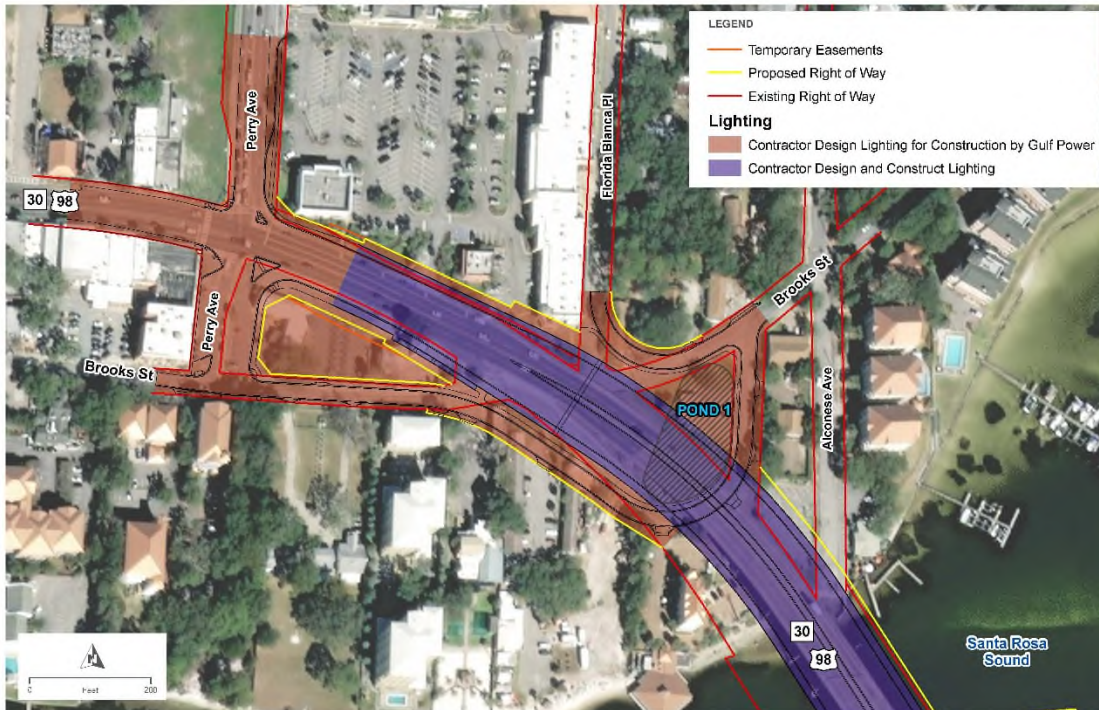


Figure 3: Lighting Design and Construction – West of Bridges

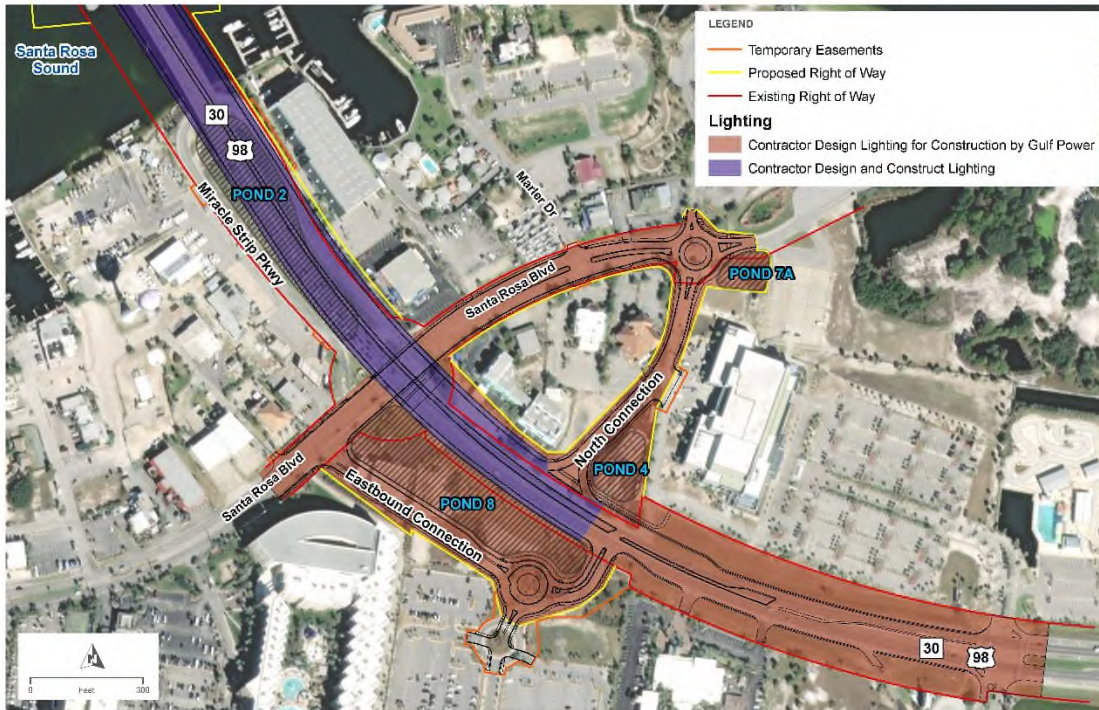


Figure 4: Lighting Design and Construction - East of Bridges

The proposed lighting is to be **typical** FDOT Conventional Lighting of the Light Emitting Diode (LED) type with full cutoff distribution to reduce sky glow as much as possible. High mast lighting is not allowed on this project.

The existing lighting in conflict with the proposed design shall be removed. **Temporary lighting shall be provided if existing lighting is removed prior to installation of proposed lighting.** The Design-Build Firm shall remove lighting in conflict and stockpile on site for the Department's contamination contractor to remove from the project. Contact the District Contamination Coordinator at (850) 330-1511.

Lighting Requirements:

- Lighting Design Analysis Report (LDAR)
- Power Design Analysis Report (PDAR)
- All new LED highway lighting system on SR 30, North Connection, and Eastbound Connection
- Navigational lighting
- Underdeck lighting at all overpass locations
- All signalized intersections
- Roundabout Lighting
- Side Street Lighting
- Shared use path on bridges
- Replace impacted lighting at Brooks Bridge Waterfront Park/ Brooks Bridge Fishing Park
- Aesthetic lighting

**Brooks Bridge Waterfront Park / Brooks Bridge Fishing Park**

The Design-Build Firm shall provide all needed design and construction services to restore the Brooks Bridge Waterfront Park and the Brooks Bridge Fishing Park. During construction, the Brooks Bridge Waterfront Park and the Brooks Bridge Fishing Park will be temporarily closed to public use for safety reasons. Following construction, the Design-Build Firm shall restore both of these park facilities including all current amenities to at least pre-construction conditions in coordination with the City of Fort Walton Beach. The Brooks Bridge Waterfront Park currently includes 44 public parking spaces, including handicap, motorcycle and bicycle parking; sidewalk as part of the Fort Walton Beach Boardwalk; pavers, shoreline stabilization, benches, picnic tables, lighting, landscaping, fencing, and a kayak/canoe launch. The Brooks Bridge Fishing Park (aka: City of Fort Walton Beach Fishing Park; currently includes lighting, bench, trash can, and shoreline stabilization. All park features impacted by construction shall be replaced with new amenities incorporating maintainable materials. The location, type, and configuration of the post-construction amenities shall be similar in scope and quality to the pre-construction amenities.

**Ongoing Right-of-Way Acquisition Process**

The Department's Right-of-Way Office is acquiring the necessary right-of-way for the project either by negotiated settlement or by the exercise of eminent domain (condemnation). The anticipated right-of-way clear date for the Project is included in the RFP. The right-of-way requirements for the Project are based on the maps as developed from the requirements of the conceptual plans included as a Reference Document in this RFP. Right-of-way maps provided are for informational purposes only. Design-Build Firm's verification with the public records is advised to confirm the accuracy of the maps. Construction activities cannot occur on acquired property until it has been certified as "clear" by the Department's Right-of-Way Office and a right-of-way certification has been issued by the Department. During the right-of-way acquisition process there are often instances where design commitments are made based on agreements with owners during settlement negotiations or as part of final negotiated settlements.

Such agreements are required to enable successful negotiations with property owners. Oftentimes, these agreements are of benefit to both the property owner and the Department. These agreements include, but are not limited to profile grade, driveway connections, culverts, ditch profiles, median openings, etc. Any design commitments made in settlement must be incorporated in the design and construction of the Project to not only function as a safe and efficient roadway, but for it to also consider the desires and needs of adjoining property owners. Any Right-of-way Commitments for these specific items are included as attachments to this RFP.

There will likely be agreements with property owners made during remaining right-of-way acquisition negotiations. As the right-of-way process progresses there may be commitments that will be forthcoming. Any right-of-way commitments made by the Department and subsequently issued to the awarded Design-Build Firm after contract execution shall be incorporated into the plans and design documents for the Project and be constructed as part of the Project. After Contract execution, if additional installations/modifications are required, the Department will negotiate with the Design-Build Firm on an appropriate supplemental agreement for the required work or in the Department's discretion pay for such work pursuant to Subarticle 4-3.2, Division I, Design-Build Specifications for this contract.

As the negotiation phase of any right-of-way parcel acquisition comes to a close there will likely be a need for one or more parcels that have not been acquired by negotiation to be condemned. Any such condemnation action will be initiated by the Department and will immediately require assistance and court testimony from the Engineer of Record for the Design-Build Firm regarding both public purpose and the reasonable necessity of specific parcels for the project. The Design-Build Firm will be required to provide any and all documentation immediately as may be requested by the Department to aid in the Right-of-Way acquisition process. The Design-Build Firm's Engineer of Record is required to be available as needed by the Department to assist in the Right-of-Way acquisition process. If the Design- Build Firm's Engineer of

Record is required to act as an expert witness (i.e. for deposition or court testimony) the Department will enter into a separate contract with the Design-Build Firm's Engineer of Record for this effort.

After right-of-way acquisitions are complete, the Department will have its demolition contractor (under a separate contract) remove all building, concrete slabs, concrete driveways, signs, septic tanks, and wells during its clearing activities. The Design- Build Firm will be responsible for any remaining clearing and grubbing including but not limited to existing fencing, trees, concrete removal, etc.

All design and construction activities for the project will be required to remain within the Department's right-of-way. The Department Right-of-Way Maps are available on the internet. These maps are the controlling document in reference to right-of-way line location. The concept plans may or may not accurately depict the right-of-way being acquired by the Department.

During the right-of-way acquisition negotiation process, the Department may obtain rights-of-entry or easements from property owners and document this specific access right in the Right-of-Way Commitments. For this reason, the Right-of-Way Commitments that include property access rights shall overrule the Right-of-Way Maps and the concepts plans.

***Portions of the right-of-way being acquired by the Department are owned by Eglin Air Force Base. The Department will not consider proposed design changes which require additional Eglin Air Force Base property.***

**Right of Way Acquisition Process for Unique Proposals by Design-Build Firms**

It is the Department's intent that all Project construction activities be conducted within the Right of Way. The Design-Build Firm may submit a Technical Proposal that requires the acquisition of additional Right of Way if the subject acquisition was approved during the Alternative Technical Concept (ATC) process. Any Technical Proposal that requires the acquisition of additional Right of Way will not extend the contract duration as set forth in the Request for Proposal under any circumstances. The Department will have sole authority to determine whether the acquisition of additional Right of Way on the Project is in the Department's best interest, and the Department reserves the right to reject the acquisition of additional Right of Way.

If a Design-Build Firm intends to submit a Technical Proposal that requires the acquisition of additional Right of Way, the Design-Build Firm shall discuss such a proposal with the Department as part of the ATC process. If a Design-Build Firm submits a Technical Proposal that requires the acquisition of additional Right of Way and the Design-Build Firm fails to obtain Department approval as part of the ATC process, then the Department will not consider such aspects of the Proposal during the Evaluation process. If the Design-Build Firm's Technical Proposal requires additional Right of Way approved by the ATC process, the additional Right of Way will be required to be directly acquired by the Department. The Design-Build Firm shall submit, along with the Technical Proposal, Right of Way maps and legal descriptions including area in square feet of any proposed additional Right of Way parcels in the Technical Proposal. The additional Right of Way will be acquired by the Department in accordance with all applicable state and federal laws, specifically including but not limited to the Uniform Relocation Assistance and Real Property Acquisition Policies for Federal and Federally Assisted Programs (42 USC Chapter 61) and its implementing regulations. This includes completing a State Environmental Impact Report (SEIR) or National Environmental Policy Act (NEPA) evaluation as appropriate. All costs concerning the acquisition of additional Right of Way will be borne solely by the Design-Build Firm. These costs include, but are not limited to consultant acquisition, appraisal services, court fees, attorney and any expert fees, property cost, etc. The Department will have sole discretion with respect to the entire acquisition process of the additional Right of Way.

If the Design-Build Firm's Technical Proposal requires additional Right of Way, the acquisition of any such Right of Way shall be at no cost to the Department, and all costs associated with securing and making ready for use such Right of Way for the Project shall be borne solely by the Design-Build Firm as a part of the Design-Build Firm's Lump Sum Price Bid. The Department will not advance any funds for any such Right of Way acquisition and the Design-Build Firm shall bear all risk of delays in the acquisition of the additional property, regardless of cause or source. No additional contract time will be granted.

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

Any additional Right of Way must be acquired prior to the commencement of any construction on or affecting the subject property. The Design-Build Firm waives any and all rights or claims for information, compensation, or reimbursement of expenses with respect to the Design-Build Firm's payment to the Department for costs associated with the acquisition of the additional Right of Way. The additional Right-of-Way cannot be used for any construction activity or other purpose until the Department has issued an applicable parcel clear letter or a Right of Way Certification for Construction.

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

#### **Intelligent Transportation Systems (ITS)**

The Design-Build Firm shall provide a fiber optic-based communication trunk line **and lateral drops** connecting the signalized intersections and tie to the existing communication network of the Okaloosa County traffic management center. The conduits for the ITS **shall be comprised of two 2-inch HDPE and** shall be provided along SR 30 and inside the bridge railings to support the field-to-center connectivity of the signalized intersection Advance Traffic Controllers. The Design-Build Firm shall provide conduit **system** for all lighting and ITS requirements included in this document for the full project limits. For the waterway crossing, the Design-Build Firm shall install three – 2" conduit in each traffic railing on each bridge. All conduits available in the traffic railings are anticipated to be needed for lighting (**navigation and roadway**), **signal**, and ITS elements. The Design-Build Firm shall provide a design that also considers future conduit locations feasible for private utility companies that would be hidden from an exterior profile view of the bridges and be located between the beam bays with hangers designed to support the conduits.

**ITS subsystems are later defined in this RFP document.** The ITS subsystems for this project shall include **at a minimum** Advance Traffic Controllers for traffic signals, High Definition IP addressable CCTV cameras at each signalized intersection, two (2) high definition IP addressable CCTV camera to cover full viewing of the bridge over the waterways, fully autonomous Road Weather Information System (RWIS), Induction loop vehicular detection for signalized intersections, and ~~96- 144~~ counts of single mode fiber optic cables for communication with lateral connection to the Local Area Network inside the cabinets for traffic signal controllers and CCTV cameras. The ITS subsystems constructed as part of this project will be operated and maintained from Okaloosa County Traffic Operations Center with the exception of the two standalone CCTV with CLD and RWIS sites. The ITS ~~field devices, supporting infrastructure and equipment within the~~ scope of this Project shall include, **but not be limited to: field devices, supporting infrastructure,** communications design, **hardware power** design, technical specifications, design plans, fiber optic cable splicing plan(s), test plans, **Systems Engineering documents such as** Project Systems Engineering Management Plan (PSEMP), Requirements Traceability Verification Matrix (RTVM), utility coordination, design documentation report, **Intelligent Transportation Systems Facility Management (ITSFM), development of system test and acceptance procedures,** and incidental items as applicable to this Project. **Develop and submit each ITS test plans to the Department for review and approval. Use only equipment and components that meet the requirements of the RFP, which are listed on the Department's Approved Products List (APL) - and are compatible with SunGuide®. ITS components will be connected to the District 3 Regional Transportation Management Center via center to center connection to Okaloosa County Traffic Operations Center.**

### **Aesthetics**

**General Approach** - The approach to an aesthetically pleasing Brooks Bridge shall start from a holistic understanding of the site context and differing conditions. The aesthetic approach shall work at the global scale of the project. FDOT conducted an online workshop to solicit public input on aesthetic elements and community values. The results are documented in the Brooks Bridge Aesthetic Workshop Survey Report (the "Aesthetic Survey Report") included as a Reference Document. The community overwhelmingly selected a "clean and contemporary" style over a historical or purely functional design. A contemporary design shall transition super structure depths in a gradual manner, provide consistent overhang cantilevers, and conceal conduits and drainage between girder lines. In addition, the Design Build Firm shall consider enhancements to piers, overlooks, railing, retaining walls, roadway lighting, aesthetic lighting, and pedestrian connectivity to provide a cohesive design that reflects community preferences as guided by the Aesthetic Survey Report. All aesthetic enhancements shall consider long term maintainability.

Sample aesthetic images are included as Reference Documents (Sample Aesthetic Interpretation and Views). These graphics provide examples of the visual quality of aesthetic elements required for this contract. The graphics represent one interpretation of the results of public involvement as documented in the Aesthetic Survey Report. The Design Build Firm is encouraged to develop its own interpretation of elements consistent with the Online Meeting Results. The Design-Build Firm may also propose a concept similar to the sample images provided.

**Piers** - The Contractor shall provide a contemporary pier form that is recognized to be representative of Fort Walton Beach and avoids typical highway pier forms. The pier geometry shall achieve shade and shadow differentiations by forming the pier to create surface variations. Considering the skewed alignment of the bridge over the navigational channel, the water and land piers shall be developed as a 'family of forms'. In order to address the urban design conditions of the low land piers, the design of the lowland piers can be a modification of the water pier form.

**Overlooks** - The Contractor shall provide a minimum of four (4) overlooks, including two on the eastbound bridge and two on the westbound bridge. Two overlooks (one on each bridge) shall be at the main span.



The other two shall be located as near as practical to the shoreline to provide easy access for pedestrians while preserving the privacy of structures on the land. Overlooks should be located to provide pleasing views of the waterway and surrounding area. Each overlook shall be a minimum of 300 SF not to include the 12 foot shared use path area. The overlook shape shall be curvilinear to avoid angular corners at the transition from the shared use path to the overlook. Each overlook shall have a canopy that is equal to or greater than the overlook surface area and include the majority of the adjacent shared use path area. Material selection shall be low maintenance and have a high resistance to wind induced damage or deformation. Illumination of the areas under the canopies shall be consistent with illumination along adjacent areas of the shared use path. **Divided benches shall be provided for pedestrian seating.**

**Railing** - The Contractor shall provide a contemporary railing system using low maintenance materials for a marine environment. The railing shall reduce the opportunities for birds to land. The railings shall be designed to FDOT Standards.

**Retaining Walls** - The Contractor shall design retaining walls finishes that have a contemporary design utilizing shallow (less than 4") relief and reflect public input documented in the Aesthetic Survey Report.

**Roadway Lighting** - The Contractor shall locate the roadway lighting poles **at the barrier between the shared use path and roadway** in a boulevard arrangement. The **lighting standards** should align transversely in plan rather than be staggered. The Contractor shall present concept plans with low height poles (in the 35' high range) that utilize LED light source with cut offs to avoid light spill into the water and neighborhoods. If needed to achieve the required foot candles on the path, secondary shared use path lighting shall be provided by luminaries embedded in the railing posts. Roadway lighting posts shall be of contemporary design with simple arms and without ornamentation. The same light posts shall be used throughout the corridor in locations where the Design Build Firm has responsibility for lighting construction.

**Aesthetic Lighting** -The Contractor shall provide aesthetic girder lighting on the bridge from abutment to abutment as well as aesthetic pier lighting. Aesthetic lighting shall include only white and/or blue lights along the girders and illuminating the piers. Lighting design and placement shall provide holistic aesthetic lighting; however, our preference is to reduce the total number of light fixtures to reduce maintenance efforts. The aesthetic lighting shall be located at the edge of the deck cantilever and focus lighting on the exterior girder on the north and south side only (not in between the two roadways). The fixtures shall be located in a chase designed to reduce the impacts of high wind and debris damaging the system. The color of the chase shall match the color of the deck material. Conduit boxes shall be placed behind the exterior girder unless the boxes can be located near the source without disrupting the light spread and out of causal viewing. The LED light spread shall be designed to be even across the face of the girder and not spill past the girder.

**Pedestrian Connectivity** -Connecting pedestrians to the bridge and providing pedestrian amenities was a desire of the public as described in the Aesthetic Survey Report. The Design Build Firm shall include a focus on connecting pedestrians and bicyclists to the bridge and enhancing opportunities for pedestrians and bicyclists to interact with the bridge, surrounding parks, and surrounding infrastructure.

### **Utilities**

The Design-Build Firm will be responsible for providing utility adjustment plans and coordinating utility relocations. The Design-Build Firm shall be responsible for determining, through the use of non-destructive means, both the horizontal and vertical location of all existing utilities above and below ground within the project limits, and for coordinating with the Utility owner(s) for any necessary relocation and/or adjustment of their utilities through the development of a comprehensive utility work schedule. Existing utility location

information is provided in the RFP and Reference Documents. The Design-Build Firm shall avoid utility impacts as much as possible. Avoidance techniques, such as utility conflict structures, should be used to avoid impacts.

Along with coordinating utility relocations for the project, the Design-Build Firm is required to perform Utility Work by Highway Contractor (UWHC) for the following UA/O's.

1. Okaloosa County Water & Sewer (OCWS) – All Relocations – Conceptual UWHC Relocation Plans are provided based on the Concept Plans
2. Eglin AFB Communications – All Relocations – UWHC Relocation Plans to be coordinated
3. Cox Communications, Century Link, AT&T Florida, Okaloosa County **Traffic Board of County Commissioners (BCC) Information Technology**, and Uniti – Partial Relocations - Six (6) four-inch (4”) communications ducts to be placed under the bridge for use for relocation.

The Design-Build Firm shall design, permit, and relocate/adjust OCWS water and sewer facilities as required for the construction of the project. The approximate limits shown in the concept plans are the required begin and end limits for the new utility lines. The concept plans depict the required tie-in locations for each utility relocation, and item (i) describes the delineation of work between OCWS and the Design-Build firm as it relates to utility connections and tie-ins. **The concept plans indicate where casing will be required. All utility lines under the roadway shall be cased. Location of crossings shall be coordinated with the utility owner. The Concept Plans depict the general intent of the Okaloosa County utility relocation. It is ultimately the Design-Build Firms responsibility to design and construct the utility relocations. All concept plan callouts labeled “proposed” and any additional conceptual line locations in the concept plans are the responsibility of the Design-Build Firm to design and construct.** The Design-Build Firm shall utilize new materials in compliance with OCWS Standard Specifications and Design Manual. Re-use of existing piping, appurtenances, and other equipment is not allowed unless specifically indicated in conceptual plans. All valves, ARVs, sampling locations, and related appurtenances that may be required for permitting, testing, and clearing the utility relocations shall be designed and installed by the Design-Build Firm. This work will be funded under FPID 415474-2-56-01 and shall be bid accordingly under the FPID.

#### Design of OCWS Utility Work

- a) The Design-Build Firm shall prepare a final engineering design, plans, technical special provisions, permit applications (including, but not limited to, OCWS, FDEP and the FDOT) for the utility work for Okaloosa County Water and Sewer in accordance with the OCWS Standard Specifications and Design Manual.  
**([http://www.co.okaloosa.fl.us/sites/default/files/doc/dept/ws/Spec\\_Manual.pdf](http://www.co.okaloosa.fl.us/sites/default/files/doc/dept/ws/Spec_Manual.pdf)).** In the event of a conflict between the OCWS requirements and any FDOT Governing Regulations, the Department shall determine which provisions apply based on the intent and purpose of the OCWS Utility Work.
- b) The Plans Package shall be in the same format as the Department's contract documents for the Project and shall be suitable for reproduction.
- c) Unless otherwise specifically directed in writing, the Plans Package shall include any and all activities and work effort required to perform the utility work, including, but not limited to, all clearing and grubbing, permitting, survey, subsurface engineering (as required), utility coordination (telephone, fiber, cable, electrical, gas, etc.) and shall include traffic and erosion control plans.

- d) Construction costs for mobilization, clearing and grubbing and maintenance of traffic for this utility work are to be included in the main project and not in the utility relocations cost.
- e) The Plans Package shall be prepared in compliance with the FDOT Utility Accommodation Manual and the FDOT Design Manual, and the Department's contract documents for the Project. If the FDOT Design Manual conflicts with the FDOT Utility Accommodation Manual, the Utility Accommodation Manual shall apply where such conflicts exist.
- f) The Design-Build Firm shall prepare the Utility Work's technical special provisions, which are a part of the Plans Package, in accordance with the Department's guidelines on preparation of technical special provisions and shall not duplicate or change the general contracting provisions of the FDOT Standard Specifications for Road and Bridge Construction and any Supplemental Specifications for the Project.
- g) The Design-Build Firm shall provide a copy of the proposed Plans Package to the Department and OCWS for review at the following stages: 60%, 90% and 100% plans.
- h) The Design Build Firm shall at all times be and remain solely responsible for proper preparation of the Plans Package and for verifying all information necessary to properly prepare the Plans Package, including survey information as to the location (both vertical and horizontal) of the Utility Facilities.
- i) The utility work will include all utility facilities of OCWS which are located within the limits of the Project, except those facilities agreed to by OCWS to be performed by their forces, of which shall only include installing the final utility tie-ins to the existing system, for both water and sewer. All materials and labor related to the final utility tie-ins will be provided by OCWS, and shall include fittings, valves, tees, tapping sleeves, linestops, restraints and thrust blocking as required to complete the tie-in work. These exceptions shall be handled by the Design-Build Firm through utility coordination efforts. The Design-Build Firm shall coordinate the timing and scheduling of the tie-ins directly with OCWS.
- j) All new and existing residential and/or commercial service connections will be required to be designed and installed by the Design-Build Firm. It will be the Design-Build Firm's responsibility to determine the number and location of service connections required. Coordination of existing and proposed service connections will be confirmed with OCWS. The Design-Build Firm will be responsible for running the service to the meter and provide all testing. OCWS will be responsible for the connections to the meters.
- k) Utility facilities of OCWS shall not be mounted to the exterior faces of structures and **aerial** must be hidden from view. **The transition from aerial to ground shall be coordinated with OCWS. The OCWS Conceptual Plans inaccurately depict utilities mounted to the MSE wall. OCWS facilities shall not be mounted onto MSE wall.**
- l) The Design-Build Firm shall fully cooperate and coordinate the utility work with all other right of way users in the preparation of the Plans Package.
- m) Upon completion of the utility work, the facilities shall be deemed to be located on the Department's right-of-way under and pursuant to the Utility Permit to be issued by the Department. The Design-Build Firm shall facilitate and comply with all permit conditions, and provide all

disinfection, pressure testing, laboratory tests, permit certifications, record drawings, etc. to obtain regulatory approval and clearance to place the utilities in service.

#### Utilities Protected in Place

- a) It is the intent of OCWS to protect-in-place the existing 16" HDPE directionally bored force main crossing on the southern side of the proposed bridge work (Sta.111-Sta.206). Upon completion of the new navigational channel barrier system OCWS shall conduct a pressure test of the existing 16" HDPE directionally bored force main (OCWS) crossing to verify that the force main was not damaged during construction. OCWS shall cap the existing 16" HDPE force main on both ends of the existing bore as shown on the plans, and the force main shall be left in place for future use by OCWS.

#### Performance of OCWS Utility Work

- a) The Department shall perform all engineering inspection, and monitoring of the Utility Work to ensure that it is properly performed in accordance with the Plans Package. OCWS shall have representation on site periodically for consultation as necessary.
- b) Testing, monitoring and reporting shall be performed by the Design-Build Firm in accordance with standard industry practices for water and wastewater and in accordance with the OCWS Standard Specifications and Design Manual.
- c) All out of service OCWS mains, services, and appurtenances that are in conflict with the Design-Build Firm's Project design shall be removed and cost of removal be covered under FPID 415474-2-56-01. Should out of service facilities not require removal, then Design-Build Firm shall **fill the facilities with flowable fill and** cap them **and place them out of service** with costs being covered under FPID 415474-2-56-01.

#### Sequence of Construction

The Design-Build Firm shall follow the following proposed sequence of construction for all proposed OCWS water and sewer work:

#### **OCWS Utility Relocations - Sewer**

- a) Remove and relocate 6" force main (Sta.132 – Sta.138); OCWS to self-perform utility tie-ins to the existing system.
- b) Construct new 16" aerial flanged force main across newly constructed northern bridge span. Construct new 16" (underground) force main on both the east and west ends of the new bridge as required to connect to the existing force main system. OCWS to self-perform utility tie-ins to the existing force main system. Once the new 16" aerial force main on the northern bridge span is in service, Design-Build Firm shall disassemble and remove the existing 16" aerial force main across the existing bridge span.
- c) OCWS will cut and cap the existing 16" HDPE directionally bored force main crossing, and once all bridge work is completed OCWS will pressure test the bored force main to verify if any damage occurred during construction.
- d) Construct new 16" aerial flanged force main across newly constructed southern bridge span. Construct new 16" (underground) force main on both the east and west ends of the new bridge as required to connect to the existing force main system.

### OCWS Utility Relocations - Water

- a) Remove and relocate 12" water main along SR30 (Sta.132 – Sta.148); OCWS to self-perform utility tie-ins to the existing system.
- b) Remove and relocate 6" water main along SR30 (Sta.135 – Sta.139); OCWS to self-perform utility tie-ins to the existing system.
- c) Remove, relocate, and adjust 6" and 12" water mains along Santa Rosa Blvd (Sta.46 – Sta.51); OCWS to self-perform utility tie-ins to the existing system.
- d) Remove, relocate, and adjust 6" water main along New North Connection Road (Sta.404 – Sta.406); OCWS to self-perform utility tie-ins to the existing system.
- e) Construct new 16" aerial flanged water main across newly constructed northern bridge span. Construct new 16" (underground) water main on both the east and west ends of the new bridge as required to connect to the existing water main system. OCWS to self-perform utility tie-ins to the existing water main system. Once the new 16" aerial water main on the northern bridge span is in service, Design-Build Firm shall disassemble and remove the existing 16" aerial water main across the existing bridge span.

The Design-Build Firm shall comply with the Utility Work by Highway Contractor Agreement that the Department executed with Okaloosa County Water & Sewer (see RFP Attachment Documents). **The Design-Build Firm is required to coordinate and resolve any comments or issues raised by Okaloosa County related to water and sewer relocations. The Design-Build Firm must receive Okaloosa County approval before RFC plans.**

During the Design-Build procurement process for this contract, the Design-Build Firm shall not coordinate directly with Okaloosa County Water & Sewer due to their work being a requirement of this RFP. All questions related to their utility work requirements will be required to go through the FDOT Bid Question website.

The Design-Build Firm shall design, permit, and relocate/adjust Eglin AFB Communications facilities as required for the construction of the project. The Design-Build Firm shall coordinate this work directly with Eglin AFB Communications in determining the appropriate relocation plan, materials, specifications, and guidelines required by Eglin AFB Communications. During the Design-Build procurement process for this contract, the Design-Build Firm shall not coordinate directly with Eglin AFB due to their work being a requirement of this RFP. All questions related to their utility work requirements will be required to go through the FDOT Bid Question website. See RFP Reference Documents for 96 CS Design Guide.

The Design-Build Firm shall design, furnish, and install conduit under the bridge for Cox Communications, Century Link, AT&T Florida, Okaloosa County **Traffic Board of County Commissioners (BCC) Information Technology**, and Uniti Fiber. Conduit shall be 4" stainless steel and shall include all appurtenances necessary for bridge attachment. **Stainless steel rigid conduits are to be Type 316 stainless steel with standard NPT threads. All elbows, nipples, couplings, connectors, hubs, clamps, u-bolts, plates, strut accessories and hardware are to be in kind with the stainless steel conduits. All components shall meet UL 6A and NEMA 4X standards, and be fully compliant with NEC. Aerial junction boxes or communication pull boxes are to be made with 316 stainless steel, double gang hub configuration, UL listed for US (Standard 514A), and sized for the conduits and quantities of conduits used. Spacing for the aerial junction boxes or communication pull boxes are to be determined by the Design-Build Firm based on the alignment of the bridge.** Conduit placement shall meet contract aesthetic

requirements and shall terminate on the roadway side of each abutment at a location accessible by standard vehicle for each UA/O. During the Design-Build procurement process for this contract, the Design-Build Firm shall not coordinate directly with ~~with~~ Cox Communications, Century Link, AT&T Florida, Okaloosa County Traffic and Uniti Fiber regarding work described within their respective Utility Work by Highway Contractor Agreement due to their work being a requirement of this RFP. All questions related to ~~the their~~ utility work described within their respective Utility Work by Highway Contractor Agreement requirements will be required to go through the FDOT Bid Question website. This work Work included in Utility Work by Highway Contractor Agreements will be funded under FPID 415474-2-52-02 and shall be bid accordingly under this FPID. Installation of conduit for Okaloosa County Board of County Commissioners (BCC) Information Technology shall be bid under 415474-2-52-01.

AT&T services will require a temporary crossing to be installed within one of the conduits described above. The AT&T subaqueous service will have to be relocated by AT&T to the temporary crossing prior to working within 10 ft of the limits of the subaqueous line. Post-construction of this project, AT&T intends to relocate their facilities from the temporary crossing back to their existing subaqueous line.

During utility coordination on side roads requiring utility relocations, location preference shall be given to utilities belonging to the roadway owner. Utilities impacted along side streets and requiring relocation are subject to utility permits required by the local government. The Design-Build Firm shall be responsible for obtaining utility permits for Okaloosa County Water and Sewer relocations and coordinating other utility relocation permits.

#### **Permitting**

FDOT will submit FDEP ERP and FDEP State 404 Permit applications based on the concept plans. The Design-Build Firm will be responsible for submitting and obtaining the USCG Bridge Permit and completing, modifying and obtaining the FDEP ERP and FDEP State 404 Permits based on the final design plans. All other permitting activities are the responsibility of the Design-Build Firm.

#### **Demolition of the Existing Bridge Superstructure and Substructure**

The Design-Build Firm shall demolish and remove the existing bridge, fender system and dolphins. The existing bridge substructure was not designed to resist vessel collision. It is the responsibility of the Design-Build Firm to protect the existing bridge from vessel collision during all phases of construction. The capacity of the existing bridge shall not be considered to resist vessel impact. External protection is required. The existing bridge substructure level of protection against vessel collision (dolphins and fender system) that is currently in place must be maintained throughout all phases of construction prior to demolition.

The Design-Build Firm shall be responsible for development of demolition plans outlining details for the work. Demolition plans must include at a minimum, but are not limited to the following: specific requirements pertaining to the demolition work, specific requirements and notes for the relocation (disposal) of the superstructure and substructure, miscellaneous shoreline and approach work, utility identification, maintenance of traffic (MOT) that will ensure all existing lanes remain open, storm water control, sedimentation control, and notes pertaining to the protection of endangered species

The original bridge at the project location was a swing bridge that was removed to construct the existing bridge. Foundational elements may be encountered.

**The Department has obtained a Hydrographical Condition Survey for the project area. The Design-Build Firm shall review and evaluate findings of the survey in conjunction with their proposed design.**

The Design-Build Firm will be required to remove any debris that may still be located under water (i.e. old pile, footings, portions of old marine vessels, etc.) that are in conflict with the new bridge and fender construction. Within the limits of the main span and fender system, any existing foundations must be removed to 24 inches below the mudline, taking into account long term scour depths when determining the elevation of the mudline.

Okaloosa County currently has permitted artificial reef sites in the area. The Department's preference is to dispose of any feasible bridge debris in these permitted artificial reef sites. The Okaloosa County artificial reef information is included in the Reference Documents of this RFP.

The concrete debris from the existing bridge will become the responsibility of the Design-Build Firm.

**Existing Vegetation Preservation and Exotic Vegetation Removal**

It is the intent to always preserve existing vegetation including trees and palms that do not conflict with proposed improvements. Tree and palm protection shall comply with FDOT Standard Plans for Road and Bridge Construction (Standard Plans), Index 110-100. Within the Project limits and within the Project Right of Way, it will be the responsibility of the Design-Build Firm to identify and remove all Category 1 invasive exotics as defined by the Florida Exotic Pest Plant Council ([www.fleppc.org](http://www.fleppc.org)) and as identified in the Landscape Opportunity Plan.

**Miscellaneous**

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

**A. Design-Build Responsibility**

The Design-Build Firm shall be responsible for survey, geotechnical investigation, design, preparation of all documentation and acquisition of all permits, 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 EA with FONSI and Reevaluation. The Design-Build Firm is responsible for coordinating with the District Environmental Office any engineering or other 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 EA with FONSI and Reevaluation. 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. 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 NEPA document or 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 bi-weekly litter removal. This includes debris on bridge deck which shall be removed within 30 minutes of notification. Monthly bridge sweeping is required.

## **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, 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 events that will take place in the procurement process. The Department reserves the right to make changes or alterations to the schedule as the Department determines is in the best interests of the public. Proposers will be notified sufficiently in advance of any changes or alterations in the schedule. Unless otherwise notified in writing by the Department, the dates indicated below for submission of items or for other actions on the part of a Proposer shall constitute absolute deadlines for those activities and failure to fully comply by the time stated shall cause a Proposer to be disqualified.

Date	Event
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<u>2/28/2020</u>	Planned Advertisement
<u>7/12/2021</u>	Current Advertisement
<u>8/2/2021</u>	Letters of Interest for Phase I of the procurement process due in District Office by 4:00 PM local time.
<u>8/30/2021</u>	Proposal Evaluators submit Letter of Interest Scores to Contracting Unit 8:00 AM local time
<u>9/2/2021</u>	Contracting Unit provides Letter of Interest scores and Proposal Evaluators comments to Selection Committee 12:00 PM local time
<u>9/7/2021</u>	Public Meeting of Selection Committee to review and confirm Letter of Interest scores 9:00 AM local time
<u>9/7/2021</u>	Shortlist Posting Date
<u>9/13/2021</u>	Final RFP provided to Design-Build Firms continuing to Phase II of the procurement process 4:00 PM local time
<u>9/21/2021</u>	<p>Mandatory Pre-Proposal meeting at 1:30 PM local time <a href="#"><u>in Florida Department of Transportation, 1074 Highway 90, Chipley, FL 32428.</u></a>          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.</p> <p><a href="#"><u>Please join my meeting from your computer, tablet or smartphone.</u></a>  <a href="https://global.gotomeeting.com/join/160016029"><u>https://global.gotomeeting.com/join/160016029</u></a></p> <p><a href="#"><u>You can also dial in using your phone.</u></a>  <a href="#"><u>United States: +1 (786) 535-3211</u></a></p> <p><a href="#"><u>Access Code: 160-016-029</u></a></p> <p><a href="#"><u>Join from a video-conferencing room or system.</u></a>  <a href="#"><u>Dial in or type: 67.217.95.2 or inroomlink.goto.com</u></a>  <a href="#"><u>Meeting ID: 160 016 029</u></a>  <a href="#"><u>Or dial directly: 160016029@67.217.95.2 or 67.217.95.2##160016029</u></a></p>
<u>9/21/2021</u>	<p>Utility Pre-Proposal Meeting facilitated by the District Utility Administrator at 1:30 PM local time <a href="#"><u>at Florida Department of Transportation, 1074 Highway 90, Chipley, FL 32428.</u></a></p> <p><a href="#"><u>Please join my meeting from your computer, tablet or smartphone.</u></a>  <a href="https://global.gotomeeting.com/join/160016029"><u>https://global.gotomeeting.com/join/160016029</u></a></p> <p><a href="#"><u>You can also dial in using your phone.</u></a>  <a href="#"><u>United States: +1 (786) 535-3211</u></a></p> <p><a href="#"><u>Access Code: 160-016-029</u></a></p> <p><a href="#"><u>Join from a video-conferencing room or system.</u></a>  <a href="#"><u>Dial in or type: 67.217.95.2 or inroomlink.goto.com</u></a>  <a href="#"><u>Meeting ID: 160 016 029</u></a></p>

	<a href="tel:160016029">Or dial directly: 160016029@67.217.95.2 or 67.217.95.2##160016029</a>
<a href="#">10/1/2021</a>	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 1 4:00 PM local time
<a href="#">10/8/2021</a>	Deadline for Design-Build Firm to submit preliminary list of Alternative Technical Concepts prior to One-on-One Alternative Technical Concept Discussion Meeting No. 1 4:00 PM local time
<a href="#">10/14/2021</a>	One-on-One Alternative Technical Concept Discussion Meeting No. 1. 90 Minutes will be allotted for this Meeting.
<a href="#">10/14/2021</a>	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 2, 4:00 PM local time
<a href="#">10/22/2021</a>	Deadline for Design-Build Firm to submit preliminary list of Alternative Technical Concepts prior to One-on-One Alternative Technical Concept Discussion Meeting No. 2. 4:00 PM local time
<a href="#">11/2/2021</a>	One-on-One Alternative Technical Concept Discussion Meeting No. 2. 90 Minutes will be allotted for this Meeting.
<a href="#">11/16/2021</a>	Deadline for submittal of Alternative Technical Concept Proposals 4:00 PM local time.
<a href="#">11/16/2021</a>	Final deadline for submission of requests for Design Exceptions or Design Variations. 4:00 PM local time.
<del><a href="#">12/21/2021</a></del> <del><a href="#">12/22/2021</a></del>	Addendum issued for approved Design Exceptions. 4:00 PM local time
<del><a href="#">2/8/2022</a></del> <del><a href="#">2/15/2022</a></del>	Deadline for submittal of questions, for which a response is assured, prior to the submission of the Technical Proposal. All questions shall be submitted to the Pre-Bid Q&A website.
<del><a href="#">2/15/2022</a></del> <del><a href="#">2/22/2022</a></del>	Deadline for the Department to post responses to the Pre-Bid Q&A website for questions submitted by the Design-Build Firms prior to the submittal of the Technical Proposal.
<del><a href="#">2/17/2022</a></del> <del><a href="#">3/1/2022</a></del>	Technical Proposals due in District Office by 2:00 PM local time.
<del><a href="#">2/17/2022</a></del> <del><a href="#">3/1/2022</a></del>	Deadline for Design-Build Firm to “opt out” of Technical Proposal Page Turn meeting.
<del><a href="#">2/24/2022</a></del> <del><a href="#">3/8/2022</a></del>	Technical Proposal Page Turn Meeting. Times will be assigned during the Pre-Proposal Meeting. 30 Minutes will be allotted for this Meeting.
<del><a href="#">3/23/2022</a></del> <del><a href="#">4/5/2022</a></del>	Question and Answer Written Responses. Deadline for the Department to provide a list of questions/clarifications for the Design-Build Firm to answer.
<del><a href="#">3/31/2022</a></del> <del><a href="#">4/12/2022</a></del>	Deadline for submittal of Question and Answer Written Responses to the Department’s questions/clarifications from the Design-Build Firm. 4:00 PM local time
<del><a href="#">4/7/2022</a></del> <del><a href="#">4/19/2022</a></del>	Deadline for submittal of follow up questions to previously submitted Question and Answer Written Responses to the Department’s questions/clarifications from the Design-Build Firm. 4:00 PM local time
<del><a href="#">4/14/2022</a></del> <del><a href="#">4/26/2022</a></del>	Deadline for submittal of Question and Answer Written Responses to the Department’s follow up questions. 4:00 PM local time.

<u>4/14/2022</u> <u>4/26/2022</u>	Deadline for submittal of questions, for which a response is assured, prior to the submission of the Price Proposal. All questions shall be submitted to the Pre-Bid Q&A website.
<u>4/19/2022</u> <u>4/29/2022</u>	Deadline for the Department to post responses to the Pre-Bid Q&A website for questions submitted by the Design-Build Firms prior to the submittal of the Price Proposal.
<u>4/19/2022</u> <u>4/29/2022</u>	Deadline for the Design-Build Firm to submit a written statement per Section III. Threshold Requirements, F. Question and Answer Written Responses
<u>4/21/2022</u> <u>5/4/2022</u>	Price Proposals due in District Office by 10:00 AM local time.
<u>4/21/2022</u> <u>5/4/2022</u>	Public announcing of Technical Scores and opening of Price Proposals at 10:30 AM local time in 1074 Highway 90, Chipley, FL 32428
<u>4/25/2022</u> <u>5/9/2022</u>	Public Meeting Date of Selection Committee to determine intended Award
<u>4/25/2022</u> <u>5/9/2022</u>	Final Selection Posting Date
<u>4/29/2022</u> <u>5/13/2022</u>	Anticipated Award Date
<u>5/20/22</u> <u>6/6/2022</u>	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 Letters of Interest.

If the Proposer is a Joint Venture, the individual empowered by a properly executed Declaration of Joint Venture and Power of Attorney Form shall execute the proposal. The proposal shall clearly identify who will be responsible for the engineering, quality control, and geotechnical and construction portions of the Work. 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 Short-Listed Design-Build Firm failing to attend will be deemed non-responsive and eliminated from further consideration. The purpose of this meeting is to provide a forum for the Department to discuss with all concerned parties the proposed Project, the design and construction criteria, 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 pre-proposal meeting require 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 signed in prior to the start of the mandatory pre-proposal meeting. The convener of the meeting will circulate the attendee sign in sheet at the time the meeting was advertised to begin. Once all Proposers have signed, the sign in sheet will be taken and the meeting will "officially" begin. Any Proposer not signed in at the "official" start of the meeting will be considered late and will not be allowed to propose on the Project.

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

The Department will meet with each Proposer, formally for thirty (30) minutes, for a page-turn meeting. FHWA will be invited on Projects of Division Interest (PoDIs). The purpose of the page-turn meeting is for the Design-Build Firm to guide the Technical Review Committee through the Technical Proposal, highlighting sections within the Technical Proposal that the Design-Build Firm wishes to emphasize. The page-turn meeting will occur between the date the Technical Proposal is due and the Question and Answer Written Response occurs, per the Schedule of Events section of this RFP. The Department will terminate the page-turn meeting promptly at the end of the allotted time. The Department will record all of the page-turn meeting. All recordings will become part of the Contract Documents. The page-turn meeting will not constitute discussions or negotiations. The Design-Build Firm will not be permitted to ask questions of the Technical Review Committee during the page-turn meeting. Roll plots submitted with the Technical Proposal and an unmodified aerial or map of the project limits provided by the Design-Build Firm is acceptable for reference during the page-turn meeting. The unmodified aerial or map may not be left with the Department upon conclusion of the page turn meeting. The use of the electronic screen will be permitted for display of the Technical Proposal, roll plots, and unmodified aerial or map of the project limits. Upon conclusion of the thirty (30) minutes, the Technical Review Committee is allowed five (5) minutes to ask questions pertaining to information highlighted by Design-Build Firm. Participation in the page-turn meeting by the Design-Build Firm shall be limited to eight (8) representatives from the Design-Build Firm. Design-Build Firms desiring to opt out of the page-turn meeting may do so by submitting a request to the Department.

## **F. Question and Answer Written Responses**

The Department will provide all proposed questions to each Design-Build Firm as it relates to their Technical Proposal approximately 1 (one) week before the written Q & A letter is due.

The Design-Build Firm shall submit to the Department a written letter answering the questions provided by the Department. The questions and written answers/clarifications will become part of the Contract Documents and will be considered by the Department as part of the Technical Proposal. In the event the Design-Build Firm includes additional information in the written response which was not discussed as part of the Department's questions and is otherwise not included in the Technical Proposal, such additional information will not be considered by the Department during the evaluation of the Technical Proposal.

One (1) week prior to the Price Proposal due date the Design-Build Firm shall submit to the Department a written statement as follows: “[insert name of the Design-Build Firm] confirms that, despite any provision in the Design-Build Firm’s Technical Proposal or any Q&A written response letter that may be inconsistent with the other requirements of the Contract Documents, [insert name of the Design-Build Firm] intends to comply fully with the requirements otherwise provided for in the Contract Documents, except for, pursuant to Subsection 5-2 Coordination of Contract Documents of the Design-Build Division I Specifications, any [insert name of Design-Build Firm]’s statements, terms, concepts or designs that can reasonably be interpreted as offers to provide higher quality items than otherwise required by the other Contract Documents or to perform services or meet standards in addition to or better than those otherwise required which such statements, terms, concepts and designs are the obligations of [insert name of the Design-Build Firm].” In case of the failure of the Design-Build Firm to timely provide such a written statement, the Department may determine the Design-Build Firm to be deemed non-responsive.

## **G. Protest Rights**

Any person who is adversely affected by the specifications contained in this Request for Proposal must file a notice of intent to protest in writing within seventy-two hours of the posting of this Request for Proposal. 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.

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

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

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

## **I. Waiver of Irregularities**

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

1. Any design submittals that are part of a proposal shall be deemed preliminary only.
2. Preliminary design submittals may vary from the requirements of the Design and Construction Criteria. The Department, at their discretion, may elect to consider those variations in awarding points to the proposal rather than rejecting the entire proposal.
3. In no event will any such elections by the Department be deemed to be a waiving of the Design and Construction Criteria.
4. The Proposer who is selected for the Project will be required to fully comply with the Design and Construction Criteria for the price bid, regardless that the proposal may have been based on a variation from the Design and Construction Criteria.
5. Proposers shall identify separately all innovative aspects as such in the Technical Proposal. An innovative aspect does not include revisions to specifications or established

Department policies. Innovation should be limited to Design-Build Firm's means and methods, roadway alignments, approach to Project, use of new products, new uses for established products, etc.

6. The Proposer shall obtain any necessary permits or permit modifications not already provided.
7. Those changes to the Design Concept may be considered together with innovative construction techniques, as well as other areas, as the basis for grading the Technical Proposals in the area of innovative measures.

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

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

**K. Department's Responsibilities**

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

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

**L. Design-Build Contract**

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

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

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

**A. DBE Availability Goal Percentage:**

The Department of Transportation has an overall, 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 and on the bid blank/contract front

page under “% DBE Availability Goal”. The Department has determined that this DBE percentage can 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 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 State of Florida can be found on the Equal Opportunity website at: <http://www.fdot.gov/equalopportunity/serviceproviders.shtm>

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

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

All Contractors must enter their bid opportunity information in the 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.

1. Florida Department of Transportation Design Manual (FDM)  
<http://www.fdot.gov/roadway/FDM/>  
Note: the use of FDM Part 9 requires approval by the District Design Engineer
2. Florida Department of Transportation Specifications Package Preparation Procedure  
<http://www.fdot.gov/programmanagement/PackagePreparation/Handbooks/630-010-005.pdf>
3. Florida Department of Transportation Standard Plans for Road and Bridge Construction  
<http://www.fdot.gov/design/standardplans/>
4. Standard Plans Instructions (Refer to Part I, Chapter 115, FDM)  
<http://www.fdot.gov/roadway/FDM/>
5. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications  
<https://www.fdot.gov/programmanagement/Implemented/SpecBooks/default.shtm>
6. Florida Department of Transportation Surveying Procedure 550-030-101  
<http://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/FormsAndProcedures/ViewDocument?topicNum=550-030-101>
7. Florida Department of Transportation EFB User Handbook (Electronic Field Book)  
[http://www.fdot.gov/geospatial/doc\\_pubs.shtm](http://www.fdot.gov/geospatial/doc_pubs.shtm)
8. Florida Department of Transportation Drainage Manual  
<http://www.fdot.gov/roadway/Drainage/ManualsandHandbooks.shtm>
9. Florida Department of Transportation Soils and Foundations Handbook  
<http://www.fdot.gov/structures/Manuals/SFH.pdf>
10. Florida Department of Transportation Structures Manual  
<http://www.fdot.gov/structures/DocsandPubs.shtm>
11. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Manual  
<http://www.fdot.gov/cadd/downloads/publications/CADDManual/default.shtm>
12. AASHTO – A Policy on Geometric Design of Highways and Streets  
[https://bookstore.transportation.org/collection\\_detail.aspx?ID=110](https://bookstore.transportation.org/collection_detail.aspx?ID=110)
13. MUTCD - 2009  
<http://mutcd.fhwa.dot.gov/>
14. Safe Mobility for Life Program Policy Statement  
<http://www.fdot.gov/traffic/TrafficServices/PDFs/000-750-001.pdf>

15. Traffic Engineering and Operations Safe Mobility for Life Program  
<http://www.fdot.gov/traffic/TrafficServices/SafetyGolden.shtm/>
16. Florida Department of Transportation American with Disabilities Act (ADA) Compliance – Facilities Access for Persons with Disabilities Procedure 625-020-015  
<https://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/?viewBy=0&procType=pr>
17. Florida Department of Transportation Florida Sampling and Testing Methods  
<http://www.fdot.gov/materials/administration/resources/library/publications/fstm/disclaimer.shtm>
18. Florida Department of Transportation Flexible Pavement Coring and Evaluation Procedure  
<http://www.fdot.gov/materials/administration/resources/library/publications/materialsmanual/documents/v1-section32-clean.pdf>
19. Florida Department of Transportation Design Bulletins and Update Memos  
<http://www.fdot.gov/roadway/Bulletin/Default.shtm>
20. Florida Department of Transportation Utility Accommodation Manual  
[https://fdotwww.blob.core.windows.net/sitofinity/docs/default-source/programmanagement/programmanagement/utilities/docs/uam/uam2017.pdf?sfvrsn=d97fd3dd\\_0](https://fdotwww.blob.core.windows.net/sitofinity/docs/default-source/programmanagement/programmanagement/utilities/docs/uam/uam2017.pdf?sfvrsn=d97fd3dd_0)
21. AASHTO LRFD Bridge Design Specifications  
[https://bookstore.transportation.org/category\\_item.aspx?id=BR](https://bookstore.transportation.org/category_item.aspx?id=BR)
22. Florida Department of Transportation Flexible Pavement Design Manual  
<http://www.fdot.gov/roadway/PM/publicationS.shtm>
23. Florida Department of Transportation Rigid Pavement Design Manual  
<http://www.fdot.gov/roadway/PM/publicationS.shtm>
24. Florida Department of Transportation Pavement Type Selection Manual  
<http://www.fdot.gov/roadway/PM/publicationS.shtm>
25. Florida Department of Transportation Right of Way Manual  
<http://www.fdot.gov/rightofway/Documents.shtm>
26. Florida Department of Transportation Traffic Engineering Manual  
<http://www.fdot.gov/traffic/TrafficServices/Studies/TEM/tem.shtm>
27. Florida Department of Transportation Intelligent Transportation System Guide Book  
[http://www.fdot.gov/traffic/Doc\\_Library/Doc\\_Library.shtm](http://www.fdot.gov/traffic/Doc_Library/Doc_Library.shtm)
28. Federal Highway Administration Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Plans and Specifications  
<http://www.fhwa.dot.gov/engineering/geotech/pubs/reviewguide/checklist.cfm>
29. AASHTO Guide for the Development of Bicycle Facilities  
[https://bookstore.transportation.org/collection\\_detail.aspx?ID=116](https://bookstore.transportation.org/collection_detail.aspx?ID=116)
30. Federal Highway Administration Hydraulic Engineering Circular Number 18 (HEC 18).  
[http://www.fhwa.dot.gov/engineering/hydraulics/library\\_arc.cfm?pub\\_number=17](http://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=17)
31. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways  
<http://www.fdot.gov/roadway/FloridaGreenbook/FGB.shtm>

32. Florida Department of Transportation Project Development and Environment Manual, Parts 1 and 2  
<http://www.fdot.gov/environment/pubs/pdeman/pdeman1.shtm>
33. Florida Department of Transportation Driveway Information Guide  
<http://www.fdot.gov/planning/systems/programs/sm/accman/pdfs/driveway2008.pdf>
34. AASHTO Highway Safety Manual  
<http://www.highwaysafetymanual.org/>
35. Florida Statutes  
<http://www.leg.state.fl.us/Statutes/index.cfm?Mode=View%20Statutes&Submenu=1&Tab=statutes&CFID=14677574&CFTOKEN=80981948>
36. Florida Department of Transportation Equal Opportunity Construction Contract Compliance Manual  
<http://www.fdot.gov/equalopportunity/contractcomplianceworkbook.shtm>
37. [Florida Department of Transportation Traffic Engineering and Operations Bulletins & Memos](https://www.fdot.gov/traffic/trafficops-bulletins.shtm)  
<https://www.fdot.gov/traffic/trafficops-bulletins.shtm>
38. [Florida Department of Transportation Construction Bulletins](https://www.fdot.gov/construction/memos/bulletins/bulletins.shtm)  
<https://www.fdot.gov/construction/memos/bulletins/bulletins.shtm>

**B. Innovative Aspects:**

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

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

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

The Department has chosen to incorporate in the Design-Build method of project delivery the process whereby Design-Build Firms may propose innovative technical solutions for the Department's approval which meet or exceed the goals of the project. The process involves the submission of an Alternative Technical Concept (ATC) as outlined below. This process has shown to be very cost effective in providing the best-value solution which often times is a result of the collaborative approach of the contractor and their designer which is made possible with the Design Build project delivery method and the ATC process.

The ATC process allows innovation, flexibility, time and cost savings on the design and construction of Design-Build Projects while providing the best value for the public. Any deviation from the RFP that the Design-Build Firm seeks to obtain approval to utilize prior to Technical Proposal submission is, by definition, an ATC and therefore must be discussed and submitted to the Department for consideration through the ATC process. ATCs also include items defined in FDM, Part 1, Chapter 121.3.2. The proposed ATC shall provide an approach that is equal to or better than the requirements of the RFP, as determined by the Department. ATC Proposals which reduce scope, quality, performance, or reliability

should not be proposed. A proposed concept does not meet the definition of an ATC if the concept is contemplated by the RFP.

The following are not permitted to be changed by the Design-Build Firms except where specifically allowed for in the RFP. The list below is not all-inclusive. ATC's not listed below may be rejected by the Department.

- Items that require Design Exceptions as defined in FDM 122
- Submittal and review duration requirements of RFP Sections V.I. and V.K.
- Requirements of the FDOT Structures Manual
- Project specific post-tensioning (PT) system approvals. PT systems must comply with the Specifications and be listed on the FDOT Approved Post-Tensioning System List
- **Shallow foundations in areas that are prone to sinkhole development. ~~Shallow foundations will not be allowed on bridges. Bridges in areas of the State that are known for being high-recharge zones (groundwater is feeding the aquifer), or that have historically developed sinkholes at a frequent rate, will not be considered for shallow foundation design.~~**
- Deck girders with longitudinal deck joints for bridges with two or more spans;
- Pier mounted fender systems
- Struts between Eastbound and Westbound SR 30 footings
- Modification of past point vessel group traffic data
- Full-depth precast deck panels  
Note: ATC proposals for full-depth precast deck panels may be considered, but must include detailed connection details, step-by-step construction sequences, grout/UHPC material requirements, connection mock-up requirements including mock-up acceptance criteria.
- Partial-depth precast deck panels;
- Reinforcing steels other than allowed by SDG 1.4.1.B except in drilled shafts and auger-cast piles. This is not intended to include non-corrosive materials that are allowed for by the RFP.
- Elimination of deck grooving;
- Replacing transverse bridge deck grooving with longitudinal bridge deck grooving;
- Elimination of deck planing;
- The elimination of cross frames in bays of steel bridges that are phase constructed;
- Non-framed, non-integral straddle pier caps that are not permanently anchored or stabilized on one end (e.g. pinned bolsters, sole plate and anchor bolts, pot or disc bearings etc.).
- Full height MSE Wall panels (piano walls).
- Auger-Cast piles for bridges

Changes resulting in the need for additional Right-of-Way from Eglin will not be considered.

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

- Horizontal or vertical clearance of structure at channel
- Design speeds
- Lane, shoulder, and shared use widths

- Pavement Design
- Department's Aesthetic Requirements
- Utility avoidance requirements at fender system
- New Design Exceptions required or modifications to Department approved Design Exceptions already provided in the Attachments.
- Significant changes in scope as determined by the Department.

The following requirements described by this RFP may be modified by the Design-Build Firm provided they are presented in the One-on-One ATC discussion meeting, as defined below, and submitted to the Department for review and approval through the ATC process described herein. The Department may deem a Proposal Non-Responsive should the Design-Build Firm include but fail to present and obtain Department approval of the proposed alternates through the ATC process. Department approval of an ATC proposal that is related to the items listed below will NOT result in the issuance of an Addendum to the RFP.

- RFP requirement other than the items in the previous paragraph's bulleted list.

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

One-on-One ATC discussion meetings may be held in order for the Design-Build Firm to describe proposed changes to supplied basic configurations, Project scope, design criteria, and/or construction criteria. Each Design-Build Firm with proposed changes may request a One-on-One ATC discussion meeting to describe the proposed changes. The Design-Build Firm shall provide, by the deadline shown in the Schedule of Events of this RFP, a preliminary list of ATC proposals to be reviewed and discussed during the One-on-One ATC discussion meetings. This list may not be inclusive of all ATC's to be discussed but it should be sufficiently comprehensive to allow the Department to identify appropriate personnel to participate in the One-on-One ATC discussion meetings.

The purpose of the One-on-One ATC discussion meeting is to discuss the ATC proposals, answer questions that the Department may have related to the ATC proposal, review other relevant information and when possible establish whether the proposal meets the definition of an ATC thereby requiring the submittal of a formal ATC submittal. The meeting should be between representatives of the Design-Build Firm and/or the Design-Build Engineer of Record and District/Central Office staff as needed to provide feedback on the ATC proposal. FHWA should be invited to ATC meetings for all PoDI projects. Immediately prior to the conclusion of the One-on-One ATC discussion meeting, the Department will advise the Design-Build Firm as to the following related to the ATC proposals which were discussed:

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

The Department will return all handouts back to the Design-Build Firm except one copy to remain in the secure procurement file.

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

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

All ATC submittals are required to be on plan sheets, on roll plots no wider than 36", or on 8.5" x 11" sheets and shall be sequentially numbered and include the following information and discussions:

- a) Description: A description and conceptual drawings of the configuration of the ATC or other appropriate descriptive information, including, if appropriate, product details and a traffic operational analysis as applicable;
- b) Usage: The locations where and an explanation of how the ATC would be used on the Project.
- c) Deviations: References to requirements of the RFP which are inconsistent with the proposed ATC, an explanation of the nature of the deviations from the requirements and a request for approval of such deviations along with suggested changes to the requirements of the RFP which would allow the alternative proposal.
- d) Analysis: An analysis justifying use of the ATC and why the deviation, if any, from the requirements of the RFP should be allowed.
- e) Impacts: A preliminary analysis of potential impacts on vehicular traffic (during construction), environmental impacts, community impacts, safety, and life-cycle Project and infrastructure costs, including impacts on the cost of repair, maintenance, and operation.
- f) Risks: A description of added risks to the Department or third parties associated with implementation of the ATC.
- g) Quality: A description of how the ATC is equal or better in quality and performance than the requirements of the RFP including the traffic operational analysis if requested by the Department.
- h) Operations: Any changes in operation requirements associated with the ATC, including ease of operations.
- i) Maintenance: Any changes in maintenance requirements associated with the ATC, including ease of maintenance.
- j) Anticipated Life: Any changes in the anticipated life of the item comprising the ATC.

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

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

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

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

Through the ATC process, the Design-Build Firm may submit, and the Department may consider, geometric modifications to the Concept Plans or other contract requirements that will provide an engineering solution that is better overall in terms of traffic flow and reduced congestion. The approval of ATCs related to improvements of traffic flow and reduced congestion is at the sole discretion of the Department. It is the Design-Build Firm's responsibility to clearly establish in the ATC process how the engineering solution provides a benefit to the Department and identify areas of conflict outlined in the RFP.

ATC's are accepted by the Department at the Department's discretion and the Department reserves the right to reject any ATC submitted. The Department reserves the right to issue an Addendum to the RFP based upon a previously denied ATC Proposal, without regard to the confidentiality of the denied ATC Proposal. All Department approvals of ATC submissions are based upon the known impacts on the Project at the time of submission. The Department reserves the right to require a modification or amendment to a previously approved ATC as a result of a contract change which is issued by an addendum subsequent to the Department's initial approval of the ATC.

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

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

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

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

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

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

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

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

1. Any right-of-way commitments, agreements and stipulated final judgements provided as an Attachment to the RFP.
2. Environmental Commitments from the EA with FONSI and Reevaluation as described in Section VI.O. ~~of~~ of this RFP.

**E. Environmental Permits:**

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

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

**2. Permits:**

The Department will submit FDEP ERP and FDEP State 404 Permit applications based on the concept plans. The Design-Build Firm will be responsible for submitting and obtaining the USCG Bridge Permit and completing, modifying and obtaining the FDEP ERP and FDEP State 404 Permits based on the final design plans.

The Design-Build Firm shall be responsible for obtaining all permits as necessary to complete the project. 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. 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, including modified permit applications. 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). The Design-Build Firm shall be solely responsible for all cost associated with permitting activities and shall include all necessary permitting activities in their schedule.

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. Preparation of all documentation related to the acquisition of all applicable permits will be the responsibility of the Design-Build Firm. Preparation of complete permit packages will be the responsibility of the Design-Build Firm. The Design-Build Firm is responsible for the accuracy of all information included in permit application packages. As the permittee, the Department is responsible for reviewing, approving, and signing, the permit application package including all permit modifications, or subsequent permit applications. This applies whether the Project is Federal or state funded. Once the Department has approved the permit applications, the Design-Build Firm is responsible for submitting the permit applications to the environmental permitting agencies. 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 applications, it is the Design-Build Firm's responsibility to make whatever changes necessary to ensure the permit applications are 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.

The Department is responsible for providing mitigation of all wetland impacts required for the conceptual design as shown in the Concept Plans. If any design modifications by the Design-Build Firm propose to increase the amount of wetland impacts such that additional mitigation is required, the Design-Build Firm shall be responsible for providing the Department information on the amount and type of wetland impacts as soon as the impacts are identified (including temporary impacts and/or any anticipated impacts due to construction staging or construction methods).

Any cost associated with additional mitigation required due to design modifications proposed by the Design-Build Firm shall be the responsibility of the Design-Build Firm. The Department anticipates satisfying mitigation requirements as depicted in the Concept Plans via an In-Lieu Fee Mitigation Project. Additional mitigation required due to a design modification proposed by the Design-Build Firm shall be coordinated with the Department as soon as possible for possible modification to the In-Lieu Fee Mitigation Project. In the event that modifying the Mitigation Plan is not viable, The Design-Build Firm will be responsible for providing the additional mitigation consistent with the provisions of section 373.4137, Florida Statutes, and acceptable to the permitting agency(ies).

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:**

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

### **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, structural, and toll facilities. 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. For Category 2 structures, submittals for bridges are limited to "units" as previously described, or a complete bridge submittal.

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

Category 1 and 2 bridge submittals shall contain the following:

- Plan sheets for the submittal under review developed to the specified level of detail (i.e. 90% plans, Final plans, etc.) as outlined in the FDM. Note for the 60% submittal on Category 2 Structures, provide the relevant sheets in accordance with the "60% Structures Plans" column of FDM Table 121.14.1. For the 90% and Final Submittals on Category 2 Structures, combine the required sheets for Foundation, Substructure, and Superstructure listed in FDM Table 121.14.3 to form the "unit" submittal.
- A complete set of the most developed plan sheets for all other major elements of the bridge. These sheets shall be marked "For Information Only" on the index sheet. In no case shall a plan sheet be less than 30% complete.
- Design documentation including a complete set of calculations, geotechnical reports, pertinent correspondence, etc. in support of the 90% and final component submittals.

## **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.

The Design-Build Firm shall coordinate with the Department's Project Manager to allow for a 90% Phase Submittal to the local government. Each comment or request by the local government shall be evaluated by the Design-Build Firm and discussed with the Department's Project Manager. Responses will be prepared by the Design-Build Firm for District Consultant Project Management Engineer signature. All comments or requests shall be responded to in writing within 30 days of receipt of comment.

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

- 1 copy of 11" x 17" Structures plans meeting the requirements of FDM Tables 121.14.1 and 121.14.2 for 60% Structures Plans
- 1 copy of draft geotechnical report
- 1 copy of draft Bridge Hydraulic Report
- 1 copy of design documentation (calculations not required)

1 copy of draft Technical Special Provisions  
1 copy of Roadway Project Layout and TTCP plans  
Any other information required for the Department to perform an Independent Department Review as discussed in the Independent Design Review Kickoff Meeting

### **90% Phase Submittal**

1 copy of 11" X 17" plans (all required components)  
1 copy of signed and sealed geotechnical report  
1 copy of Settlement and Vibration Monitoring Plan (SVMP) for Department acceptance and update throughout the construction period  
1 copy of signed and sealed Bridge Hydraulic Report  
1 copy of design documentation  
1 copy of Technical Special Provisions  
1 copy of Landscape Opportunity Plans  
1 copy of Bridge Load Rating Calculations  
1 copy of Completed Bridge Load Rating Summary Detail Sheet  
1 copy of Load Rating Summary Form  
1 copy of all design changes introduced since the 60% plan submittal that affect the modeling or component design of various bridge components  
1 copy of Concept of Operations (ITS)  
1 copy of Maintenance of communication (MOC) plans  
1 copy of Project System Engineering Management Plan (ITS)  
1 copy of Requirement Traceability Verification Matrix (ITS)  
1 copy existing Signalization and Intelligent Transportation System equipment report  
1 copy of power design analysis report (PDAR)  
1 copy of Utility Conflict Matrix

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 copy of Landscape Opportunity Plans  
1 set of final documentation  
1 signed and sealed copy of the Bridge Load Rating Summary Detail Sheet  
1 signed and sealed copy of the Load Rating Summary Form  
1 signed and sealed Construction Specifications Package or Supplemental Specifications Package  
1 copy of signed and sealed copy of Construction Specifications Package or Supplemental

Specifications Package

- 1 of electronic copy of Technical Special Provisions in .pdf format
- 1 copy of all major design changes introduced since the 90% plan submittal that affect the modeling or component design of various bridge components
- 1 copy of all the Independent Department Review comments and the EOR's response
- 1 copy of Concept of Operations (ITS)
- 1 copy of Maintenance of Communication (MOC) plans
- 1 copy of Project System Engineering Management Plan (ITS)
- 1 copy of Requirement Traceability Verification Matrix (ITS)
- 1 copy existing Signalization and Intelligent Transportation System equipment report
- 1 copy Power Design Analysis Report (PDAR)

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. NO BRIDGE CONSTRUCTION WILL BE ALLOWED TO COMMENCE UNTIL THE U.S. COAST GUARD PERMIT IS OBTAINED. BRIDGE CONSTRUCTION IS DEFINED AS FROM BEGIN BRIDGE TO END BRIDGE.

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

#### **4. Milestones:**

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

- Typical Section package
- Utility Clearance Certification
- Permit applications for Department review
- Responses to RAIs from permitting agencies for Department review
- Approved permits package
- Pavement Design
- Package, if different than the minimum pavement design included as an Attachment to the RFP
- **Re-Evaluation, if needed due to design changes**
- **Endangered Species Act (ESA)** Section 7 Re-Initiation of consultation if needed due to design changes or time.

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

**J. Contract Duration:**

The Department has established a Contract Duration of 1,720 calendar days for the subject Project.

**An Incentive-Disincentive is available for this project and can be found in the Design-Build Division I Specifications included in the Attachments section of the RFP. The achievable incentive is \$5,000,000 as detailed in the specification.**

**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 review of Category 2 structures submittals requires Central Office Structures Design Office involvement and **Independent Department Reviews. the schedule shall allow for up to 20 calendar days (excluding weekends and Department observed Holidays) for these reviews.** The Design-Build Firm shall allow at least the following durations:

- (30) calendar days (excluding weekends and Department observed Holidays) between the 60% phase submittal and the 90% phase submittal for any Category 2 structures Submittals to allow for the initial development of the IDR.
- (60) calendar days (excluding weekends and Department observed Holidays) between the 90% phase submittal and the Final phase submittal for any Category 2 structures Submittals for the IDR.
- (20) calendar days (excluding weekends and Department observed Holidays) for the Final phase submittal for any Category 2 structures Submittals.
- (20) calendar days (excluding weekends and Department observed Holidays) for the review of all additional Category 2 structures resubmittals. Category 2 structure resubmittals must include all required submittal documentation per Section V.I (Submittals)

IDR durations are subject to change based on the Design Build Firm's Technical Proposal submittal. Upon review of each Firm's Technical Proposal, new IDR review times may be provided to each Firm as part of the Question and Answer Written response session. The Independent Department Review of Category 2 structures will be performed concurrently, and of similar duration, with the normal Department review of submittals. Review will not begin until submittals are deemed complete by the Department.

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

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

- Billy Bowlegs Pirate Festival
- Mardi Gras on the Island
- ~~Red Cross Run~~
- Greek Festival
- ~~Downtown Fort Walton Beach Street Fest~~
- ~~Earth Day Fort Walton Beach~~
- Spring Break

<u>Year</u>	<u>Dates</u>
<u>2023</u>	<u>March 10-26</u>
<u>2024</u>	<u>March 08-24</u>
<u>2025</u>	<u>March 07-23</u>
<u>2026</u>	<u>March 13-29</u>
<u>2027</u>	<u>March 12-28</u>
<u>2028</u>	<u>March 10-26</u>

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
- Anticipated Contract Execution Date
- Anticipated Notice to Proceed Date
- Department Right-of-Way Clear Date
- Kickoff meeting with the Department's Independent Review consultant
- Design Submittals
- Completed Category 2 bridge design for Independent Department review
- 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 (60%, 90%, Final,)
- Foundation Construction
- Fender System Design
- Fender System Construction
- Substructure Design (60%, 90%, Final, RFC)



- Substructure Construction
- Superstructure Design (60%, 90%, Final, RFC)
- 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
- Maintenance of Communication (MOC) Plan
- Existing Signalization and Intelligent Transportation System equipment report
- Equipment Testing and Commissioning; System Testing, Standalone
- Equipment Testing and Commissioning; System Testing, Network Communication
- Equipment Testing and Commissioning; System Testing, Central Test End-User
- Equipment Submittals (Prior to Start of Construction)
- Test Plan Submittal to FDOT
- Field Device Deployment
- System Integration (District Coordination, County Coordination, Meetings, Field Work, Acceptance)
- As-Built Plan Preparation and Submittal
- RTVM Updates Lighting Design
- Lighting Design
- Lighting Construction
- Maintenance of Traffic Design
- Landscape Opportunity Plans
- Permit Submittals
- Demolition of Existing Bridge
- Landscape/Irrigation Design (inside roundabouts only)
- Landscape/Irrigation Construction (inside roundabouts only)
- Maintenance of Traffic Set-Up (per duration)
- Erosion Control
- Holidays and Special Events (shown as non-work days)
- Additional Construction Milestones as determined by the Design-Build Firm
- Final Completion Date for All Work

**L. Key Personnel/Staffing:**

The Design-Build Firm's work shall be performed and directed by key personnel identified in the Letter of Interest and/or 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 Letter of Interest and/or 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 Letter of Interest without written consent of the Department. In the event a change in the Partner/Teaming Arrangement is requested, the Design-Build Firm shall submit the reason for the proposed change. Any changes in the Partner/Teaming Arrangement shall be subject to review and approval by the Department's Chief Engineer. The Department shall have sole discretion in determining whether or not the proposed substitutions in Partner/Teaming Arrangements are comparable to the Partner/Teaming Arrangements identified in the Letter of Interest and/or 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
- Drainage Pre-submittal Meetings
- Post Submittal Design Review 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. If, for any reason, planned network or signal operation outages are to occur, the Design-Build Firm shall submit to the Department for approval a Maintenance of Communication (MOC) Plan in advance of the planned network and/or signal operation outage detailing work to be performed and a strategy for minimizing the outage. The existing fiber backbone cut over shall be coordinated District

Three Transportation System Management Operations (TSM&O) manager, Okaloosa County Traffic Engineer and designated representatives before beginning of roadway construction.

The project location currently has Okaloosa County fiber on the Brooks bridge and the project corridor.

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. Public Involvement:**

**1. General:**

Public involvement is an important aspect of the Project. Public involvement includes communicating to all interested persons, groups, and government organizations information regarding the development of the Project. The Department, or its designated representative, will serve as the Public Involvement Consultant (PIC) to carry out an exhaustive Public Involvement Campaign and a marketing effort. The Design-Build Firm will assist the Department in the Public Involvement effort as described below.

**2. Community Awareness:**

The Design-Build Firm will cooperate with the PIC in development and delivery of a project Community Awareness Program.

**3. Public Meetings:**

The Design-Build Firm shall provide all supporting materials necessary for various public meetings, which may include:

- Kick-off or introductory meeting
- Metropolitan Planning Organization (MPO) Citizens Advisory Committee Meetings
- MPO Transportation Technical Committee Meetings
- MPO Meetings
- Public Information Meetings
- Elected and appointed officials
- Special interest groups (private groups, homeowners associations, environmental groups, minority groups and individuals)
- Open Houses
- Virtual Public Hearings

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

For any of the above type meetings the Design-Build Firm shall provide all technical assistance, data and information, display boards, printed material, video graphics, computerized graphics, etc., and information

necessary for the day-to-day exchange of information with the public, all agencies and elected officials in order to keep them informed as to the progress and impacts that the proposed Project will create. This includes workshops, information meetings, open houses, and public hearings.

The Design-Build Firm shall, as determined by the Department, attend the meetings with an appropriate number of personnel to assist the CEI/Department. The Design-Build Firm shall forward all requests for group meetings to the CEI/Department. The Design-Build Firm shall inform the CEI/Department of any meetings with individuals that occur without prior notice.

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

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

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

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

**5. Public Involvement Data:**

The Design-Build Firm is responsible for the following:

- Coordinating with the Department's PIC and the District Public Information Office.
- Identifying possible permit and review agencies and providing names and contact information for these agencies to the Department.
- Providing required expertise (staff members) to assist the Department on an as-needed basis.
- Preparing color graphic renderings and/or computer generated graphics to depict the proposed improvements for coordination with the Department, local governments, and other agencies.
- Providing information to the Department to keep the Department website current.

The Design-Build Firm shall provide records of all public correspondence, written or verbal, to the Department throughout the life of the Project.

The Design-Build Firm may be asked by the CEI/Department to prepare draft responses to any public inquiries as a result of the public involvement process. The Department shall review all responses prior to the Design-Build Firm mailing.

**P. 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.

**2. Construction:**

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

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

Prepare and submit to the Engineer a Job Guide Schedule (JGS) using the Department database in accordance with Section 105 of Standard Specifications.

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

**Q. Liaison Office:**

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

**R. Engineers Field Office: N/A**

**S. 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 estimate 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.

**T. 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 OpenRoads Designer with FDOT Connect Software 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 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 OpenRoads Designer and/or AutoCAD design files format.

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

**U. 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.

**V. 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 , fabrication plants, etc. in accordance with the latest Specifications.

**W. Value Added:**

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

- Roadway features
- Roadway drainage systems,
- Approach slabs
- Superstructure
- Substructure
- Concrete defects
- Structural steel defects (if applicable)
- Post-tensioning systems (if applicable)
- ITS Elements
- Landscaping

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.

The Design-Build Firm shall provide at a minimum the three (3) year warranty period as defined by Article 338, Value Added Asphalt Pavement, Division II, Standard Specifications. The Design-Build Firm may provide a longer warranty period than the three (3) year minimum.

The Design-Build Firm shall provide at a minimum the five (5) year warranty period as defined by Article 475, Value Added Bridge Components, Division II, Value Added Specifications. The Design-Build Firm may provide a longer warranty period than the five (5) year minimum.

The Department will NOT consider self-imposed monetary penalties/deductions proposed by Design-Build Firm's as Value Added items.

**X. 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 437366-1 SR 30 (US 98) from West of Josie Road to West of Brooks Bridge—Resurfacing; The project is scheduled to Let in FY 2023. The Department's Project Manager is Ray Kirkland.

- FPID 442261-1 Santa Rosa Blvd from Military Bound Entrance to SR 30 (US 98) Miracle Strip— Local Agency Program (LAP) Project for sidewalk construction. The Department’s Project Manager is Craig Gavin.

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.

**Y. 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 and Major Structures**

The Design-Build Firm shall determine whether the resistance factors used for pile design will be based on static, statnamic, and/or dynamic load testing. If static/statnamic load testing is proposed, 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 pile foundations in any of the following areas of the Project, a minimum number of successful load tests must be performed in representative locations of that area:

- Station 109+05 to Station 115+00 (CL of Survey), minimum of 1 test)
- Station 115+00 to Station 120+00 (CL of Survey), minimum of 1 tests)
- Station 120+00 to Station 131+96 (CL of Survey), minimum of 1 test)

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

1. Selection of pile type and size.
2. Selection of test pile lengths, locations and quantity of test piles.
3. Selection of pile testing methods.
4. Determining the frequency of such testing unless otherwise stated herein.
5. Performance of the selected test pile program, including dynamic load test personnel and equipment. The Department may observe the installation of test piles and all pile testing.
6. Preparing and submitting a Pile Installation Plan for the Department's acceptance.
7. Selection of production pile lengths.
8. Development of the driving criteria.
9. Driving piles to the required capacity and minimum penetration depth.
10. Inspecting and Recording the pile driving information. Provide a pile inspection device that displays and stores electronically for every hammer blow along with a timestamp: stroke for open-ended diesel hammers and blows per foot and blows per minute for all hammers. The device must auto-generate the Department's Pile Driving Record form and export the non-editable electronic data in a format compatible with the Pile Driving Record form. Use this device during the inspection of test piles and production piles.
11. Submitting Foundation Certification Packages.
12. Providing safe access and cooperating with the Department in verification of the piles, both during construction and after submittal of the certification package.

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

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

- Station 109+05 to Station 115+00 (CL of Survey), (minimum of 1 test)
- Station 115+00 to Station 120+00 (CL of Survey), (minimum of 1 test)
- Station 120+00 to Station 131+96 (CL of Survey), (minimum of 1 test)

Limits of these areas may be modified by the Design-Build Firm if the modifications are justified by additional subsurface information and concurred with by the Department. Furthermore, resistance factors for static/statnamic load testing may only be used for production shafts which have the same tip elevations in the same material as the representative static/statnamic load test shaft. Deviations in tip elevations or

bearing material will require additional static/statnamic testing if the static/statnamic load test resistance factors will be used.

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 For Miscellaneous Structures**

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 Miscellaneous Structures**

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

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

### **Specialty Geotechnical Services Requirements**

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

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

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

#### **D. Utility Coordination:**

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

1. A minimum of 4 years of experience performing utility coordination in accordance with Department standards, policies, and procedures.
2. Knowledge of the Department plans production process and utility coordination practices,
3. Knowledge of Department agreements, standards, policies, and procedures.
4. Ability to physically reach the project site within three (3) hours.

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, and coordinating the implementation of and submitting to the Department for review, all Utility Work Schedules.
8. Resolving utility conflicts.
9. Obtaining and maintaining all appropriate "Sunshine 811" tickets as they apply to utility relocation work.
10. Performing Constructability Reviews of plans prior to construction activities with regard to the installation, removal, temporary removal, de-energizing, deactivation, relocation, or adjustment of utilities.
11. Providing periodic Project updates to the Department Project Manager and District Utility Office as requested.
12. Coordination with the Department on any issues that arise concerning reimbursement of utility work costs between the Department and the utility.
- ~~13. Verifying the electrical and communications requirements for toll facilities provided in the GTR.~~
14. Prepare utility certifications or statements for all Federal-Aid construction projects per 23 CFR 635.309(p)(1)(v)

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

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

<u>UA/O</u>	<u>Utility Relocation Type</u>	<u>Eligible for Reimbursement</u>	<u>Work to be Bid in this D/B Contract</u>
AT&T Corporate	UA/O Performing Utility Work	No	No
AT&T Florida	UA/O Performing Utility Work; DB Firm Performing partial Utility Work through UWHC <sup>1</sup>	No	Partial 1. <a href="#">Include under 415474-2-52-02</a>
Centurylink	UA/O Performing Utility Work; DB Firm Performing partial Utility Work through UWHC <sup>1</sup>	Partial	Partial 1. <a href="#">Include under 415474-2-52-02</a>

City of Fort Walton Beach	UA/O Performing Utility Work	Partial	No
Cox Southeast	UA/O Performing Utility Work; DB Firm Performing partial Utility Work through UWHC <sup>1</sup>	Partial	Partial 1. <u>Include under 415474-2-52-02</u>
Gulf Power Company	UA/O Performing Utility Work	Partial	No
Okaloosa County <u>Board of County Commissioners (BCC)</u> Information Technology	UA/O Performing Utility Work; DB Firm Performing partial Utility Work <u>through UWHC<sup>1</sup></u>	No	Partial 1. <u>Include under 415474-2-52-01</u>
<u>Okaloosa County Signal System</u>	<u>UA/O Performing Utility Work; DB Firm Performing partial Utility Work through UWHC<sup>1 2</sup></u>	<u>No</u>	<u>Partial 1.</u>
Okaloosa County Water & Sewer	DB Firm Performing Utility Work through UWHC	Partial	Yes, <u>Include under 415474-2-52-02</u>
Okaloosa Gas District	UA/O Performing Utility Work	Partial	No
Uniti Fiber	UA/O Performing Utility Work; DB Firm Performing partial Utility Work through UWHC <sup>1</sup>	No	Partial 1. <u>Include under 415474-2-52-02</u>
Eglin AFB Communications	DB Firm Performing Utility Work <u>through UWHC</u>	No	Yes. <u>Include under 415474-2-52-01</u>

1. DB Firm work to include 4” stainless steel conduit materials, placement, and attachment to bridge. See Description of Work section of the DBRFP.
2. “Okaloosa County Signal System” is owned by FDOT and relocation is covered in Section VI. R. of the RFP.

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

UAO	Contact Person	Contact Number	Email Address
AT&T Corporate	Steve Hamer	813-888-8300 EXT. 201	shamer@sdt-1.com
AT&T Florida	Tim Edgar	850-293-3780	te1810@att.com
CenturyLink	Amber Gilson	850-815-3131	amber.gilson@centurylink.com
City of Fort Walton Beach	Daniel Payne, P.E.	850-833-9613	dpayne@fwb.org
Cox Southeast	Roger Dixon	850-314-8163	roger.dixon@cox.com
Gulf Power Company	Chad Swails	850-244-4747	chad.swails@nexteraenergy.com
Okaloosa County Information Technology	Jason Snyder	850-978-0331	jsnyder@myokaloosa.com
Okaloosa County Signal System	Randy Showers, P.E.	850-609-6181	rshowers@myokaloosa.com
Okaloosa County Water & Sewer	Jon Kanak	850-609-5098	jkanak@myokaloosa.com

Okaloosa Gas District	Ryan Burns	850-280-4851	ryanburns@okaloosagas.com
Uniti Fiber	Kyle Hill	850-544-1400	james.hill@uniti.com
Eglin AFB Communications	Mr. Ken Coleman	850-882-4990	kenneth.coleman.7@us.af.mil

Utility information shown in the RFP Concept Plans is limited to existing utility locations. The information is sourced from UA/O markups, UA/O GIS data, UA/O as-builts, and project survey as noted in the plans. Source information provided by UA/O's is included in the Reference Documents. The Description of Work section of the RFP includes specific information on UWHC.

The Design-Build Firm may request the utility to be relocated to accommodate changes from the concept plans; however, these relocations require the Department's approval and the Department will not pay the Utility Agency/Owner (UA/O) or the Design-Build Firm for the utility relocation work regardless of the UA/O's eligibility for reimbursement. ~~Gulf Power (remain in place and energized), Okaloosa Gas District (remain in place and in service), Okaloosa County Water and Sewer (remain in place, and to be placed out of service once new main installed on new bridge) and AT&T Corporate (remain in place and out of service once temporary crossing is installed on new bridge) have subaqueous facilities as depicted in the concept plans and as shown in the Reference Documents. These facilities are to be protected, to remain, and not to be relocated.~~

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

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

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

**E. Roadway Plans:**

**General:**

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 Typical Section Package based on the RFP Requirements. The Design-Build Firm shall develop and submit a signed and sealed Pavement Design Package **(if modified from the minimum pavement design in the RFP)** and Drainage Analysis Report for review and concurrence by the Department and FHWA on Projects of Division Involvement (PoDIs).

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

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. Slope requirements
  4. Barriers
  5. Right-of-Way
- Data Sheet
- Design Speed

#### **2. Pavement Design Package:**

The recommended pavement design attached to this document is the minimum required pavement design for the contract.

**“Resurfacing for side streets” pavement design as provided as an Attachment to the RFP is ONLY intended to be utilized for tie-ins and areas of conflicting pavement markings.**

**Any proposed alternate pavement design shall require a minimum of one lift of structural pavement and one lift of friction course pavement. Minimum Pavement Design requirements for each design applies to the entire width of the lane. Any tapered/variable depth milling shall meet these minimum requirements across the entire lane unless otherwise approved by the Department. All longitudinal joints, including base and pavement widening**



**joints, shall be within 1 foot of the lane edge or 1 foot of the center of a lane to minimize joints within the vicinity of a wheel path.**

If alternate pavement designs are proposed, the following submittal requirements shall be provided to the Department for review.

- 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. Minimum structural asphalt thickness
  7. Cross slope
  8. Identify the need for modified binder
  9. Pavement coring and evaluation
  10. Identify if ARMI layer is required
  11. Minimum milling depth

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, ~~temporary~~ temporary drainage design for all MOT phases, 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 Department has developed a preliminary drainage design as depicted in the concept plans, for which an ERP permit has been submitted. The drainage design in the concept plans may be modified by the Design-Build Firm as necessary for the project.

The objective is to obtain approved stormwater treatment/attenuation design. The Design-Build Firm shall ensure that no adverse impacts occur to the adjacent properties as a result of the drainage design.

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.

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

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

The Design-Build Firm must employ a Registered Professional Engineer in Florida who specializes in coastal engineering. The coastal engineer must hold a M.S. or Ph.D. in Coastal Engineering or a related engineering field and/or have extensive experience (as demonstrated by technical publications in technical journals with peer review) in coastal hydrodynamics and sediment transport processes. The coastal engineer must sign and seal the final Bridge Hydraulics Report and Bridge Hydraulics Recommendation Sheet. **As part of the Bridge Hydraulics Report, the Design-Build Firm is responsible for ensuring no greater harm to the existing shoreline due to water velocities is caused by their design. If the Design-Build Firm's proposed design creates more scour than the current bridge configuration, the Design-Build Firm shall enhance the shoreline within the FDOT Right of Way.**

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

#### **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.

For criteria not specifically defined within the RFP, criteria contained in *AASHTO – A Policy on Geometric Design of Highways and Streets* shall be applicable to Perry Road South, Brooks Street, Florida Blanca Place, Santa Rosa Boulevard, Business Access Route, new Northbound Connection, new Eastbound Connection, and Hotel Entrance Roadway. Roundabouts shall be designed in accordance with FDOT Design Manual criteria.

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

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

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

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

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

**I. Structure Plans:**

**1. Bridge Design Analysis:**

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

falsework systems, etc.) to ensure compliance with the contract plan requirements and intent.

- f. Wall heights, from the top of leveling pad to the top of wall coping, greater than 30' shall not be permitted, unless site specific locations have been approved by the Department through the ATC process.

## 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.
- b. Critical Temporary Retaining Walls: Whenever the construction of a component requires excavation that may endanger the public or an existing structure that is in use the Design-Build Firm must protect the existing facility and the public. If a critical temporary retaining wall is, therefore, required during the construction stage only, it may be removed and reused after completion of the work. Such systems as steel sheet pilings, soldier beams and lagging or other similar systems are commonly used. In such cases, the Design-Build Firm is responsible for designing and detailing the wall in the set of contract plans. These plans must be signed and sealed by the Structural Engineer in responsible charge of the wall design.
- c. For bridges over navigable waterways, establish the required pier strengths using the MathCad program furnished by the Department. The MathCad program furnished by the Department allows for the proposed bridge geometry to be input by the Engineer. Other parameters such as water traffic, waterway characteristics, etc. may not be changed. This assures that all Design-Build Firms are designing on the same assumptions other than the specific bridge layout that each is proposing.

The following parameters shall be utilized by the Design-Build Firm in the Mathcad program for calculating the required pier strengths:

### Section 1 – Navigable Channel Characteristics and Vessel Traffic PastPoint Data

Channel Characteristics  
C = 150 ft  
 $\Theta$  = 10 degrees  
Region = Turn/Bend  
 $V_c$  = 1.0 knot  
 $V_{xc}$  = 0.0 knot  
 $R_D$  = low

Vessel Traffic Data  
Past PointNumber = 27  
VesselDirection = both  
 $V_{min}$  = 1 knot

### Section 2 – Pier Characteristics

$D_{\text{water}} =$   
(-280ft or more from CL channel) = 9 ft  
(-115ft from CL channel) = 19 ft  
(+115ft from CL channel) = 27 ft  
(+280ft or more from CL channel) = 16 ft

- For the Design Build Firm's specific pier locations, the Firm may interpolate between the limits listed above for the appropriate elevation.
- $D_{\text{water}}$  is defined from centerline of existing channel along Baseline SR 30 (-) downstation, (+) upstation

Section 3 – Vessel Fleet Characteristics

Velocity = 7 knots

Section 11 – Importance Classification

Regular Bridge

- d. Superstructure components shall be located above the splash zone.
- e. The minimum vertical clearance of the main span over the navigation channel shall be 65-feet above the mean high water elevation of Santa Rosa Sound at the main channel crossing. A minimum 150-foot horizontal clearance in the main channel between the fender system shall be provided. At the channel span, the minimum span length shall be 230-ft.
- f. The LRFD Operational Importance Factor shall be 1.0 for all bridges.
- g. Any use of Prefabricated Bridge Elements and Systems shall be in accordance with the design considerations documented in SDM Chapter 25. If the Design Build Team plans to deviate from these requirements, an ATC should be submitted to allow for Department review and concurrence. The following minimum requirements will be required for ATCs:
  - i. General mock-up details for each PBES connection detail
  - ii. General mock-up acceptance criteria required based on connection dissection results
  - iii. General detail of each PBES connection
- h. Existing Structure Removal:
  - i. Within the limits of the main span and fender system, if the existing foundations do not conflict with the proposed foundation locations, the existing foundations must be removed to 24 inches below the mudline, taking into account long term scour depths when determining the elevation of the mudline.
  - ii. All existing dolphins must be completely removed.
  - iii. Disposition of original swing bridge foundations are unknown. Part or all of the original foundation may have been left in place. See Reference Documents for as-built plans.
- i. Pier protection such as dolphins and islands will not be allowed.

- j. Partial height retaining walls (i.e. perched walls or toe walls) will NOT be allowed for this project.
- k. Geosynthetic Reinforced Soil (GRS) Walls and Abutments will NOT be allowed for this project.
- l. Full height cheek walls shall be provided at the following locations:
  - i. Exposed ends of all end bents
  - ii. Exposed ends of piers where the difference in the exterior beam depth in adjacent spans is greater than or equal to 9”.
  - iii. Exposed ends of piers where the ends of exterior beams in adjacent spans are offset in plan.
  - iv. Exposed ends of piers where beams in adjacent spans are of dissimilar material.
- m. Pile bents shall not be permitted, except at bridge abutments when located behind retaining walls.
- n. All bridge foundations shall be deep foundations.
- o. If structural steel is proposed: All structural steel shall be coated in accordance with Developmental Specification 564. The Design-Build Firm shall use the edition in effect at the time the bid price proposals are due in the District Office.
- p. No stiffeners will be allowed on the outside of exterior girders with the exception of bearing and jacking stiffeners.
- q. Steel box girders are not permitted.
- r. All bolts shall be galvanized.
- s. Weathering steel is not permitted. **The use of ASTM A709 Grade 50 structural steel is acceptable.**
- t. If continuous post-tensioned concrete superstructure units utilizing flexible filler for tendons within the girder webs are proposed, the following requirements shall apply:
  - i. The design for shear shall account for 1.2 times the outer specified duct diameter as a discount in effective web width for shear design capacity.
  - ii. Confinement reinforcement shall be provided for the transverse splitting forces in the web due to the abrupt void within the web at the duct locations.
  - iii. **Limit the duct diameter-to-web width ratio to no more than 0.4.**
  - iv. **The principal tensile stresses in webs shall not exceed  $0.082\sqrt{f'c}$  (ksi) at the Service III limit state of LRFD 3.4.1, both before and after all losses and redistribution of forces.**
  - v. As an alternative to items (i), ~~and~~ (ii), (iii), and (iv) above, physical testing may be performed by the Design-Build Firm to corroborate the design. All testing procedures and results shall be subject to review and approval by the State Structures Design Office (SSDO).
  - vi. Continuous post-tensioned concrete superstructures shall be submitted through the ATC process for review and approval by the Department.

- u. Concrete segmental box girders beams will require a 6'-6" maintenance access (SDG 4.6.2 requires 6'-0").
- v. All footings located in the water shall be waterline footings. The following additional footing design criteria shall be used:
  - i. Size footing such that the effective depth,  $d_v$ , is sufficient to resist one-way shear without the contribution of shear reinforcement per LRFD [5.12.8.6]. Neglect pile-to-cap interface friction for calculation of two-way punching shear resistance.
  - ii. For footings designed to resist vessel collision or other large lateral loads with the full bending capacity of the pile developed per SDG 3.5.1.
    - a. Determine the minimum horizontal dimension from the edge of the exterior pile to the nearest footing edges as the largest of the following (rounded up to the nearest inch):
      - i. Edge distance required for lateral resistance
      - ii. One-half of the width or diameter of the pile (for piles widths or diameters 24-inches or larger
      - iii. 9-inches (LRFD 10.7.1.2 minimum offset) + 3-PBESinches (horizontal driving tolerance) +  $\sum$  diameters of reinforcing bars for punching shear (horizontal and vertical bars) + 2-inches minimum clearance to pile face
    - b. Develop the main top and bottom reinforcing bars into the perimeter edge region of the footing with 90-degree hooks
- w. All permanent retaining walls shall have a concrete facing. MSE walls shall be limited to a height of 30 ft. Any retaining walls where nominal water depths exist to support waves during the 100-yr storm will require scour/erosion countermeasures (i.e., toe protection and splash apron if applicable) or designed to resist the 100-yr scour.
- x. For fill slopes in front of end bents or abutments, the magnitude of the slope shall not exceed 1V: 2H.
- y. Conduits shall not be mounted to the exterior face of retaining walls or exterior face of structures and must be hidden from view.
- z. Any necessary bridge drainage piping shall be hidden from view.
- aa. For superstructures, if the controlling low member elevation of the superstructure is less than 1-foot above the design wave crest elevation, wave forces shall be calculated and applied according to AASHTO Guide Specifications for Bridges Vulnerable to Coastal Storms. For substructures, wave forces shall be calculated and applied according to AASHTO Guide Specifications for Bridges Vulnerable to Coastal Storms. The wave vulnerability classification of the bridges shall be **Extremely Critical "Critical/Essential" per section 5.1 of the AASHTO Guide Specifications for Bridges Vulnerable to Coastal Storms (Equivalent to "Extremely Critical" per SDG 2.5 commentary)**. The "Service Immediate" performance level shall be used with applicable Strength Limit State load factors. A Level III analysis is required to develop wave forces from coastal storms.

- bb. The Design-Build Firm shall design for an environmental classification of extremely aggressive marine structure for the superstructure and substructure for the bridge, for seawalls and for the retaining walls.
- cc. Class 5 coatings, tints, stains, and anti-graffiti coatings shall not be used on the project.
- dd. A custom fender system is required, unless span requirement of SDG 3.14.1.B is satisfied, for the navigation channel for channel delineation per the SDG and to re-direct errant barge and other vessel collisions. Per Table 3.14.2-1 of the SDG, a minimum energy of 455 k-ft is associated with Past Point #27 for the Minimum Energy Absorption Capacity (EAC) of the fender system. Standard Plans Index 471-030 will not be permitted as its fender system energy capacity is only 38 k-ft. For flared sections of the fender system, use a pile spacing that is not greater than half of the pie spacing used in the tangent section (not to exceed 8 feet). Use the same size of piles in the flared sections of the fender system as used in the tangent sections. **The maximum allowable deflection for the custom fender system is 10 ft.**
- ee. The Design-Build firm's custom fender system design shall avoid impacts to the subaqueous facilities owned by Gulf Power, AT&T Corporate and Okaloosa Gas District that are to remain in place as depicted in the concept plans and as shown in the Reference Documents.
- ff. SDG 3.14.2.F.1 will be followed when determining the requirements for the design of navigation lighting and clearance gauge details.
- gg. Access ladders will not be required on fender systems. Provide a platform from nearby pier footing to fender system for access. Use hot dip galvanized steel for catwalk structure with polymer decking.
- hh. Pedestrian railing on the bridges shall be aluminum railing only.
- ii. A minimum 10-ft width between parallel bridges will be required to facilitate staged construction as well as for future maintenance and inspection requirements as approved by the FDOT Office of Maintenance. Additional horizontal separation is preferred. The only exception to this is the begin bridge first span where a minimum of 8-ft is required between the bridges.
- jj. All bridge piers and permanent retaining walls must meet clear zone requirements. The Department will not approve the use of permanent barrier wall or guardrail to protect within the clear zone.
- kk. Wildlife connectivity will not be required.
- ll. Lightweight concrete will not be permitted for any structural applications.
- mm. It is not necessary to consider the scour effects on temporary structures.
- nn. Auger-cast piles for bridges are prohibited



- oo. Any channel span unit simple span prestressed girder superstructures made continuous for live load with individual span lengths exceeding 200 ft. must be reviewed by the Department through an ATC.

**pp. If Standard Plans Index 455-031 (30" Square Prestressed Concrete Pile - High Moment Capacity) piling are proposed, provide venting similar to previous 2015 Design Standard Index 20631.**

**Bridge, and MSE wall surface finish requirements:**

The Design-Build Firm shall seal the concrete surfaces of the MSE walls, and exposed bridge elements (excluding bridge deck) using an opaque Silicone Acrylic Sealer. **All sides of in-water footers are partially exposed and shall also include an opaque Silicone Acrylic Sealer.** The Design-Build Firm shall develop a TSP subject to Department approval for the sealer. During the design phase, the Design-Build Firm shall also provide to the Department the specific proposed sealer product to be utilized and the plan for utilizing staff qualified for completing the sealer application. The proposed TSP shall include similar information as detailed below:

- Source Limitations
- Certificates of Compliance
- Material List
- Manufacturer's Information
- Approval of Materials
- Pollution Control Plan
- Delivery and Storage

The TSP shall include the surface preparation and application of the sealer and include the following:

- Examination of Surfaces. Before starting any Work, surfaces to receive sealer finish shall be examined carefully for defects which cannot be corrected by the procedures specified below under "Surface Preparation" and which might prevent satisfactory sealing results. Should such conditions be encountered, the Engineer shall be notified immediately so that the extent of the problem and a solution can be identified. Commencing of work shall be construed as acceptance of the surfaces, and thereafter, the Contractor shall be fully responsible for satisfactory work as required herein.
- Field Area "Sample". Provide a full two (2) coat "sample" at the Field Sample Area using type of sealer proposed for use on this Project.

For MSE wall include a minimum of two (2) panels cast and sealed to represent surfaces.

Final approval of sealer system and color will be from Field Sample Area.

- Protection. Protect from surface preparation operations and contamination by sealing materials all surfaces not to be sealed. Restore surfaces which are contaminated by sealing materials to their original condition.
- Surface Preparation. All surfaces shall be clean, dry and free of grease, oil, paint, sealers, coatings, etc. prior to application of sealant. Surface preparation shall be performed in accordance with manufacturer's recommendations. Concrete surfaces shall be hydro-silica blasted at the direction of the Engineer as follows:

1. Hydro-silica blasting shall be capable of pressures in excess of 2500 psi in order to effectively remove all existing applied finishes, sealers, curing compounds, and other surface residues. Dry sandblasting shall not be employed without express written

approval of the Engineer.

2. Prior to blasting, use a manufacturer recommended de-greasing agent if required, following label directions, rinse thoroughly and allow the surface to dry. If mold mildew or fungus are present, kill and remove by cleaning with a solution.
  3. If concrete surface feels like 120-grit sandpaper, the pores are open enough for the sealer to properly bond. If concrete does not have this texture, etch surface with a manufacturer recommended concrete etching solution following label instructions.
  4. Prepared concrete shall have a pH between 7 and 10. If a high pH reading (11-13) is detected, neutralize the surface by acid etching the surface with a manufacturer recommended concrete etching solutions, following label instructions. If after the process the surface pH is high, then notify the Engineer before proceeding with the Work.
- Environmental Conditions. Apply sealer when environmental conditions are within ranges identified by the manufacturer.
  - Under no circumstances shall any sealer be applied when the dew point and the temperature are within three (3) degrees C of each other or otherwise when surfaces are wet or contaminated in any way.
  - Inspection. Contractor shall arrange to have sealer manufacturer's representative inspect and approve prepared (unsealed) surface and, prior to commencement of initial application and each succeeding coat..
  - Application. Two (2) coats of the sealer should be applied on the prepared surfaces following manufacturer's recommendations.
  - Cleanup. Clean spills and spatters and tools immediately with a manufacturer recommended solvent. Follow manufacturer's instructions and safety recommendations when using any solvent.

#### **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 Firm's Engineer of Record who has successfully completed the mandatory Specifications Package Preparations Training.

The website for completing the training is at the following URL address:

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

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

<https://fdotewp1.dot.state.fl.us/SpecificationsPackage/Utilities/Membership/login.aspx>

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

**K. Shop Drawings:**

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

**L. Sequence of Construction:**

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

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

**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:**

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

### 1. Traffic Control Restrictions:

There will be NO LANE CLOSURES allowed on SR 30 (US 98), SR 145, Perry Avenue South, Brooks St, Florida Blanca Place, Santa Rosa Blvd, the new Business Access Road, the new North Connection, the new Eastbound Connection, and the Hotel Entrance Roadway from 5:30 AM to 9:00 PM Monday through Thursday and from 5:30 AM Friday to 9:00 PM Sunday. If Pacing Operations are proposed, they will not be permitted during the times specified above.

The existing number of lanes and length of all auxiliary and turn lanes, shall be maintained at all times, except during the **permissible lane closure** times detailed **within the RFP, below: During permissible lane closure times, a minimum of one lane of traffic in each direction must be maintained along SR 30 (US 98), Santa Rosa Blvd., and SR 145 at all times.** Lane closure restrictions apply to all lanes including auxiliary lanes and turn lanes.

A lane may only be closed during active work periods. All requests for lane closures shall be submitted in writing to the Department 14 calendar days prior to a closure, detour, diversion, or MOT phase change. All lane closures must be reported to the local emergency agencies, the media, and the District 3 Public Information Officer a minimum of 12 calendar days prior to each closure.

**No lane closures are allowed on the Project during the Special Events days previously listed in this RFP in order to minimize potential impacts to the events.**

It is anticipated that Brooks St. will have to be closed temporarily within the limits of the realignment. The Design-Build Firm must maintain access to all properties at all times via an approved detour route. Closure shall be limited to no more than seven (7) total days. All remaining side roads, business access, and driveways shall remain open at all times. Side roads can NOT be closed unless approval from the District Secretary and approval from any applicable local government is obtained.

All detours shall be included in the Transportation Management Plan and approved by the Department. The Design-Build Firm shall obtain written approval from local agencies for detours that utilize or otherwise impact roadways that are under the jurisdiction of those local agencies.

During all phases and all times of construction, minimum lane widths shall be 10-feet.

Should the Design-Build Firm elect to use the existing roadway shoulders for temporary traffic control on a temporary basis, the Design-Build Firm shall modify the existing cross slope to match the adjacent lane. The Design-Build Firm shall be responsible for providing the required structural integrity and maintenance of the shoulder. When no longer needed for temporary traffic control, the Design-Build Firm shall restore the shoulder to the required width and cross slope.

There will be no pavement marking eradication permitted after the final asphalt course is placed. For any existing asphalt roadways where eradication of temporary or permanent striping is required to accommodate lane shifts or diversions, a full width overlay or full width milling, and resurfacing of the travelled way shall be the only acceptable means of pavement marking eradication.

Temporary detection for all movements at all signalized intersections shall be maintained throughout construction. Temporary detection shall detect only the appropriate approach lane for the associated phase.

**Overhead trailer mounted traffic signals shall not be utilized.**

SR 30 (US 98) is a designated Hurricane Evacuation Route. All lanes within the project limits must be open for traffic within 12 hours of a hurricane evacuation notice or other catastrophic event and shall remain open for the duration for the event as directed by the Engineer.

**NO LANE CLOSURES are allowed on the Project during the Special Events listed within the RFP.**

Special consideration shall be given to the drainage system when developing the construction phases. Positive drainage must be maintained at all times and shall NOT adversely impact adjacent properties. Provide temporary facilities to ensure turbid water and silt are not transported to existing drainage systems and/or Santa Rosa Sound.

The Transportation Management Plan shall be prepared by a certified designer who has completed the Department's Advanced Maintenance of Traffic training course, and in accordance with the Department's Standards Plans and the FDOT Design Manual.

The existing bridge has an existing lighting system and requires temporary lighting to be provided during the construction including navigational lighting. The Design-Build Firm is responsible for maintaining the existing navigational lighting until the permanent new navigational lighting is installed and operational.

**Pedestrian and Bicycle Access During Construction:**

If the Design-Build Firm allows work areas to encroach upon a trail, sidewalk, or intersection cross walk, a minimum clear width of 4 feet must be maintained for public use. If the required clear width cannot be met, the Design-Build Firm shall provide an alternative accessible route. Pedestrian and bike facilities shall be maintained and shall conform to ADA requirements. The existing bridge curb shall be maintained for pedestrian access in the temporary traffic control condition. Asphalt millings are not allowed for temporary sidewalk.

**Business Access:**

The Design-Build Firm's Transportation Management Plan shall maintain access to all business.

**Emergency Services:**

The Design-Build Firm shall coordinate with and ensure that the temporary traffic control plans will not adversely impact emergency responder operations.

**Navigation:**

Boating access shall be maintained for marine traffic. The Design-Build Firm shall make use of the USCG Notice to Mariners and all information contained within the USCG Bridge Permit to communicate the location and details for navigating through the project area.

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

The Design-Build Firm will be responsible for preparing designs and proposing construction methods that are permissible. The Design-Build Firm will be responsible for any required permit fees including public notice 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 following outlines the commitments from the EA with FONSI and Re-Evaluation and describes the responsibilities of the Design Build Firm (see also Section V.D.) and the Department in order to ensure fulfillment of the commitments.

- 1) A Section 4(f) Determination of Applicability is required for archaeological site 8OK00780. It was unable to be completed in the PD&E phase due to the extent of hardscape and disturbance in the area of the proposed project. Consultation with State Historic Preservation Officer resulted a concurrence determination that the site is not eligible for listing in the National Register of Historic Places. However, due to past archaeological discoveries in this area, FDOT will conduct appropriate archaeological research in areas where ground disturbance associated with the proposed bridge project will occur once FDOT has identified and purchased these areas. In accordance with the FDOT and SHPO concurrence determination of July 27, 2016, should any discoveries occur which may alter the significance determination made on the Alconese Site in accordance with 36 CFR Part 800.4(c) and which may cause an adverse effect to the site in accordance with 36 CFR Part 800.5(a), FDOT will determine if the site qualifies for protection under Section 4(f) and proceed as appropriate in consultation with the SHPO and, as appropriate, the Seminole Tribal Historic Preservation officer and other Native American tribal officials. *This commitment has been completed by the Department.*
- 2) FDOT owns the 0.58 ac parcel 24-2S-24-1070-0000-0040 as transportation right-of-way, leased by the City of Fort Walton Beach for public parking lot including landscaping, lighting, sidewalk, public boardwalk, and water management. During construction, the lease may be suspended. Access to the park is not required to be maintained during construction. Following construction, FDOT will renegotiate the lease agreement and park amenities with the City of Fort Walton Beach. The park currently includes 44 public parking spaces, including handicap, motorcycle and bicycle parking; sidewalk as part of the Fort Walton Beach Boardwalk; shoreline stabilization; benches and picnic tables; lighting; landscaping; and a kayak/canoe launch. Negotiations will be completed by the Department. *The Design Build Firm will construct park to preexisting conditions following construction activities within the limits of or adjacent to the park.*
- 3) During construction, the City of Fort Walton Beach Fishing Park (Alconese Avenue Pier) would be temporarily closed to public use for safety reasons. Following construction, the park would be returned to public use, and the park amenities (pier, lighting, bench, trash can, and shoreline stabilization) would be returned to at least pre-construction conditions in coordination with the City of Fort Walton Beach. *The Design Build Firm will construct park to at least preexisting conditions following construction activities within the limits of or adjacent to the park.*
- 4) Except as required for safety, access along the Florida Circumnavigational Saltwater Paddling Trail shall be maintained during construction. Temporary closures shall require notification as coordinated with the Florida Department of Environmental Protection,

Office of Greenways and Trails. *This commitment to be completed by the Design-Build Firm.*

- 5) A Special Use Permit shall be obtained from the National Park Service for the new Brooks Bridge and S.R. 30 (U.S. 98) right-of-way over the Gulf Islands National Seashore and for new bridge piles within waters of the Gulf Islands National Seashore. *This commitment to be completed by the Department.*
- 6) Coordination *by the Design-Build Firm* is required with the Okaloosa County Public Works Director during the design phase regarding access to Little Ross Marler, Ross Marler and Veteran's Parks.
- 7) Additional archaeological testing is required once the footprint for proposed construction is further defined. A research design must be developed in consultation with the State Historic Preservation Officer and the Seminole Tribe of Florida Tribal Historic Preservation Officer to prepare a testing strategy for 8OK00780. Construction monitoring by a qualified archaeologist is required. *Testing has been completed. Monitoring to be conducted by Department. The Design Build Firm shall notify the Department at least 14 days prior to ground disturbing activity within 8OK00780, and coordinate times and access for the Department's monitoring.*
- 8) Contractor shall follow the NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions (March 2006).
- 9) Contractor shall follow the Construction Special Provisions, Sturgeon Protection Guidelines (Pursuant to NMFS and FWS), September 2012.
- 10) Nocturnal in-water work is not allowed during the sturgeon migratory period which is from the first of October through the end of May. This measure provides a nightly period without noise-inducing activities and allows fish to move through the area without acoustic disturbance. Nighttime is defined as 30 minutes after sunset to 30 minutes before sunrise. This commitment applies to all pile driving including temporary work trestles. *This commitment to be completed by the Design-Build Firm.*
- 11) A noise monitoring plan shall be developed and submitted *by the Department* to FWS for approval prior to construction to collect hydroacoustical data from a representative set of test piles. Data collected will be used to verify the extent of potential noise impacts and, if necessary, refine the recommended conservation measures. The FDOT Office of Environmental Management is working toward a statewide noise monitoring/data collection study. The contractor shall cooperate with the University of North Florida or other Department approved staff that are collecting data if this bridge is included in the study.
- 12) A noise management plan shall be developed and submitted *by the Design- Build Firm* to FWS for approval prior to construction that demonstrates how underwater pile driving noise will be managed with the goal of minimizing behavioral disturbance and injury threshold to marine species. The noise management plan shall give consideration to use of bubble curtains or other measures of noise attenuation, and use of a ramp-up procedure during pile driving. This gradual increase in noise level gives species time to leave the impact area prior to initiation of full noise levels.

- 13) Mooring work barges or vessels shall maintain at least 1.5-ft clearance above the water body bottom to allow sturgeon passage and to minimize potential disturbance to bottom sediments. No mooring is allowed over areas of submerged aquatic vegetation. *This commitment to be completed by the Design-Build Firm.*
- 14) In order to provide a net conservation benefit to the sturgeon, consistent with the FWS Mitigation Policy, *the Department* will purchase 30 Vemco® sonic transmitters (estimated at \$350 each), 10 Vemco® receivers (estimated at \$1,480 each), one Vemco® omnidirectional hydrophone (estimated at \$6,590), and 20 batteries (estimated at \$50 each), to be used by FWS for a study on the effects of pile driving sound on Gulf sturgeon migratory behavior concurrent with the proposed action.
- 15) An erosion and sediment control plan will be submitted *by the Design-Build Firm* and approved by the Service at least 60 days prior to the start of construction to assure that potential impacts to Gulf Sturgeon habitat from sedimentation and turbidity are avoided and minimized to the extent practicable. The Service will be contacted immediately if failures occur in erosion and sediment control measures occur. [Biological Opinion, Reasonable and Prudent Measure 1.1]. *The Service is defined as U.S. Fish and Wildlife Service (FWS).*
- 16) The off-site stormwater compensatory treatment area will be coordinated with the Service for review and approval as plans become available. [Biological Opinion, Reasonable and Prudent Measure 1.2] *This commitment to be completed by the Design-Build Firm.*
- 17) Any demolition that involves blasting will be coordinated with the Service for review and approval as plans become available. [Biological Opinion, Reasonable and Prudent Measure 1.3]. If blasting is required for demolition of existing structures, a blast plan and marine species watch plan shall be developed and submitted to FWS, NMFS, and FWC for approval. *This commitment to be completed by the Design-Build Firm.*
- 18) If a need arises to develop off site staging areas for construction, location and erosion control measures for these sites will be coordinated with the Service for review and approval as plans become available. [Biological Opinion, Reasonable and Prudent Measure 1.4] *This commitment to be completed by the Design-Build Firm. Coordination with the Service shall be through the Department.*
- 19) The location of temporary work trestles and barge mooring will be coordinated with the Service for review and approval as plans become available. This is to ensure that in-water structures will not block the narrow channel width at the bridge and allow adequate space for migratory movements. [Biological Opinion, Reasonable and Prudent Measure 1.5] *This commitment to be completed by the Design-Build Firm.*
- 20) Field reviews will be conducted by *the Department* and the Service within 30 days of anticipated project completion, and within 30 days of completing construction to determine if site restoration is needed. [Biological Opinion, Reasonable and Prudent Measure 1.6].
- 21) The zone of impacts from elevated underwater sound levels that cause behavioral disturbance (150 dB RMS) will not extend greater than 1,037-ft from pile driving operations. Given recent exceedance of this sound threshold in test pile monitoring on



Pensacola Bay Bridge test piles, adequate demonstration of ability to control sound levels below this threshold using attenuation methods will be necessary. If the zone of impacts is exceeded, then formal consultation should be reinitiated. The underwater sound management plan and in-situ hydroacoustic sound monitoring of test piles (2.2 and 2.3 below) will be required to verify the zone of impacts that is the basis for this BO. [Biological Opinion, Reasonable and Prudent Measure 2.1] *The Design Build Firm will be responsible for developing and abiding by requirements of the Sound Management Plan. The Department will be responsible for monitoring. Any additional formal consultation shall be through the Department.*

- 22) The underwater sound management plan will be submitted to the Service for review at least 60 days prior to the onset of construction. The plan will provide the final design for pile size, installation method, and timing for pile installation. This will include the measures proposed to mitigate underwater noise such as bubble curtains, temporary noise attenuation piles, air filled fabric barriers, isolated piles or cofferdams, or double-walled piles. [Biological Opinion, Reasonable and Prudent Measure 2.2] *This commitment to be completed by the Design-Build Firm.*
- 23) In-situ hydroacoustic sound monitoring of pile driving will be done during test piling to accurately determine sound levels based on materials, equipment, substrate, and method of pile installation. This assessment will be done on a representative sample of test piles located proximate to the project site, in an area most conducive to sound production, and at 10 meters from the pile. Any change in pile materials and/or installation methodology will require a re-assessment of sound levels. The acoustic monitoring results will be provided to the Service for review. [Biological Opinion, Reasonable and Prudent Measure 2.3] *Acoustic Monitoring to be provided by the Department.*
- 24) The study area will be routinely monitored *by the Department* for the presence of stunned, injured, or dead sturgeons (indicators of take). A plan will be developed to establish the methods, frequency, and reporting requirements for monitoring. The monitoring plan will be coordinated and approved by the Service prior to construction. [Biological Opinion, Reasonable and Prudent Measure 2.4] *This commitment to be completed by the Department.*
- 25) When engineering limits do not require impact driving, piles shall be advanced by vibration, oscillation, rotation, or pressing. [Biological Opinion, Reasonable and Prudent Measure 2.5] A ramp-up procedure is required each day for pile driving operations to give animals an opportunity to leave the area as noise levels increase. *This commitment to be completed by the Design-Build Firm.*
- 26) New technologies to better mitigate underwater sound levels from pile driving will be considered during the design. Specifically, consideration should be given to breakthrough approaches, such as doublewalled piles or mandrel-driven double-walled piles, as an alternative to using less-effective bubble curtains. [Biological Opinion, Reasonable and Prudent Measure 2.6] *This commitment to be completed by the Design-Build Firm.*
- 27) Upon locating a dead, injured, or sick individual of an endangered or threatened species, *the Design-Build Firm shall notify the Fish and Wildlife Service Law Enforcement Office, Groveland, Florida at (352) 429-1037 within 24 hours. The Design Build Firm will provide additional notification to the Fish and Wildlife Service's Field Office at Panama City,*

Florida at (850) 769-0552 within 48 hours. Care should be taken by the Design-Build Firm in coordination with the CEI, in handling sick or injured individuals and in the preservation of specimens in the best possible state for later analysis of cause of death or injury. [Biological Opinion, Reasonable and Prudent Measure 3.1]

- 28) A report describing the actions taken to implement the terms and conditions of this incidental take statement shall be submitted to the Project Leader, U.S. Fish and Wildlife Service, 1601 Balboa Avenue, Panama City, Florida, 32405, within 60 days of the completion of construction. This report shall include the dates of work, assessment and actions taken to address impacts to the Gulf Sturgeon, if they occurred. [Biological Opinion, Reasonable and Prudent Measure 3.2] *This commitment to be completed by the Department.*
- 29) *The Design Build-Firm shall coordinate* with the FWS and FWC during the bridge design phase to incorporate lighting which meets both traffic safety needs and enhanced protection for sea turtles. If permanent exterior light fixtures associated with the bridge will be used during marine turtle nesting season (May 1 – October 31), all fixtures should minimize light contribution to urban sky glow which could be visible from the marine turtle nesting beach. Possible recommendations may include the use of downward directed, full-cutoff, well-shielded fixtures with low pressure sodium or warm white ( $\leq 3000\text{K}$ ) light-emitting diode (LED) lamps that allow no emission of light above the horizontal plane of the fixture.
- 30) Contractor shall follow the Florida Fish and Wildlife Conservation Commission's Manatee and Sea Turtle Construction Conditions for In-Water Work Associated with Florida Department of Transportation Projects, [2012].
- 31) Under statute 581.185, the Florida Fish and Wildlife Conservation Commission (FWC), FDACS and Endangered Plant Advisory Council will be notified that FDOT as owner is allowing for salvaging by others of the state-listed Cruise's and Godfrey's goldenaster prior to construction in accordance with state law (Chapter 581.185, Florida Statutes). *This commitment to be completed by the Department. The Design-Build Firm shall provide access for salvage authorized by the Department*
- 32) Submerged Aquatic Vegetation and Essential Fish Habitat mitigation will be developed as part of the permitting process which will be completed in the design phase of the project. When final seagrass and salt marsh impacts are determined, compensatory mitigation for those impacts shall be reviewed and approved by NMFS in order to complete the NMFS Essential Fish Habitat consultation. Follow-up coordination was completed with NMFS on October 24, 2017 regarding mitigation for SAV. Impacts to SAV are anticipated to be minimal (approximately 200-sf). NMFS expressed a willingness to coordinate with the NFWFMD to incorporate SAV impact mitigation into the overall wetland mitigation strategy. In addition, the National Park Service Gulf Islands National Seashore (GUIS) Superintendent requested on November 27, 2018: If submerged aquatic vegetation (SAV) impacts or proposed mitigation change or are to occur within park waters, GUIS requests additional coordination and document review. *The Department will handle the Mitigation for wetland impacts shown in Concept Plans. Additional impacts created by modification to the Concept Plans shall be handled as defined within the RFP.*
- 33) Stormwater and drainage plans shall be reviewed and approved by NMFS and FWS to assess water quality impacts due to stormwater coming off of the new bridges (whether

that compensatory mitigation is on-site or off-site). *Coordination and plan submittal by Design-Build Firm.*

- 34) Bridge construction and demolition will require the use of barges and potentially a temporary work trestle. All practicable efforts will be made to avoid barge spudding and temporary work trestle placement over seagrass beds. *The Design-Build Firm will explore ways to avoid and minimize impacts to the maximum extent practicable during final design and permitting through FDEP and USACE. Note to Design-Build Firm: Permits applicable to this commitment are the FDEP ERP and State 404 Permits.*
- 35) The horizontal navigational clearance (clear space between the fendering systems) shall be increased to 150-ft.
- 36) Vertical air draft shall be raised to 65-ft above the MHW elevation to be consistent with Gulf Intracoastal Waterway (GIWW) recommendations.
- 37) A Waterways Management Plan is required to define maintenance of vessel traffic on the Gulf Intracoastal Waterway (GIWW) during construction and demolition. *The Design-Build Firm is responsible for development and implementation of the plan.*
- 38) An archeologist is required to monitor the Alconese Site (8OK00780) and the O'Neal Site (8OK01780) during earth disturbing activities. The Alconese Site is located to the east of Brooks Street from STA. 140+20 to STA. 143+20 and north of US 98 from STA. 112+00 to STA. 114+60. The O'Neal Site is located to the south of Brooks Street from STA. 130+00 to STA. 135+80. The archeologist will be provided by the CEI and will be responsible for stopping work on-site if artifacts or remains are exposed. The Cultural Resource Coordinator will be notified at the DEMO office if work is stopped. The archeologist will provide a monitoring report at the completion of the project to the Cultural Resource Coordinator.

Contamination assessments have been completed for asbestos and paint coatings on the existing bridge. The reports are included as Attachments in this RFP. The Design-Build Firm is responsible for reviewing the results of these reports and complying with the recommended actions. Mercury and/or PCBs may be present in the existing light bulbs and/or light ballasts. Sampling and testing of these items will be conducted by the Department when the Design-Build Firm begins removing the lighting. The Design-Build Firm is responsible for coordinating with the District Contamination Impacts Coordinator to scheduling the sampling activities. This coordination shall begin at a minimum one (1) month prior to removing the existing lighting.

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

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

A Conceptual Signing and Pavement Marking Plan has been provided by the Department (Reference Document - Concept Plans) identifying sign locations and legends within the Project limits. No structural analysis was performed for the Conceptual Signing Plan.

The Design-Build Firm shall be responsible for the design of all new sign supports (posts, overhead span, overhead cantilever, bridge mount, concrete barrier wall mounted, 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.

The regulatory, warning and roundabout signing shall not encroach into the shoulder space. No part of the assembly (sign panel or mount) shall encroach into the required vertical and horizontal clearances of the respective travel and shoulder areas.

Advance street name signs shall be provided for all approaches to the signalized intersections in conformance with the Traffic Engineering Manual.

All approaches to the roundabouts shall include the signing as required in the MUTCD. Sign cross sections are required for all new guide sign assemblies (overhead truss, single column bridge barrier wall, multi-column roadside ground mounts).

~~The Design-Build Firm shall include the design and construction of an overhead cantilever sign structure on US 98 eastbound supporting a flashing beacon warning sign alerting the motorists of the occasional formation of queuing created by the traffic signal at the intersection of US 98 and Eastbound Connection. This sign shall be hardwired to the signal controller for activation. Additional vehicular queue detection using induction loops shall be provided on US 98 eastbound travel lanes at the location determined by the Design-Build Firm. The overhead cantilever sign shall be located to provide sufficient warning distance and time equal to the stopping sight distance.~~

Special emphasis crosswalks shall be provided at the roundabouts, and at signalized intersections. Crosswalks shall be 10-feet wide and stripes shall be positioned so they are parallel to the wheel path.

All existing signing (including regulatory, warning, guide, or other) within the Project Limits, or as affected by the Project, must be similarly maintained in accordance with MUTCD requirements. Any signs that conflict with traffic patterns shall be covered with an opaque material until such a time where the signs are no longer in conflict with the traffic patterns.

The following signage must be retained during all phases of construction, in the general location that it was in prior to the initiation of construction:

- 511 signing
- Emergency management (hurricane) shelter and hurricane evacuation signing

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 provide a lighting design and a lighting analysis, and prepare lighting plans in accordance with Department criteria.

The Design-Build Firm shall develop and submit for approval, the Lighting Control Panel Board comprised of Main Circuit Breaker, Branch Circuit Breaker /Pole Number identification plan that is compatible with the existing lighting systems maintenance identification scheme for each light control center.

The roadway lighting design shall follow the Lighting Design Criteria outlined in the FDOT Design Manual. The intersection lighting and the proposed roundabout lighting shall follow the FDOT Design Manual.

Where existing roadway lighting system had been installed by the local power company, the Design-Build Firm shall coordinate with the power company for the removal of the existing overhead power fed lighting system when providing the permanent lighting.

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

1. Provide new lighting control center per current National Electrical Code (NEC) 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, pull boxes, etc. This review also includes circuits outside the limits of lighting construction that originate or touch this Project's scope of work, and include the electrical loads in the design of the proposed new lighting control centers in this project limits.

All deficiencies within the limits of lighting construction shall be identified and corrected. Any deficiencies outside the limits of lighting construction shall be brought to the attention of the Department. 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 final locations of distribution transformers and service poles to minimize service and branch circuit conductors and conduit lengths. Preliminary electrical service locations shall be coordinated with the local power company, and power service information and letter of available fault current (Kilo Amp Interrupting Current, KAIC rating) at the location where local power company will be supplying the power service shall be obtained and be submitted as part of the PDAR and be included in LDAR. 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 deliverables, etc. It is the Design-build Firm's responsibility to verify and comply with all jurisdictional authority's requirements with respect to the power service points. The

Design-Build Firm shall provide separate meter, safety disconnect, and service poles for each maintenance jurisdiction.

Lighting installed by the Design-Build Firm shall be of the full cut-off type, with shields and gooseneck arms provided with a LED lamp, and comply with the Commitments.

The conduit for lighting shall not be used for other purposes such as ITS. The Design-Build Firm shall provide a conduit run consistent with National Electric Code within the bridge parapets on bridge to accommodate lighting conductors. No overhead conductors will be allowed for the final lighting system. Lighting pull boxes will not be permitted in paved roadways. No pull boxes are permitted within the designated roadway shoulder, paved or unpaved. No surface mounted conduits shall be placed on the visible exterior surfaces of any structure. Surface mounted lighting or ITS conduits on bridge between interior beam bays and along the piers are not allowed.

The Design-Build Firm shall design and construct the underdeck lighting for the portions of the project where US 98 is elevated at Santa Rosa Blvd. and at Brooks Street.

### **Navigational Lighting Requirements**

Navigational Lighting for the Channel Margin Navigation Lights shall be designed for use as a marine signal light for marking channel margin, per U.S. Coast Guard Bridge Administration General Construction Requirements, CFR 33 Part 118. The housing shall be in compliance with the FDOT Standard Specifications for Road and Bridge Construction Section 510.

All clearance gauges must indicate the vertical distance between **"low-steel" low member** of the bridge channel span and the level of the water, measured to the bottom of the foot marks, read from top to bottom. Each gauge must be installed on the end of the right channel pier or pier protection structure facing approaching vessels and extend to a reasonable height above high water so as to be meaningful to the viewer.

The Design-Build Firm shall design, furnish and install a new navigational lighting system to replace existing navigational red lights and new gauge lights on the side of the fender system and the center channel navigational green light on the side of the bridges with a complete new navigational lighting system including but not limited to LED navigational lights, power source, service point/load center, raceway system and conductors. The Design-Build Firm shall provide for complete fender system and clearance gauge lighting detail as required per U.S. Coast Guard permit.

Design shall provide ready access for lamp service.

Lens section shall be 180 degrees red. Lamp shall be 120 VAC, medium base LED with a rated life of 100,000 hours (over 11 years of operation when burned 24 hours per day), and shock and vibration resistant.

Overall luminosity of the LED array shall be 840 candelas for both red and green arrays (similar visibility to a 75W incandescent lamp). Beam viewing angle shall be 22 degrees for red and 20 degrees for green.

Lamp color shall match the color of the fixture lens for maximum light output. Red LEDs shall have a wavelength of 630 nm. Green ("marine" green or blue-green) LEDs shall have a wavelength of 510-515 nm.

Lamp mounting shall center the array on the focal plane of the lens. Receptacles shall be mounted on a bracket, which shall be isolated from the navigation light fixture with rubber grommets to minimize shock and vibration. Mounting bracket shall position the center of the lamp at the focal plane of the fixture lens for optimal light transmission.

A manual locking device shall hold the light securely in normal operating and service positions and shall be capable of accepting a padlock.

A cast junction box with gasketed access cover shall be provided where specified in the plans. Junction box shall be of the same material as the fixture assembly and shall match the navigation light base footprint. Orientation of junction box shall be capable of rotation in 90-degree increments.

The Center Channel Navigation Lights shall be designed for use as marine signal lights for marking center of channel, per U.S. Coast Guard Bridge Administration General Construction Requirements and be similar to the Channel Margin Lights described above except that the lens section is 360 degrees green.

The navigational lighting will be maintained by the Department upon final acceptance.

The utilization of solar power for the navigational lighting system is not allowed.

The Design-Build Firm shall be responsible ~~to for maintaining the existing navigational lighting system until the new system is operational and~~ demolish and dispose of the existing navigational lighting system. ~~and maintaining the existing navigational lighting system until the new system is operational.~~

## **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.

All signal heads shall be mounted horizontally. ~~Internally illuminated street name signs with LED source of lighting shall be provided for all approaches of the signalized intersections. All mast arm poles shall be painted using the Federal Color Code currently established by the Okaloosa County.~~

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:

- Project Layout / Overview sheets outlying the locations of field elements
- Communication Overview outlying the begin and termination of the fiber optic communication cables, proposed splice and pull boxes, local hubs, and devices on the straight line diagram.
- Detail sheets on:
  - CCTV structure, CCTV attachment, CCTV operation/layout
  - Road Weather Information System (RWIS)
  - Fiber optic splice and conduit
  - Power Service Distribution
  - Wiring and connection details

- Conduit, pull box, and vault installation
- Directional Bore Details
- Overall Power Service Distribution diagram
- Device and Facility Access Plans For All Stage Of Construction and As-Built Condition
- 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

Anticipated CCTV cameras and RWIS for the Bridge area:

ITS Devices	Approximate Location	Direction	Notes
CCTV Cameras	Both sides of the bridge approach and departures including bridge proper coverage	Both Directions	Fiber Optic-based communication and connection to Okaloosa TOC
RWIS	<u>Mounted on the bridge structure or on <del>On</del></u> one side of the bridge where weather and visibility information can be detected	Suitable Location to be determined <u>by the Design-Build Firm</u> and approved by the DEPARTMENT	Fiber Optic-based communication and connection to Okaloosa TOC and FDOT Chipley RTMC

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.

Mounting, or integrating of ITS, traffic and signalization components to existing or new light poles, lighting structures, sign structures, etc. will not be allowed. Do not mix underground, traffic railing conduits for ITS, signalization and lighting infrastructure. The Design-Build Firm shall design and implement the Project to keep the Department’s standard Traffic Signal Maintenance and Compensation Agreement in good standing.

At a minimum, the signal work in this project shall consist of the following major components:



- The Design-Build Firm shall design, furnish, install, integrate and test traffic signals, detection and proposed CCTV cameras.
- The Design-Build Firm shall prepare Signalization Plans in accordance with all applicable standards and Department criteria. In addition, the Design-Build Firm shall incorporate all aspects of the District 3 Signalization General Notes that can be obtained from the District Design Office.
- The Design-Build Firm is required to provide all data collection and analysis for the signalized intersection designs and any specific maintenance of traffic needs.
- Temporary signal(s) shall be designed, installed and maintained at the Design-Build Firm's discretion and as directed by the Department anytime during the course of the project.
- Detection at existing, and temporary signals shall be established and maintained by the Design-Build Firm throughout the duration of the project with no lapse in operation of the detection greater than District 3 TSM&O manager and/or Okaloosa County Traffic Engineer approved hours. Temporary detection shall be accomplished by use of rigidly mounted video, microwave, and/or induction loops at the Design-Build Firm's discretion.
- Timing and phasing plans shall be developed and maintained by the Design-Build Firm for maintenance of traffic throughout the duration of the project in consideration of prevailing traffic conditions. It is anticipated that multiple timing plans will need to operate on a time-of-day basis to accommodate differing traffic conditions during AM peak, PM peak, off-peak, night-time, and weekend periods. In addition to interim timing plans developed and maintained during the construction operation, the Design-Build Firm shall establish a permanent set of timing plans, time-of-day settings, and day-of-week settings that are to remain in the traffic signal equipment at the conclusion of the construction project. The permanent timings discussed above are to be summarized and documented in a signed and sealed report to the department for review and approval.
- All traffic signal controllers provided shall be advance traffic controllers inside advance traffic controller cabinets at each intersection. The traffic control cabinet associated peripheral equipment, and electrical power service assembly shall be strategically located in a protected area not vulnerable to damage by vehicular impact. Install Ethernet-based Blue TOAD at each signalized intersection collocated on the proposed mast arm upright and connected to traffic signal controller.

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

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

- Replacement of any ITS System components that are impacted by the Design-Build Firm's scope of work as approved by the Department. All equipment shall be new unless otherwise specified.
- CCTV – Includes concrete poles, camera lowering devices and mountings to provide 100% CCTV coverage of the project corridor.
- RWIS shall include ~~the level concrete pad for the entire system inside a type B fence enclosure. It shall include~~ the power service, communication splice box, electrical pull box,

concrete strain pole to support the RWIS components, RPU enclosure, ITS cabinet, atmospheric sensor, WIVIS sensor, wind speed and direction sensor, grounding, UPS, RPMU, AC Power, RWIS power supply, and it shall support all Object Identifiers (OIDs) defined by the NTCIP Standard for the RWIS, SNMP framework, Ultra Mobile Technology (UMB) sensor data over Internet Protocol (IP), as well as USB and Ethernet interfaces, attachment brackets, system-wide surge protection devices for a full autonomous RWIS assembly. The RWIS can be located on the ground or mounted on the bridge. If on the ground, the RWIS shall be located at a suitable site within FDOT right-of-way adjacent to Santa Rosa Sound. The RWIS site shall be in a suitable spot without any trees, structure, or other objects that could disrupt the functionality of the system, and include a level concrete pad inside a Type B fence enclosure. If located on the bridge, the pole, sensors and pull boxes must be installed at a dedicated location not shared with other systems such as CCTV or lighting, mounted on a bridge CIP pedestal constructed and incorporate a galvanized steel maintenance platform. The maintenance platform shall be of sufficient size to allow access on three sides of the RWIS system with minimum clear space of 3 ft on each side, and include a handrail on all three sides. The location of the RWIS and design of the maintenance platform is subject to approval by the DEPARTMENT.

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- Removal of any ITS System components that are impacted by the Design-Build Firms scope of work as approved by the Department.
- Testing of fiber optic backbone and lateral drops furnished and or installed or modified by the Design-Build Firm.
- End-to-End Testing of the installed Intelligent Transportation System.

The Design-Build Firm shall coordinate 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.

### **Smart Work Zone (SWZ)**

The Design-Build firm shall design, construct, operate, and maintain a smart work zone (SWZ) during all phases of construction requiring lane closures, lane shifts, or diversions. The SWZ shall include CCTV cameras with Pan-Tilt-Zoom (PTZ) at critical locations to monitor the project construction impacts on traffic conditions. The SWZ may use Portable or trailer mounted devices that can be easily adjusted and relocated to improve monitoring. Monitoring will be by the DEPARTMENT at the RTMC in Chipley. The SWZ system shall be integrated with Design-Build Firms Temporary Traffic Control Plans.

The Design-Build Firm shall adjust the CCTV camera locations as needed to maintain full coverage during all phases of construction. The Design-Build Firm shall give the Department the opportunity to review and approve camera placement locations during each phase or construction to achieve desired outcomes. The SWZ systems shall be designed to stream video remotely to the D3 Regional TMC through an internet interface. The cameras shall use wireless communications, such as cellular or wireless broadband. The camera mounting system shall be capable of raising the camera to at least 30 feet above the roadway. When portable CCTV cameras are used, the portable CCTV shall be solar powered and provide sufficient battery backup to ensure continuous operation.

**SWZ Wireless Communications System:** The Design-Build Firm shall provide a wireless communication system for each SWZ component. The Design-Build Firm is responsible to design and provide adequate communications to meet the bandwidth, latency, and reliability requirements of each SWZ device and provide SWZ cloud based Commercial Off The Shelf (COTS) software. Both cellular communications and wireless broadband are acceptable solutions. Wireless broadband shall be designed for optimum line of sight. The Design-Build Firm may provide independent communications to each device or provide communications from each device to a central communications point.

**SWZ cloud-based COTS software:** The Design-Build Firm shall provide a turnkey cloud-based, COTS software solution to operate and maintain the SWZ system. The software shall include the following functionality:

- Monitor and control all SWZ field devices (CCTV Cameras)
- Provide a secure web portal to the D-3 RTMC in Chipley and feed data to SunGuide®, Florida 511, Google, and Waze. The web portal and data feeds shall, as a minimum, provide data about current SWZ locations, current time-stamped work zone speed limits, current work zone operating conditions, current traffic volumes approaching and through the work zone, and locations of delays or queues within the work zone. Data format shall meet FDOT SunGuide®, FDOT FL511, Google and Waze format requirements.

### **ITS Analysis**

The Design-Build Firm shall review the approved preliminary engineering report, typical section package, as-built plans of the constructed projects in the vicinity of this project, traffic technical memorandum, and proposed geometric design alignment to identify impacts to the proposed ITS field device placements. The Design-Build Firm shall review all related District ITS plans and documentation for the project corridor to ensure all cited ITS elements are included in this project.

The Design-Build Firm shall prepare a PSEMP, RTVM, and other documents as determined necessary for conformance with FHWA requirements. The Design-Build Firm shall use all applicable DEPARTMENT requirements and guidelines, including, but not limited to, the FDM, Standard Plans, and Standard Specifications for Road and Bridge Construction in the design of ITS.

The initial RTVM shall be submitted to the Department for review and approval no later than 30 calendar days after the approval of the PSEMP. At a minimum, the PSEMP and RTVM shall be reviewed every major milestone (such as phase submittals and/or with an equipment/device type change) after the initial approval and updated, as needed. The updated and revised PSEMP and RTVM documents shall be submitted to the Department for review and approval.

### **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. The Design-Build Firm shall provide a detailed plan of action, which discusses the process for integrating the new devices into the existing Okaloosa County Traffic Operations Center (TOC).

The Design-Build Firm shall coordinate all integration activities with the Department prior to commencement of any integration activities. Okaloosa County TOC is a secured facility and access to it shall be scheduled at least one week in advance with the County Traffic Operations Manager. All integration within the TOC shall be scheduled at times other than during the normal weekday peak traffic hours (7:00 am to 9:00 am, and 3:30 pm to 7:00 pm).

Remote VPN access shall not be provided to the Design-Build Firm to access the ITS network of the Okaloosa County. The County Traffic Operations Manager, or his designated representative, will perform the Okaloosa County TOC existing infrastructure integration tasks to proposed signalization and ITS infrastructure in the Okaloosa County TOC with the guidance and coordination support of the Design-Build Firm, as necessary. Integration and testing of all proposed field Signalization and ITS infrastructure shall be performed by the Design-Build Firm.

The Design-Build Firm shall provide to the County Traffic Operations Manager all necessary information and data to facilitate subsystem configuration and integration activities.

The Design-Build Firm shall incorporate the as-built CADD plans for all existing and new underground utilities installed under this Project, including but not limited to, FOC, splices schematics, pull boxes, splice boxes, power service and cables, and underground conduit system, in an electronic format that shall be 100 percent compatible with Department's ITSFM forms. The Design-Build Firm shall prepare ITSFM data entry worksheets for each ITS field installation as required by the Department.

The Design-Build Firm shall be responsible for the integration and testing of all signalization and ITS infrastructure and communications subsystems. Once the Design-Build Firm has installed and supplied the power and communications interconnect to each ITS device as stated in the plans and specifications and approved by the Department/CEI, the Design-Build Firm shall integrate each device into the existing passive communications network. The Design-Build Firm shall coordinate with the Department Project Manager and/or Operations Manager a schedule of installation and integration. Once the Design-Build Firm has completed the installation of fiber plant and devices and receives acknowledgement acceptance by the Department's construction services that each device proposed in the field is installed, properly connected, and completely equipped for field integration activity, the Design-Build Firm shall then field integrate the ITS devices/cabinets in accordance with the approved schedule. The Design-Build Firm shall verify that all ITS devices are in the correct locations and are functioning properly at each location at the time of installation and integration.

- The Design-Build Firm shall verify communications between all ITS devices as designed, between each ITS device location, and between all communications hubs and the Okaloosa County TOC. The Design-Build Firm shall install and integrate all active Layer 2 communications components and Layer 2 communications equipment in all communications hubs. This shall include, but be not limited to, field switches, device servers, Uninterruptible Power Supply (UPS), remote power management devices, and all cables and connectors necessary for the successful operation of the communications system. Excluded is modification of any existing or new Core Switches/Routers operating at Layer 3 Core Switches. Such devices shall be configured by the Department or Okaloosa County TOC .
- The Design-Build Firm shall provide a Field Integration Checklist indicating that all integration tasks have been completed and are documented.
- The Design-Build Firm shall provide all equipment, parts, and configuration data necessary to integrate the ITS with the Okaloosa County TOC.
- The Design-Build Firm shall provide complete and comprehensive documentation of all elements of this Project as specified in this RFP.

The project ITS field devices are to be operated from the Okaloosa County TOC. The Design-Build Firm shall integrate the individual ITS field elements (i.e., CCTV cameras, H.264 decoders, and Ethernet

communication devices) with the respective vendor-provided subsystem software such that each of the subsystems shall be operated as a stand-alone system. This configuration will form the basis for Part 1 of the Subsystem Tests.

Once Part 1 of the Subsystem Tests are completed and the results are approved by the Department, the Design-Build Firm shall provide all integration and configuration data and settings so the Okaloosa County TOC can integrate the ITS field elements into the existing Core Layer 3 Ethernet Switches.

As soon as possible, after completion of Part 1 of the Subsystem Tests, the Design-Build Firm shall provide to the Okaloosa County TOC Manager all necessary information and data to facilitate the Okaloosa County TOC configuration and integration activities. The Okaloosa County TOC completes Core Layer 3 Ethernet Switch and integration and configuration within 14 calendar days of receipt of the configuration and integration data and related information from the Design-Build Firm. After Okaloosa County TOC integration is completed, the Design-Build Firm shall conduct remaining Part 2 of the Subsystem Tests.

Prior to the Final Acceptance, the Design-Build Firm shall demonstrate to the Department that all of the equipment specified in the RFP that was installed and configured by the Design-Build Firm flawlessly operates from the Okaloosa County client workstation located at the TOC.

The integration of the various subsystems with the Okaloosa County ATMS software will shall be performed by the responsibility of the Department and the Okaloosa County Department of Public Works with guidance, coordination, and support of the Design-Build Firm. The Design-Build Firm shall coordinate with the TOC and provide the following services:

1. Conduct a site survey to prepare the creation of the system database, configuration files, system graphics, and other preparatory work for the integration of the Okaloosa County ATMS software .
2. Troubleshoot any Design-Build Firm-installed field hardware issues that affect the integration work.
3. Furnish and install the field hardware and software required to operate with the Okaloosa County ATMS software.
4. Provide ITS field device information, such as equipment configuration diagrams, IP addresses, protocols, and documentation (e.g., users' manual, troubleshooting guide, etc.).
5. Configure the ITS field devices for integration with the Okaloosa County ATMS software, including link, intersection, and device configurations.
6. Provide post-installation services after testing the Okaloosa County ATMS . The services shall include providing documentation to allow the Okaloosa County TOC personnel to perform ATMS integration tasks, including but not limited to, populating the tables and creating map links.
7. Meet with the Department to validate all required documents.

All of the licenses for the products shall be transferred to the Department and Okaloosa County TOC . The installation media for the above products shall be provided and shall become the property of the Department after installation.

#### **4. Material, Equipment, and Subsystem Requirements**

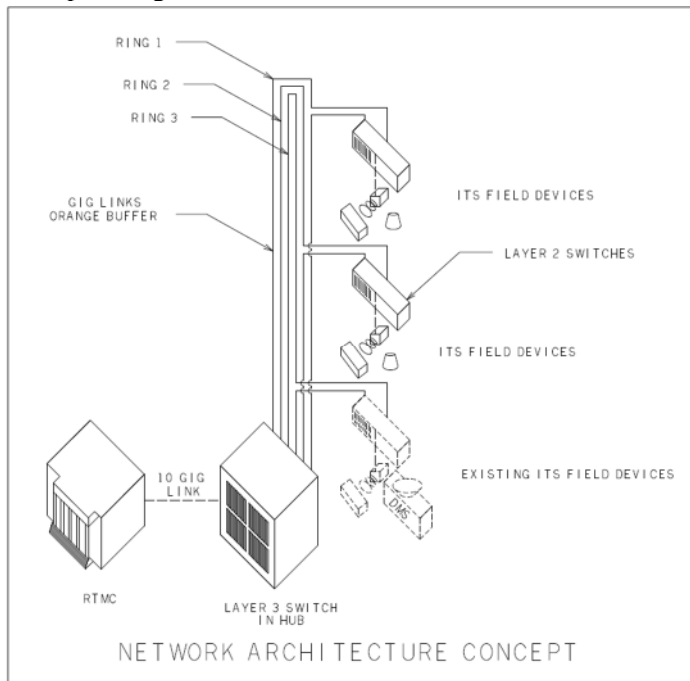
##### **a. Communication Subsystems**

For purposes of the RFP, the term “connectivity” refers to the physical connection between the ITS field devices and the Layer 2 Ethernet switches in the ITS cabinets. The term “interconnectivity” refers to the connection between any two adjacent hubs and the TOC. The Design-Build Firm shall provide full connectivity for ITS field elements installed with the Project.

The Design-Build Firm shall provide a communication subsystem that is an open-architecture, non-proprietary, real-time multimedia communication network, which is fault-tolerant. The Design-Build Firm shall design a hierarchical network design, which includes the following layers:

- The interconnectivity layer: comprised of the Layer 3 Ethernet switches in the TOC and local communication hubs. The Okaloosa County Traffic Operations personnel will perform configuration of these Layer 3 Ethernet switches.
- The connectivity layer: the local-access layer that connects ITS field devices, Layer 2 Ethernet switches, and all necessary encoders, media converters, and device servers in the ITS cabinets.
- The FOC physical layer: the physical media that connects the Layer 2 and Layer 3 Ethernet switches.

The Design-Build Firm shall integrate the ITS field elements into the TOC without disrupting existing functions and ITS field elements. New ITS cabinets and ITS field elements shall be integrated into this network. The Design-Build Firm shall develop and deploy new connectivity 1 gbps Layer 2 MFES in all new ITS cabinets, and traffic signal controller cabinets. The Design-Build Firm shall design and implement a “leap-frog” network architecture such that no adjacent ITS field elements are in the same fiber pair ring as shown in the Network Architecture Concept layout below.



The Design-Build Firm shall work closely with the Okaloosa County Traffic Operations personnel to confirm the network architecture concept. The final network architecture, along with the associated FOC splicing diagrams, shall be included with the 90% plans for review and approval by the Department.

All new underground and directional bored communications conduit shall be HDPE SDR 11 rated or thicker and smooth wall interior. A spare conduit shall be provided for each newly installed conduit. There shall be a separate spare conduit each for communication and power. Open trench and bored communication

conduit consist of a two 4” gray outer duct (includes communication and a spare), each with one 1 ¼” white innerduct, one 1 ¼” orange innerduct, and one 1” gray innerduct. Install locate wire inside the outer duct, but outside the innerducts. Open trench and bored power conduit consist of two 2- inch gray conduit (includes power and a spare). Every drop or laterals, new conduit runs shall have two 2-inch conduit runs. All conduits shall have “jet-line” or equal pull string installed in each spare conduit run for future use to support the field-to-center connectivity of the signalized intersection Advance Traffic Controllers. Each bridge railing shall include separate 2” Schedule 80 conduit runs. for ITS electrical power, ITS communication, and lighting electrical power.

**b. IP Addressing Scheme**

The Design-Build Firm shall utilize the Okaloosa County Traffic Operations Standard IP Addressing Scheme to create a Project- specific list for all new/existing ITS field elements that are installed as part of the Project. The Department will provide the Design-Build Firm with as many multicast IP addresses required for the CCTV video streams and the remaining needs. The IP address file will be provided in Excel spreadsheet format.

The Design-Build Firm shall be required to submit for approval a current cabinet configuration document listing all IP addresses utilized in the Project in a format easily understood depicting, at a minimum, the following information:

- Page Number (from Plans)
- Mile Marker
- GPS coordinates
- Device Type
- IP Address, etc.

The Design-Build Firm shall not use any IP addressing scheme or IP addresses other than those provided by the Department through Okaloosa County. The Department and Okaloosa County TOC personnel shall review and approve the Design-Build Firm’s IP addressing scheme submittal prior to the Design-Build Firm’s implementation of the scheme.

The Design-Build Firm shall design and deploy multiple virtual local area networks (VLANs) to segment ITS field elements into logical workgroups. The Design-Build Firm shall ensure that the new ITS field elements are configured in new sets of VLANs. The design of VLANs shall take into consideration the optical network requirements described elsewhere in the RFP.

**c. Fiber Optic Cable**

The Design-Build Firm shall provide a 144-count single-mode FOC backbone. The FOC backbone should preferably be installed along the side of the main line and inside the bridge traffic railings. Any deviation to the FOC backbone location shall be approved by the Department. The Design-Build Firm shall tie to existing FOC backbone to ensure continuity.

The Design-Build Firm shall provide 12- 24 count single-mode FOC drops from the 144-count FOC backbone to ITS cabinets. Individual fibers shall be looped one full turn within the splice tray to avoid micro bending. Place buffer tubes and bare optical fibers such that there is no discernible tensile force placed upon them. There shall be only one buffer tube per splice tray. All splice trays shall be

~~deep trays and capable of closing without the use of tape or other adhesive devices. Fiber optic strands shall not enter more than one splice tray.~~

~~In no case shall the Design-Build Firm install FOC in the same conduit, pull box, or splice box as electrical cables.~~

~~Any request to access the existing ITS system including, but not limited to, fiber optic cable (hand holes and pull boxes), ITS equipment control cabinet(s), ITS power facilities, traffic signal cabinets, ITS specific equipment (CCTV), and/or the TOC will require a submitted and approved access schedule. This document shall identify access necessities, schedule expectation(s), specific ITS facilities to be accessed, and an action plan for potential failure. This document shall be submitted to the TOC Operations Manager 30 calendar days prior to system access.~~

**d. Fiber Optic Conduit and Locate System**

~~The Design-Build Firm shall provide a 96-count single-mode FOC backbone.~~ The FOC backbone should preferably be installed along the side of the main line and inside the bridge traffic railings. Any deviation to the FOC backbone location shall be approved by the Department. The Design-Build Firm shall tie to existing FOC backbone to ensure continuity.

~~The Design-Build Firm shall provide 12-count single-mode FOC drops from the 96-count FOC backbone to ITS cabinets.~~ Individual fibers shall be looped one full turn within the splice tray to avoid micro bending. Place buffer tubes and bare optical fibers such that there is no discernible tensile force placed upon them. There shall be only one buffer tube per splice tray. All splice trays shall be deep trays and capable of closing without the use of tape or other adhesive devices. Fiber optic strands shall not enter more than one splice tray.

In no case shall the Design-Build Firm install FOC in the same conduit, pull box, or splice box as electrical cables.

Any request to access the existing ITS system including, but not limited to, fiber optic cable (hand holes and pull boxes), ITS equipment control cabinet(s), ITS power facilities, traffic signal cabinets, ITS specific equipment (CCTV), and/or the TOC will require a submitted and approved access schedule. This document shall identify access necessities, schedule expectation(s), specific ITS facilities to be accessed, and an action plan for potential failure. This document shall be submitted to the TOC Operations Manager 30 calendar days prior to system access.

All ITS sites shall be accessible by a maintenance vehicle (typically a ¾ ton pickup truck).

The Design-Build Firm shall install directional bores perpendicular to the roadway when crossing another roadway. Where multiple conduits are required, the directional bore shall place all conduits into a single outer conduit appropriately sized to contain the required number and sizes of conduit.

**e. Managed Field-Hardened Ethernet Switches (MFES)**

Managed field-hardened Ethernet switches shall meet the requirements of the Specifications, or the following minimum technical requirements, depending upon which is more stringent.

The Design-Build Firm shall furnish and install new 1 Gbps Layer 2 MFES in all new ITS cabinets and traffic signal controller cabinets. The Design-Build Firm shall ensure the MFES has a minimum of 14 ports.



The Design-Build Firm shall ensure that the configurations of the MFES are able to be downloaded and stored on a PC and later shall be able to be uploaded to the unit when necessary.

The Design-Build Firm shall ensure that the configuration of the MFES meets or exceeds the following minimum trouble shooting and diagnostic specifications:

1. Displaying the contents of a specified address
2. Displaying information about hardware registers for a specified port
3. Displaying configuration and status of physical and logical ports
4. Displaying detailed information about Spanning Tree (configuration and status)
5. Displaying active status of the unit

The Design-Build Firm shall ensure that each MFES supports, at a minimum, have the following security features:

1. Passwords – Multi-level user passwords secure switch against unauthorized configuration
2. SSH / SSL – Extends capability of password protection to add encryption of passwords and data as they cross the network
3. Enable / Disable Ports – Capability to disable ports so that traffic cannot pass
4. 802.1q VLAN – Provides the ability to logically segregate traffic between predefined ports on switches
5. MAC Based Port Security – The ability to secure ports on a switch so only specific ITS field elements / MAC addresses can communicate through that port
6. 6802.1x Port Based Network Access Control – The ability to lock down ports on a switch so that only authorized clients can communicate via that port
7. RADIUS – Provides centralized password management
8. SNMPv3 – Encrypted authentication and access security

**f. CCTV Subsystem**

The Design-Build Firm shall design the placement of CCTV cameras as follows:

- Provide unobstructed view of both directions of travel on the new bridges including clear zones and on crossroads
- Full CCTV coverage of the project to ensure that all portions of the roadway including the clear zones can be observed at an angle sufficient to discriminate between vehicles, regardless of the distance between the CCTV and the vehicles
- All proposed CCTV cameras shall be high definition and IP addressable, Analog cameras will not be accepted
- CCTV poles and cameras shall not be installed on the bridge proper

The Design-Build Firm shall perform a 360 degree field of view video survey at the proposed camera height for each CCTV camera site utilizing a bucket truck and the Design-Build Firm's proposed camera. The intent of the video survey is to verify 100 percent CCTV coverage of the new bridges and travel lanes, auxiliary lanes, and crossroads. The Design-Build Firm shall record the video survey for the Engineer's review and acceptance.

Any additional CCTV cameras and field elements required to obtain the coverage requirements described above shall be included in the Design-Build Firm's ITS plans and furnished, installed, integrated, and tested at no additional cost to the Department.

The Design-Build Firm shall install camera lowering devices for the CCTV pole covering the new bridges. Any variation to this requirement will not be approved by the Department.

All CCTV camera poles will have 8' blunt tip air terminals with 4' exposed above and opposite the component to be protected. Supports for this air terminal shall be at the base of the air terminal and at the midpoint. Stainless steel straps shall not be used to mount the air terminal to the pole. The air terminal shall be mechanically bonded to the CCTV pole.

CCTV poles shall be constructed of length and stiffness that can meet the vertical placement and camera stability requirements and the following additional requirements:

1. All CCTV poles shall be located outside the clear zone as applicable mainline travel lanes or shielded in accordance with the FDM.
2. Electrical ground: All CCTV poles shall be supplied with an electrical ground meeting the requirements of the Specifications and Standard Plans.

The Camera Lowering Device (CLD) shall be mounted to a specially designed tenon bolted to the top of the pole as required. All poles shall have a minimum inside raceway dimension of four (4) inches at the tip of the pole. All poles shall be provided with a fish wire to facilitate cable installation.

The Design-Build Firm shall design-build the CCTV pole with CLD in such a manner that the personnel operating the CLD lowering mechanism are not standing directly beneath the CCTV assembly and the access to the CLDs is not obstructed in any manner. The lowering arm shall be mounted perpendicular to the roadway unless otherwise approved by the Department. The CCTV sites with CLD are only required at the bridge approach-departures.

The Design-Build Firm shall ensure the camera pole to include the opening for CLDs at 90 degrees from the CCTV camera. The design of the pole shall include the Hand-Hole Frame (HFF) and conduit entry holes for the ITS cabinet without any conflict with the CLD and the HFF. The Design-Build Firm shall submit the details of placement of CLD and CCTV camera assembly as part of the 90% design submittal for the Department's review and approval. The CLD shall include a suspension contact unit for electrically connecting the camera assembly to the power, data, and video cables; divided support arm; and a pole adapter for the assembly's attachment to a pole-top tenon, a pole top junction box, and a camera connection box. The CCTV camera viewing, and poles locations shall not be interfered with or obstructed by other devices or landscaping elements such as trees and shrubbery in the vicinity.

The Design-Build Firm shall also pay for any utility adjustments required for these CCTV field elements at no additional cost to the Department.

**g. Power Subsystem**

The Design-Build Firm shall establish the power service addresses and the necessary commercial electrical power service for all ITS sites. Once power service has been established by the Design-Build Firm, the Department or its designee will inspect the power service for compliance with Department, NFPA, and NEC standards, and all Contract Documents. The Design-Build Firm shall provide a signed and sealed

Power Design Analysis Report (PDAR) prepared by a licensed electrical engineer consist of electrical load calculations, voltage drop calculations for each ITS site or combination of sites, and include the service feeder size computations from the power company transformer to each local hub. The Design-Build Firm shall optimize the number of ITS cabinets for economy of construction and maintenance. The Design-Build Firm shall design and install electrical service, meters, conduit, pull boxes, copper conductors, and procure service points from the local power service providers within the project limits to make installation fully functional. All electrical distribution shall be underground, and isolated from the communication network.

In addition, the Design-Build Firm shall apply the following criteria to the design of the power service:

1. Aluminum wound electrical products shall not be installed.
2. All elements shall be new and free of damage.

Electrical power design and plans shall include the following:

1. Electric service panel in the cabinet, based on electrical load of the cabinet and an additional 20A circuit and receptacles shall be provided for miscellaneous electrical loads
2. Electrical power shall be designed based on the load requirements of the ITS field element(s), cabinet, network equipment, UPS, and other miscellaneous electrical equipment at each ITS field element location
3. Step-up or step-down transformers as needed for each location
4. Loads shall be calculated per NEC requirements and maximum 5% allowable voltage drop including the service feeder from the utility transformer
5. Grounding, lightning, and surge protection for all electrical subsystems
6. Plans shall clearly show all electrical ratings requirements, loads, wire sizes, grounding, lightning, surge protection, meters, disconnects, generator plugs, and all elements necessary for a complete and functional design
7. Final electrical plans signed and sealed by a Professional Electrical Engineer licensed with the State of Florida Board of Professional Engineers
8. All electrical cabling shall be new copper cabling. The Design-Build Firm shall use cables that are resistant to saltwater, suitable for direct burial, and spliced with submergible rated splice kits

The Design-Build Firm shall be responsible for contacting and coordination with the local power companies along the Project corridor. The Design-Build Firm shall work with the local power companies to designate locations of electrical sources to provide new and adjusted electrical service as required for the Project.

The Design-Build Firm shall pay all necessary fees and expenses required by the commercial electrical companies to establish new electrical power and for adjustment of existing service. The Design-Build Firm shall work with the Department to establish billing addresses for each new power service location along with the responsible party for future bills. Along with other as-built documentation, the Design-Build Firm shall provide electrical calculations and other details of the implemented power service to the Department including the GPS location of each power source.

For each power distribution system, the Design-Build Firm shall also provide equipment to automatically assume and power the loads in the event of an interruption of commercial power to include emergency generator(s) with automatic start, ATS, transformers, cabinets, power panels, circuit breakers, and all related equipment. The Design-Build Firm shall be responsible for verifying these locations, determining final available power sources and voltages, coordinating with the local power companies, and paying any

and all connection and monthly service fees for the power supply until the project has been turned over to the Department on the written date of Final Acceptance.

All ancillary components shall be delivered along with the needed cables and connectors for power and generator/ATS communications. Power conduits shall have smooth walls and be sized adequately, as determined by the overall cable diameter and recommended percentage of fill of conduit area, per requirements in the latest NEC and the Specifications.

The power conductors shall be adequately sized per requirements in the latest NEC and the Specifications. Conductors shall be rated for underground installation in wet locations. The power system design shall include convenience outlets that may be used by the maintenance crew. Within each ITS equipment cabinet, at least two NEMA 5-15R type GFCI protected outdoor rated receptacles for use by maintenance personnel shall be provided.

Power cables shall be marked with 1 tag indicating direction or exit from underground facilities (i.e., vaults, primary junction boxes, service holes, manholes, secondary junction boxes, transformers). This tag shall indicate the general direction of the cable(s) to the next facility where the cable is located. The Department must approve the tags used before the procurement and installation. All tags shall be labeled with the next point of connection (i.e. transformer 1 to transformer 2). All equipment shall be numbered prior to placing the tags on the power cables.

The power subsystem shall contain readily accessible, manually resettable, or replaceable circuit protection devices (such as circuit breakers or fuses) for equipment and power source protection. Power equipment shall be installed in areas to avoid wet locations and easy access by vehicles and maintenance personnel. All connections and equipment should be outdoor-rated and protected from moisture and water intrusion. No exposed wiring is permitted.

Coordination of protection devices is required to minimize interruption of electrical service to other areas of the power system. The system shall be designed so that the protective device closest to the fault operates first.

All ancillary components shall be delivered along with the needed cables and connectors for power and communication. All installations and wiring shall meet the requirements of the NEC and NESC. Grounding shall be in accordance with the requirements of NEC Article 250 and the Specifications.

Remote Power Management Units (RPMU) – The Design-Build Firm shall provide RPMU for controlling multiple network devices and services. The RPM shall individually control AC power for up to eight connected devices. Once connected to the network, the RPMU shall provide access and control using a standard web browser and password. The Design-Build Firm shall supply remote power management in each cabinet servicing an ITS device within the project. The RPMU shall provide the following minimum functionalities:

1. Eight outlets;
2. Network connections via Ethernet;
3. Network control/support via HTTP server & SNMP agent TCP/IP;
4. Scheduled event control including day of week and specific time start-up and shutdown; and
5. Notifications including pagers and network broadcast messages.

## 1. Transformers

When the commercial power is not supplied with the correct voltage or phasing, the Design-Build Firm shall design, construct, install, and integrate the transformer (Power Feed Transformer) at each commercial power supply location to convert the power supply from the Utility Company (ies) to the appropriate secondary voltage single phase power and with suitable wire sizes that are capable of providing power to the operations of ITS field elements within the Project. The transformer shall be equipped with two 2.5 percent taps above and two 2.5 percent taps below normal voltage. All taps shall be full capacity taps. However, the Design-Build Firm shall not include the plus or minus tap in the voltage drop calculations during the design of the power subsystem. All transformers shall be copper wound.

The Design-Build Firm shall design, construct, install, and integrate the transformer (ITS field element Transformer) at each of the ITS field element location cabinets to step-down from the voltage supplied from the underground distribution wire to the 120/240v power requirement for that location, and neutral conductor from the primary winding shall not be bonded to the secondary winding for isolation purposes.

## 2. ITS Electrical Conduit, Pull and Junction (Splice) Boxes

Electrical conductors shall not be placed in the same conduit, pull box, or splice (junction) box as FOC. The Design-Build Firm shall furnish and install ITS electrical conduit and pull/splice boxes for non-fiber optic wiring needs (power, communication, etc., for ITS). The Design-Build Firm shall meet the following requirements.

1. Detail type, size and quantity of ITS electrical pull/splice boxes on the Plans.
2. Provide installation details including connections with conduit in compliance with the Specifications and Standard PlansStandards.
3. Address site restoration and disposal of excavated materials.
4. Use only equipment and components that meet the requirements of the RFP, which are listed on the Department's Approved Products List (APL).
5. ITS electrical pull/splice boxes shall meet the requirements of the Specifications.
6. ITS electrical pull/splice boxes shall be a minimum of 24 inches long by 18 inches wide by 12 inches deep. Ensure that the pull/splice box is large enough to house non-fiber cables, as required, without subjecting the cables to bend radii less than industry standards for the types and diameters of cables in the box. Ensure there is enough room to provide any necessary cable splicing. Ensure the boxes are large enough for storage of slack cable. Pull boxes shall not be located in ditches where there is a potential for them to be submerged by seasonal high-water.
7. The maximum spacing between ITS electrical pull boxes shall be in conformance with the N.E.C. associated with the size and number of conductors.  
The Design-Build Firm shall develop specifications in accordance with industry standards to address cable placement and spacing in accordance with industry recommendations for the types and sizes of cables used on the Project.
8. Provide supplemental electronic box markers in all ITS pull/splice boxes.
9. Provide locking and security systems on electrical ITS pull/splice boxes to prevent theft of copper cable. The security system shall include, at a minimum, a system for securing the lid that includes hardened metal bars or other cover and locks/bolts with unique keys that are not available in the consumer marketplace. Ten keys shall be provided for the maintenance personnel use. The keys shall be delivered to the Department upon Final Acceptance. The security system shall also include a 12-inch thick concrete mowing apron, supplemental security locking systems, and/or other systems designed and proven to deter theft. The

- Design-Build Firm shall submit the locking and security systems to the Department for review and approval with other required design submittals.
10. Mowing aprons shall be installed for all shoulder mounted pull and splice boxes.

### 3. **Uninterrupted Power Supply (UPS)**

The Design-Build Firm shall install a UPS at each device cabinet and traffic signal controller cabinet. Each UPS shall supply all electronic components housed in and associated with ITS field equipment cabinets with uninterrupted power for a minimum of four (4) hours in the event of power loss. Each UPS shall be sized according to the maximum expected load for each cabinet plus 50 additional Watts. The service outlets shall not be connected to the UPS.

The UPS shall provide commercial power pass through during all failures of UPS. The Design-Build Firm shall ensure that the UPS is generator compatible to ensure clean, uninterrupted power to protected equipment when generator power is used. The UPS shall be environmentally rated for the environment that the UPS is installed in. The recharging all of the UPS batteries which may be drained shall be included within the power design calculations.

The Design-Build Firm shall supply a SNMP network management interface to determine operational status of the UPS, the internal UPS temperature, and the external temperature as recorded by a remote sensor mounted elsewhere in the cabinet, and state of the cabinet door switch(es) (open or closed), and SPD failures (open or closed SPD alarm contacts). All UPS shall be designed and integrated to the ITS Ethernet network, such as: power loss, battery levels, and alarms. Any software required to monitor the UPSs shall be furnished, configured, and integrated into the TOC monitoring computer.

### 4. **Grounding, Lightning, and Surge Protection**

All Project systems shall be protected from damage caused by lightning strikes, transient voltage surges, and induced current. The Design-Build Firm shall design, install, and test all grounding, lightning protection, and Surge Protection Device (SPD) subsystems in accordance with the Specifications and Underwriters Lab (UL) 96A specifications.

The Design-Build Firm shall furnish and install resettable SPDs for all cables and conductors (power, video, and data). All Project subsystems, devices, and ancillary components with electrical interconnects shall be protected from voltage surges caused by lightning, transient voltage surges, induced current, and external electromagnetic fields at the time of installation of each device, as specified in the Specifications.

The Design-Build Firm shall provide a grounding system that meets the grounding requirements of the N.E.C. (latest edition) and the Specifications.

The Design-Build Firm shall provide a SPD both ahead of and behind (i.e., on the supply side and the load side of) all ITS device electronics. The SPD for the ITS device's power source (supply side) shall be rated at a minimum rating of 80 kiloamps (kA) per phase, or greater. The SPD for the ITS device's point of use (load side) shall be rated at minimum of 20 kiloamps (kA) per phase. The SPD on both sides shall have an operating voltage of 120 VAC single phase and a maximum continuous operating voltage of 150 VAC single phase.

The Design-Build Firm shall ensure that the required lightning protection equipment for each device pole is securely attached on the pole at an elevation higher than the highest attached ITS device and/or component described herein (e.g. CCTV cameras).

## 5. Device Protocol Compliance

For the ITS devices being installed, the Design-Build Firm shall ensure that the protocol used by those devices, which are to be controlled by the Okaloosa County ATMS software, is compliant with the protocols listed online at the following website to ensure compatibility for integration with ATMS software. The primary control center for all signal and ITS devices is at Okaloosa County Traffic Management Center.

### CCTV Camera Data Configuration Documentation Requirements:

Data	Description
Camera Name	The data identifies the unique name of each camera.
Center ID	The data identifies the unique name of the center where each camera resides.
Protocol	The data specifies the protocol (values: SNMP, SNMP [PMPP]) for each camera.
Poll Process	The data provides the name of the driver for each camera.
Manufacturer	The data identifies the manufacturer of each camera.
Location Description	The data describes where each camera resides.
Roadway	The data identifies the roadway where each camera resides.
Direction	The data identifies the direction of the roadway where each camera is installed.
Latitude	The data identifies the latitude where each camera resides.
Longitude	The data identifies the longitude where each camera resides.
Op Status	The data identifies the operational status (values: Active, Error, Failed, Out Of Service) of each camera.
Address Type1	The data identifies the address type (values: pmpp Address, comm Address) for each camera. If pmpp Address, then the camera uses SNMP (PMPP); if Comm Address, then the camera uses SNMP.
Address Type2	The data specifies the address type (value: portServerAddress) of Address Type 2.
Address	The data identifies the device address of each camera.
Port Server IP	The data identifies the IP address for the port server where each camera resides.
Port Server Port Number	The data identifies the port number for the port server where each camera resides.
Community Name	The data identifies the community name for each camera.
Attach to Video Device	If selected, additional IP video parameters must be supplied.

IP Video Data Documentation Requirements:

<b>Data</b>	<b>Description</b>
Video Device IP Address	The data identifies the IP address for the encoder.
Blackout	The data determines if the camera is restricted.
Video Device Type	The data identifies the video device type (IP video device) for the encoder.
IP Streaming Driver ID	The data identifies the unique IP video switch driver name.
Card Number	The data identifies the card number for the encoder.
Manufacturer	The data identifies the manufacturer values of the encoder.
Model	The data identifies the model of the encoder.
Streaming Type	The data identifies the streaming type (values: elementary, transport, program) for the encoder.
Secondary Interface	The data identifies the secondary interface for the encoder that enables users to maximize the number of inputs for the encoder.
Snapshot Requested	The data determines if snapshots are generated for the encoder.

The Design-Build Firm shall be responsible for providing all data necessary to populate the SunGuide® database. The Design-Build Firm shall provide this data to the Okaloosa County Traffic Operations Manager. The Okaloosa County Traffic Operations Manager, or his designated representative, will enter the appropriate data into the ATMS database at the TOC under the oversight of the Design-Build Firm. At no time shall the Design-Build Firm be granted ATMS administrative rights or access to the Okaloosa County TOC.

**5. 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.

**6. Existing Conditions**

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

**S. Landscape Opportunity Plans:**



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

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

The Opportunity Plans shall include the following:

1. Proposed improvements and existing elements to remain as associated with the Project.
2. Vegetation disposition depicting existing plant material to be removed, relocated or to remain.
3. Wetland jurisdictional lines.
4. Proposed drainage retention areas and easements.
5. Proposed utilities and existing utilities to remain.
6. Graphically depicted on-site and off-site desired or objectionable views.
7. Locations of landscape opportunity planting areas in a bubble format which identifies various vegetation groupings in a hatched or colorized manner. Examples are: "trees/palms/shrubs", "shrubs only", "buffer plantings", etc.
8. Provided and labeled applicable clear zone, horizontal clearance, setback dimensions on the plans and in chart form which reflect AASHTO, FDOT and Department guidelines for landscape installation and maintenance operations, including those that have been coordinated with other disciplines
9. Identified outdoor advertising locations, owners and contacts and shown 1000 ft. view zone.
10. Indicated potential area(s) for wildflower plantings.

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

Landscape construction documents and landscape installation are not included in this contract and shall be provided by others, **except within the center of the roundabouts as required by the RFP.**

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

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

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

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

## **VII. Technical Proposal Requirements:**

### **A. General:**

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

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

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

A copy of the written Technical Proposal must also be submitted electronically in PDF format including bookmarks for each section. 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. Minimum font size of ten (10) shall be used. Times New Roman shall be the required font type.

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

**[Submit the Technical Proposal electronically in PDF format to: d3.designbuild@dot.state.fl.us](mailto:d3.designbuild@dot.state.fl.us)**

**Submittal shall be broken into individual electronic documents as defined below to ensure file sizes remain manageable:**

- **Technical Proposal**
- **11x17" plan sheets**
- **Individual roll plots—each roll plot shall be its own electronic file and clearly named. If the Department is unable to open or print roll plot(s) due to large file size, the Design-Build Firm will have 3 business days to submit six (6) prints of each roll-plots upon notification by the Department.**

**Submit one (1) Original hard copy and one (1) CD, DVD or Flash Drive containing the Technical Proposal in .pdf format and six (6) collated, complete sets of hard copies of the Technical Proposal to:**

Ranae Dodson  
FDOT Procurement Manager  
1074 Highway 90  
Chipley, Florida 32428

The minimum information to be included:

Section 1: Project Approach

- Paper size: 8½" x 11". The maximum number of pages shall be 15 single-sided, typed pages including text, graphics, tables, charts, and photographs. Double-sided 8½" x 11" sheets will be counted as 2 pages. 11"x17" sheets are prohibited.
- Describe how the proposed design solutions and construction means and methods meet the project needs described in this Request for Proposal. Provide sufficient information to convey a thorough knowledge and understanding of the project and to provide confidence the design and construction can be completed as proposed.
- Provide the term, measurable standards, and remedial work plan for any proposed Value Added features that are not Value Added features included in this RFP, or for extending the Value Added period of a feature that is included in this RFP. Describe any material requirements that are exceeded.
- Provide a Written Schedule Narrative that describes the Design and Construction phases and illustrates how each phase will be scheduled to meet the Project needs required of this Request for Proposal. Bar or Gantt charts are prohibited.
- Submit a Category 2 Submittal Report summarizing the proposed Category 2 elements for each bridge per FDM 121.3 (maximum 1 page).
- Provide name and background information for your coastal engineer (if not previously provided in your Letter of Interest.)
- Describe aesthetic details and overall approach to project aesthetics.
- Describe the Maintenance of Traffic approach along with construction staging and storing. Address how existing traffic volume, small work areas, and urban area will be accommodated to provide a safe construction work zone.
- **Discuss the approach to provide vessel collision protection on existing bridge substructure during construction of proposed bridge and fender system.**

Section 2: Plans

- Plan and Profile views of the proposed improvements shall be submitted in roll-plot format. The maximum number of roll plots that may be submitted is 10. The maximum width of the roll-plots shall be 36". The maximum length of the roll-plot shall be 6'. **Inclusion of additional information on the roll-plot, other than depictions of the Plan and Profile views, is allowed. All other information not included on the roll plots shall be provided on 11"x17" sheets. No more than 200 single-sided 11" x 17" sheets are allowed. All information shall be provided on roll plots, including, but**

not limited to Plan and Profile views, typical sections, special emphasis details, structure plans, General Notes, etc. All approved ATCs the

Design-Build Firm intends to utilize for the project shall be detailed in the proposal plan as appropriate.

- Provide ship design impact forces in the General Notes of the structure plans.
- Right of Way Maps and Legal Descriptions (including area in square feet) of any proposed additional Right of Way parcels if applicable and approved through the ATC process. Provide Technical Proposal Plans in accordance with the requirements of the FDOT Design Manual, except as modified herein.
- The Plans shall complement the Project Approach.
- Provide the mooring and spud locations for barges. Include the bridges, fishing pier, subaqueous utility lines, and temporary and permanent impacts to Submerged Aquatic Vegetation (SAV) in the schematic and total anticipated wetland impacts.
- Provide an Aesthetics Package. Aesthetics Package shall be submitted on 36" x 6' roll plot (maximum 2 roll plots). Aesthetic Package shall include renderings of the proposed structures depicting the details of the proposed aesthetic elements on the rendering viewpoints provided below. The contractor will be allowed to supplement the four required views with additional viewpoints if desired to convey the aesthetic design.
  - **View 1: Land Based View Focused on Main Span.** The purpose of this view is to provide a representation of overall bridge elements from land, showing pier shapes, overlooks, shade structures, highway lighting and aesthetic lighting. Two images are required from View 1 including one daytime and one nighttime image. Coordinates and camera settings should be the same or similar to the following:
    - GPS: 30.399167, -86.601222
    - Elevation from ground (Standing on Dock): 6'
    - Rotation: -29.189° from North, 91.19° Up
    - Film Lens: 35mm
    - Focal Length: 40mm
    - Zoom: 1.0
    - F Stops: 2.5
    - Shutter: 1/1200
    - ISO: 70
  - **View 2: Water Based View of Main Span and Overlook (Low Elevation):** The purpose of this view is to show detail of the pier shapes, overlook, railing and shade structure from an elevation near the water. Coordinates and camera settings should be the same or similar to the following:
    - GPS: 30.401782, -86.600086
    - Elevation from water: 38'2"
    - Rotation: 138.7° from North, 88.664° Up
    - Film Lens: 35mm
    - Focal Length: 40mm
    - Zoom: 1.0

- F Stops: 2.5
- Shutter: 1/1200
- ISO: 70
- **View 3: Water Based View of Main Span and Overlook (High Elevation):** The purpose of this view is to show detail of the pier shapes, overlook, railing and shade structure from an elevation above the bridge. Coordinates and camera settings should be the same or similar to the following:
  - GPS: 30.401789, -86.600140
  - Elevation from water: 166'9"
  - Rotation: 152° from North, 59.636° Up (0 is looking straight down)
  - Film Lens: 35mm
  - Focal Length: 40mm
  - Zoom: 1.0
  - F Stops: 8
  - Shutter: 1/500
  - ISO: 100
- **View 4: Land Based View of MSE Wall:** The purpose of this view is to show details of the proposed abutment wall and scale of the low-level structure. Coordinates and camera settings should be the same or similar to the following:
  - GPS: 30.403000, -86.601861
  - Elevation from ground: 14'2"
  - Rotation: 116.218° from North, 89.26° Up, Camera tilted -1.088°
  - Film Lens: 35mm
  - Focal Length: 40mm
  - Zoom: 1.0
  - F Stops: 8
  - Shutter: 1/500
  - ISO: 100
- ❖ For the profile view depicting the structure at night, the Design-Build Firm shall show the illumination on the structure. Visual images shall provide overall aesthetic intention and details for the aesthetic elements of the bridge including, but not limited to, pier shape, roadway and shared use path lighting, aesthetic lighting of retaining walls and substructure, retaining wall finishes/graphics, scenic overlooks and canopies, pedestrian railing, etc.

**C. Evaluation Criteria:**

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

<u>Item</u>	<u>Value</u>
1. Design	30
2. Construction	35
3. Innovation	10
4. Value Added	5
<b>Maximum Score</b>	<b>80</b>

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

1. **Design ( 30 points)**

The Design-Build Firm is to address the quality and suitability of the following elements in the Technical Proposal:

- Structures design
- Roadway design / and safety
- Drainage design
- Environmental Design
- Design coordination plan minimizing design changes
- Geotechnical investigation plan
- Geotechnical load test program
- Minimizing impacts through design to:
  - Environment
  - Public
  - Adjacent Properties
  - Structures
- ~~Temporary Traffic Control Plan~~ Transportation Management Plan
- Incident Management Plan
- Aesthetics
- Utility Coordination and Design, including reducing impacts
- Signalization Design
- Roundabout Design
- ITS System Design
- Maintainability
- Design considerations which improve recycling and reuse opportunities
- Design Innovation

The Design-Build Firm is to address the following in the Technical Proposal: aesthetics features of the design including but not limited to the following: considerations in the geometry, suitability and consistency of structure type, structure finishes, shapes, proportions and form throughout the limits of the project.

Architectural treatments such as tiles, colors, emblems, etc. will not be considered as primary aesthetic treatments.

The Design-Build Firm is to address the following in the Technical Proposal: design and utility coordination efforts that minimize the potential for adverse impacts and project delays due to utility involvement.

The Design-Build Firm is to address the following in the Technical Proposal: development of design approaches which minimize periodic and routine maintenance. The following elements shall be considered: access to provide adequate inspections and maintenance, access to structure's lighting system, and impacts to long term maintenance costs

The Design-Build Firm is to address the following in the Technical Proposal: approach to the proposed aesthetic design, including but not limited to, considerations in the geometry and consistency of overall theme. Discussion shall also include how the proposed aesthetic features relates to the preferences detailed within the Brooks Bridge Aesthetic Online Meeting Results included as a Reference Document in the RFP. Elements provided within the Aesthetic Online Meeting Results represent the minimum level of acceptable aesthetics.

## 2. Construction ( 35 points)

The Design-Build Firm is to address the quality and suitability of the following elements in the Technical Proposal:

- Safety
- Structures construction
  - Include removal of existing structures foundations and constructability of proposed structures
  - **Include plan for protecting existing substructure from vessel collision during construction of proposed structure and fender system**
- Roadway construction
- Drainage construction
- Construction coordination plan minimizing construction changes
- Minimizing impacts through construction to:
  - Environment
  - Public
  - Adjacent Properties
  - Structures
- Implementation of the Environmental design and Erosion/Sediment Control Plan
- Implementation of the Maintenance of Traffic Plan
- Implementation of the Incident Management Plan
- Utility Coordination and Construction
- Materials proposed
- Workmanship

The Design-Build Firm is to address the following in the Technical Proposal: developing and deploying construction techniques that enhance project durability, reduce long term and routine maintenance, and those techniques which enhance public and worker safety. This shall include, but not be limited to, minimization of lane and driveway closures, lane widths, visual obstructions, construction sequencing, and drastic reductions in speed limits.

The Design-Build Firm is to address the following in the Technical Proposal: ensuring all environmental commitments are honored.

The Design-Build Firm is to address the following in the Technical Proposal: construction and utility coordination efforts that minimize the potential for adverse impacts and project delays due to utility conflicts.

The Design-Build Firm is to address the following in the Technical Proposal: approach in the construction of the proposed aesthetic features with heavy consideration in the overall maintainability and suitability. Quality of elements provided within the Aesthetic Online Meeting Results represent the minimum level of acceptable aesthetic detail.

**3. Innovation (10 points)**

The Design-Build Firm is to address introducing and implementing innovative design approaches and construction techniques which address the following elements in the Technical Proposal:

- Minimize or eliminate Utility relocations
- Materials
- Workmanship
- Enhance Design and Construction aspects related to future expansion of the transportation facility
- Construction Innovation
- Design Innovation

**4. Value Added (5 points)**

The Design-Build is to address the following Value Added features in the Technical Proposal:

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

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

Value Added Feature	Minimum Value Added Period
Value Added Asphalt	3 years
Value Added Bridge Components	5 years



**D. Final Selection Formula:**

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

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

BPP = Bid Price Proposal

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

The Design-Build Firm selected will be the Design-Build Firm whose adjusted score is lowest. The Department reserves the right to consider any proposal as non-responsive if any part of the Technical Proposal does not meet established codes and criteria.

**E. Final Selection Process:**

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

**F. Stipend Awards:**

The Department has elected to pay a stipend to all non-selected Short-Listed Design-Build Firms to offset some of the costs of preparing the Proposals. The non-selected Short-Listed Design-Build Firms meeting the stipend eligibility requirements of the Project Advertisement and complying with the requirements contained in this section will ultimately be compensated. The stipend will only be payable under the terms and conditions of the Design-Build Stipend Agreement and Project Advertisement, copies of which are included with this Request for Proposal. This Request for Proposal does not commit the Department or any other public agency to pay any costs incurred by an individual firm, partnership, or corporation in the submission of Proposals except as set forth in the Design-Build Stipend Agreement. The amount of the stipend will be \$ 331,000 per non-selected Short-Listed Design-Build Firm that meets the stipend eligibility requirements contained in the Project Advertisement. The stipend is not intended to compensate any non-selected Short-Listed Design-Build Firm for the total cost of preparing the Technical and Price Proposals. The Department reserves the right, upon payment of stipend, to use any of the concepts or ideas within the Technical Proposals, as the Department deems appropriate.

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

A non-selected Short-Listed Design-Build Firm eligible for stipend compensation must submit an invoice for a lump sum payment of services after the selection/award process is complete. The invoice should include a statement similar to the following: "All work necessary to prepare Technical Proposal and Price Proposals in response to the Department's RFP for the subject Project".

## **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. One (1) hard copy of the Bid Price Proposal shall be hand delivered in a separate sealed package to the following:

Ranae Dodson  
FDOT D3 Procurement Manager  
1074 Highway 90  
Chipley, Florida 32428

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.

Forms to be included with the Price Proposal are included in the RFP.