

# Florida Department of Transportation District One

# DESIGN-BUILD REQUEST FOR PROPOSAL FOR DISTRICTWIDE DESIGN-BUILD PUSHBUTTON CONTRACT

For District One

Financial Projects Number(s): 440789-1\* (Federal On-System); 440790-1 (Federal Off-System); 440791-1 (State Funded) Federal Aid Project Number(s): Contract Number: E1R18

# **Table of Contents**

I.	Introduction				
	А.	Design-Build Responsibility	3		
	В.	Department Responsibility	4		
II.	Schedul	le of Events	4		
III.	Thresho	old Requirements	6		
	<b>A.</b>	Qualifications	6		
	B.	Joint Venture Firm			
	C.	Price Proposal Guarantee			
	D.	Pre-Proposal Meeting			
	E.	Technical Proposal Page-Turn Meeting			
	F.	Question and Answer Session			
	G.	Protest Rights			
	H.	Non-Responsive Proposals			
	I.	Waiver of Irregularities			
	J.	Modification or Withdrawal of Technical Proposal			
	К.	Department's Responsibilities			
	L.	Design-Build Contract			
	М.	Acceptance of Work:			
	N.	Task Work Order Liquidated Damages:			
	0.	Price Adjustments			
IV.	Disadva	ntaged Business Enterprise (DBE) Program	14		
	А.	DBE Availability Goal Percentage:			
	В.	DBE Supportive Services Providers:			
	C.	Bidders Opportunity List:			
<b>T</b> 7	<b>D</b>				
V.	Project Requirements and Provisions for Work15				
	A.	Governing Regulations:			
	B.	Innovative Aspects:			
	C.	Geotechnical Services:			
	D.	Department Commitments:			
	E.	Environmental Permits:			
	F.	Contamination:			
	G.	Railroad Coordination:			
	H.	Survey:			
	I.	Verification of Existing Conditions:			
	J.	Submittals:			
	K.	Contract and Task Work Order Duration:			
	L.	Project Schedule:	24		

	М.	Key Personnel/Staffing:	
	<b>N.</b>	Partner/Teaming Arrangement:	
	О.	Meetings and Progress Reporting:	
	Р.	Public Involvement:	
	Q.	Quality Management Plan (QMP):	
	R.	Liaison Office:	
	S.	Engineers Field Office: Error! Bookmark	
	Т.	Schedule of Values:	
	U.	Computer Automation:	
	V.	Construction Engineering and Inspection:	
	<b>W.</b>	Testing:	
	X.	Value Added:	
	Y.	Adjoining Construction Projects:	
	Ζ.	Issue Escalation:	
	Z.	Roadway Plans and Specifications	
	AA.	Drainage Plans:	
	BB.	Structures Plans:	
	CC.	Signing and Marking Plans:	
	DD.	Signalization Plans:	
	EE.	Lighting Plans:	
	FF.	Partial Payments:	
VI.	Design and A.	d Construction Criteria	
	B.	Vibration and Settlement Monitoring:	
	В. С.	Vibration and Settlement Monitoring: Geotechnical Services	
	C.	Geotechnical Services	
	C. <b>D.</b>	Geotechnical Services Utility Coordination:	
	C. D. E.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations:	
	C. D. E. G.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design:	
	C. D. E. G. H.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations:	
	C. D. E. G. H. I.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans:	
	C. D. E. G. H. I. J.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings: Sequence of Construction:	
	C. D. E. G. H. I. J. K.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings:	
	C. D. E. G. H. I. J. K. L.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings: Shop Drawings: Stormwater Pollution Prevention Plans (SWPPP): Temporary Traffic Control Plan:	
	C. D. E. G. H. I. J. K. L. M.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings: Shop Drawings: Shop Drawings: Stormwater Pollution Prevention Plans (SWPPP): Temporary Traffic Control Plan: Environmental Services/Permits/Mitigation:	34 36 39 41 41 41 41 43 43 43 43 44 44 44 5
	C. D. E. G. H. I. J. K. L. M. N.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings: Shop Drawings: Sequence of Construction: Stormwater Pollution Prevention Plans (SWPPP): Temporary Traffic Control Plan: Environmental Services/Permits/Mitigation: Signing and Pavement Marking Plans:	34 36 39 41 41 41 41 43 43 43 44 44 44 44 44 44 44 44 44 44
	C. D. E. G. H. J. K. L. M. N. O. P. Q.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings: Shop Drawings: Stormwater Pollution Prevention Plans (SWPPP): Temporary Traffic Control Plan: Environmental Services/Permits/Mitigation: Signing and Pavement Marking Plans: Lighting Plans:	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	C. D. E. G. H. J. K. L. M. N. O. P.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings: Shop Drawings: Sequence of Construction: Stormwater Pollution Prevention Plans (SWPPP): Temporary Traffic Control Plan: Environmental Services/Permits/Mitigation: Signing and Pavement Marking Plans:	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	C. D. E. G. H. J. K. L. M. N. O. P. Q.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings: Shop Drawings: Stormwater Pollution Prevention Plans (SWPPP): Temporary Traffic Control Plan: Environmental Services/Permits/Mitigation: Signing and Pavement Marking Plans: Lighting Plans:	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
VII.	C. D. E. G. H. I. J. K. L. M. N. O. P. Q. R.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings: Shop Drawings: Stormwater Pollution Prevention Plans (SWPPP): Temporary Traffic Control Plan: Environmental Services/Permits/Mitigation: Signing and Pavement Marking Plans: Lighting Plans:	$\begin{array}{c} 34\\ 36\\ 39\\ 41\\ 41\\ 41\\ 41\\ 43\\ 43\\ 44\\ 44\\ 44\\ 44\\ 44\\ 44\\ 44\\ 44$
VII.	C. D. E. G. H. I. J. K. L. M. N. O. P. Q. R. Technical A.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings: Sequence of Construction: Stormwater Pollution Prevention Plans (SWPPP): Temporary Traffic Control Plan: Environmental Services/Permits/Mitigation: Signing and Pavement Marking Plans: Lighting Plans: Signalization and Intelligent Transportation System Plans: Signalization and Intelligent Transportation System Plans: General:	
VII.	C. D. E. G. H. I. J. K. L. M. N. O. P. Q. R. Technical A. B.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings: Shop Drawings: Stormwater Pollution Prevention Plans (SWPPP): Temporary Traffic Control Plan: Environmental Services/Permits/Mitigation: Signing and Pavement Marking Plans: Lighting Plans: Signalization and Intelligent Transportation System Plans: Signalization and Intelligent Transportation System Plans: Signalization and Intelligent Transportation System Plans:	
VII.	C. D. E. G. H. I. J. K. L. M. N. O. P. Q. R. Technical A.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings: Shop Drawings: Sequence of Construction: Stormwater Pollution Prevention Plans (SWPPP): Temporary Traffic Control Plan: Environmental Services/Permits/Mitigation: Signing and Pavement Marking Plans: Lighting Plans: Signalization and Intelligent Transportation System Plans: Signalization and Intelligent Transportation System Plans: Submittal Requirements: Evaluation Criteria:	
VII.	C. D. E. G. H. I. J. K. L. M. N. O. P. Q. R. Technical A. B.	Geotechnical Services Utility Coordination: Roadway Plans: Geometric Design: Design Documentation, Calculations, and Computations: Structure Plans: Specifications: Shop Drawings: Shop Drawings: Stormwater Pollution Prevention Plans (SWPPP): Temporary Traffic Control Plan: Environmental Services/Permits/Mitigation: Signing and Pavement Marking Plans: Lighting Plans: Signalization and Intelligent Transportation System Plans: Signalization and Intelligent Transportation System Plans: Signalization and Intelligent Transportation System Plans:	

VIII.	I. BID PROPOSAL REQUIREMENTS		.55
	A.	Bid Price Proposal:	. 55

# 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 Initial RFP Task Work Orders

Bid Price Proposal Forms:

- 1. Bid Blank (375-020-17)
- 2. Design Build Proposal of Proposer (375-020-12)
- 3. Design Build Bid Proposal Form (700-010-65)
- 4. Bid or Proposal Bond (375-020-34)
- 5. DBE Forms (as applicable)

## I. Introduction.

The Florida Department of Transportation (Department) has issued this Request for Proposal (RFP) to solicit competitive bids and proposals from Proposers for a Task Work Order driven Districtwide Design-Build Push-Button Contract. The Task Work Orders derived from this contract may contain Federal Highway Administration (FHWA) mandates that require Federal Highway Administration approval as well as State mandates that require State approval. The successful bidder will be responsible for the implementation of projects from concept to completion of construction. Typical projects will consist of intersection improvements, lighting upgrades, median revisions, signal installations, drainage improvements, ITS upgrades, signing, installations, safety improvements and structure projects.

Individual projects may be assigned for a period of three (3) years from the date of the Notice to Proceed (NTP) of this Contract being issued, with a maximum of three (3) optional annual renewals which must be approved by the Florida Department of Transportation Chief Engineer prior to renewal being issued, or until a total maximum accumulated compensation of \$30,000,000 is reached, of which a maximum of \$5,000,000 would be allocated for Task Work Order assignments during each year of the contract. Individual Task Work Order assignments will not exceed \$1,000,000 and will not exceed 1 year in duration.

All allocations shall be contingent upon sufficient legislative appropriation and additional funds may be added to increase the contract amount when they are available. The Department, however, does not guarantee any quantities or final compensation relative to this contract. Actual quantities and final compensation will be based on Task Work Orders issued during the contract period.

The types of projects that may be assigned under this Contract shall include, but not be limited to:

- intersection widening
- lengthening storage lanes
- median modifications
- signal upgrades and installations
- lighting upgrades and installations
- ADA upgrades and pedestrian/bicyclist improvements
- sidewalk installations and upgrades
- median revisions (adding turn lanes, modifying for directional openings and closing of medians)
- drainage upgrades and/or installations
- guardrail upgrades or installations
- signing and pavement markings
- intelligence transportation systems components upgrades

The first four (4) Task Work Orders under this Contract will authorize the constructability analysis or design and construction of the specific projects in the attached in the Initial RFP Task Work Orders document. The Technical Proposal and the Price Bid Proposal shall address the Proposer's qualifications for those specific projects.

For each subsequent Task Work Order, the Design-Build Firm shall be responsible for preliminary feasibility assessments, survey, geotechnical investigation, design, acquisition of all permits not acquired by the Department, any required modification of permits acquired by the Department, maintenance of traffic, demolition, and any other requirements to complete the plans for construction on or before the date indicated in the Task Work Order. The Department will make available any existing as-built plans or other data related to each Task Work Order if they are available.

#### **Description of Work**

a. Constructability Analysis:

The purpose of this analysis phase is to provide the Florida Department of Transportation (FDOT) with professional services for conducting needed constructability analysis for assigned Task Work Orders. The analysis and conceptual recommendations produced by the Design-build Firm in this analysis will provide valuable input into the development of the design for the associated Task Work Orders with minimum of time impact, delay, or cancellation.

Payment shall be made for services provided in this analysis as part of the design fee related to the construction cost when the task is able to proceed. For those tasks that need to be cancelled as a result of the findings during the constructability analysis, the designer will be paid a fee based on a percent of the estimated construction cost established by the contractor as a response to this RFP. This fee will also be utilized in determining the low bid option of the score and will be negotiated with the design-build firm prior to notice to proceed on each task.

The constructability analysis will not be required for every Task but will be identified in the scope of services for each Analysis Task when needed.

b. Design-Build Phase:

Design-Build services are required for various District-wide push-button improvements that will be assigned as individual Task Work Orders as the specific projects are identified. If there are issues in a specific project that must be in compliance with the Federal Highway Administration (FHWA) guidelines and requirements, these guidelines and requirements will be met before this Task Work Order can be issued. Each such assignment shall be made with the issuance of a Task Work Order authorization, which shall identify the assigned project, specify the Design-Build services to be performed, and state the compensation for the services and Task Time compensation in the NTP is subject to change based on the quantities established during the design phase. No construction is to be started without an agreement between FDOT and the Contractor on the lump sum reimbursement. No work shall begin on a specific project until a Task Work Order for that project has been authorized in writing by the Department under the Contract.

The Design and Construction Criteria, Section VI, 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 environmental permitting agencies; and the public.

The Design-Build Firm will coordinate all utility relocations. The Department will reserve the right to provide partial or complete design plan sets to the Design-Build Firm for their use in completion of an assigned Task Work Order. The fee for design services may be revised based on the completeness of the plans. This revision will be extended by way of a Supplemental Agreement (SA).

The Design-Build Firm shall demonstrate good project management practices while working on the projects assigned under this Contract. These practices include communication with the Department and others as necessary, management of time and resources, and providing the Department with complete documentation related to this contract when requested. The Department will provide contract administration, management services 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 collaboratively provide job specific information and/or functions as outlined in this document.

c. Contract Tracking/Inventory and Evaluation Phase:

The Department requires the Design-Build Firm to collect and utilize specific data before, during, and after construction of projects for reporting and evaluation purposes. The evaluation purposes directly support and measure the Federal Highway Administration's safety goals and the Department's mission to provide a safe and efficient transportation system that ensures the mobility of people and goods. The Design-Build Firm shall provide a progress / status report on a yearly basis.

## A. Design-Build Responsibility

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

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

For each Task Work Order, the Design-Build Firm shall be responsible for reviewing the approved Environmental Document of the Project Development & Environment (PD&E) Study/National Environmental Policy Act (NEPA) document.

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

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

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

The Design-Build Firm shall examine boring data, where available, and make their own interpretation of the subsoil investigations and other preliminary data, and shall base their bid on their own opinion of the conditions likely to be encountered. The submission of a proposal is prima fascia 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 in accordance with Specification Section 107 with monthly mowing frequency and monthly litter removal.

#### B. Department Responsibility

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

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

The Department will determine the environmental impacts and coordinate with the appropriate agencies during the preparation of NEPA or SEIR Reevaluations. For federal projects, the Department will coordinate and process Reevaluations with FHWA.

#### 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
October 30, 2017	Advertisement
November 20, 2017	Letters of Interest for Phase I of the procurement process due in
	District Office by 5:00 pm local time
December 18, 2017	Proposal Evaluators submit Letter of Interest Scores to Contracting
	Unit 12:00 pm local time
December 26, 2017	Contracting Unit submit Letter of Interest Scores and Proposal
	Evaluator comments to Selection Committee 2:00 pm local time
January 18, 2018	Public Meeting of Selection Committee to review and confirm Letter
	of Interest scores 10:00 am local time
January 18, 2018	Notification to Responsive Design-Build Firms of the Letter of
	Interest scores 4:00 pm local time (Design Build Firms are also
	provided their individual scores on this date)
January 22, 2018	Deadline for all responsive Design-Build Firms to affirmatively

	declare intent to continue to Phase II of the procurement process 2:00
	pm local time
January 22, 2018	Shortlist Posting 4:00 pm
February 2, 2018	Final RFP provided to Design-Build firms providing Affirmative
	Declaration of Intent to continue to Phase II of the procurement
	process
February 13, 2018	Mandatory Pre-Bid Meeting at 1:30 pm local time in District One
<u>reordary 10, 2010</u>	Headquarters, 801 N. Broadway Ave., Bartow, FL 33830 District
	Office. All Utility Agency/Owners that the Department contemplates
	an adjustment, protection, or relocation is possible are to be invited to
Est	the mandatory Pre-Proposal meeting.
February 28, 2018	Utility Pre-Proposal Meeting facilitated by the District Utility
	Engineer at 9:00 a.m. local time in District One Headquarters, 801 N.
	Broadway Ave., Bartow, FL 33830 District Office.
March 19, 2018	Deadline for Design-Build Firms to submit questions (for which an
	answer is assured) in accordance with Specification 2-4 prior to the
	submittal of Technical Proposal
March 27, 2018	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.
April 9, 2018	Technical Proposals due in District Office by 5:00 pm local time
April 9, 2018	Deadline for Design-Build for to "opt out" of Technical Proposal Page
<u>- ipin &gt;, 2010</u>	Turn meeting.
April 23, 2018	Thirty-minute "Page Turn" of Design-Build Firm's Technical
<u>ripin 23, 2010</u>	Proposal
May 7, 2018	Deadline for Department to provide a preliminary list of questions in
<u>Widy 7, 2010</u>	advance of the Question & Answer Session
<u>May 14, 2018</u>	Question and Answer Session. Times will be assigned during the pre-
<u>Iviay 14, 2018</u>	proposal meeting. One hour will be allotted for questions and
M 01 0010	responses.
<u>May 21, 2018</u>	Deadline for Design-Build Firms to submittal of Written Clarification
	letter following Question and Answer Session 2:00pm local time
<u>May 21, 2018</u>	Deadline for Design-Build Firms to submit questions (for which an
	answer is assured) in accordance with Specification 2-4 prior to the
	submittal of the Bid Price Proposal
<u>May 28, 2018</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.
August 21, 2018	Price Proposals due in District Office by 11:00 am local time.
August 21, 2018	Public Meeting announcing of Technical Scores and opening of Price
	Proposals at 11:00 am
August 30, 2018	Public Meeting of Selection Committee to determine intended Award
	10:00 am
August 30, 2018	Posting of the Department's intended decision to Award (Final
	Selection Posting) 4:00 pm
September 13, 2018	FHWA Concurrence to Award
September 19, 2018	Anticipated Award Date
	· · · · · ·
<u>October 1, 2018</u>	Design-Build Firm execute the contract
October 11, 2018	FDOT executes the contract

## 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 Proposer failing to attend will be deemed nonresponsive 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 oversight Projects, in order to discuss the Project in detail and to clarify any concerns. Proposers shall direct all questions to the Departments Question and Answer website: 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 FA Oversight Projects. The purpose of the page-turn meeting is for the Design-Build Firm to guide the Technical Review Committee through the Technical Proposal, highlighting sections within the Technical Proposal that the Design-Build Firm wishes to emphasize. The page-turn meeting will occur between the date the Technical Proposal is due and the Question and Answer session occurs, per the Schedule of Events section of this RFP. The Department will terminate the page-turn meeting promptly at the end of the allotted time. The Department will 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. An unmodified aerial or map of the project limits provided by the Design-Build Firm is acceptable for reference during the page-turn meeting. The unmodified aerial or map may not be left with the Department upon conclusion of the page turn meeting. Use of other visual aids, electronic presentations, handouts, etc., during the page turn meeting is expressly prohibited. Upon conclusion of the thirty (30) minutes, the Technical Review Committee is allowed five (5) minutes to ask questions pertaining to information highlighted by Design-Build Firm. Participation in the page-turn meeting by the Design-Build Firm shall be limited to 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 Session

The Department may meet with each Proposer, formally, for a Question and Answer (Q&A) session. FHWA shall be invited on FA Oversight Projects. The purpose of the Q & A session is for the Department to seek clarification and ask questions, as it relates to the Technical Proposal, of the Proposer. The Department may terminate the Q & A session promptly at the end of the allotted time. The Department shall record all or part of the Q & A session. All recordings will become part of the Contract Documents. The Q & A session will not constitute discussions or negotiations. Proposers will not be permitted to ask questions of the Department except to ask the meaning of a clarification question posed by the Department. No supplemental materials, handouts, etc. will be allowed to be presented in the Q & A session. No additional time will be allowed to research answers.

Within one (1) week of the Q & A session, the Design-Build Firm shall submit to the Department a written clarification letter summarizing the answers provided during the Q & A session. The questions, answers, and written clarification letter will become part of the Contract Documents and will be considered by the Department as part of the Technical Proposal. The Design-Build Firm shall not include information in the clarification letter which was not discussed during the Q&A session. In the event the Design-Build Firm includes additional information in the clarification letter which was not discussed during the Q&A session and is not otherwise included in the Technical Proposal, such additional information will not be considered by the Department during the evaluation of the Technical Proposal.

The Department will provide some (not necessarily all) proposed questions to each Design-Build Firm as it relates to their Technical Proposal approximately 24 hours before the scheduled Q & A session.

# G. Protest Rights

Any person who is adversely affected by the specifications contained in this Request for Proposal must file a notice of intent to protest in writing within seventy-two hours of the posting of this Request for Proposals. Pursuant to Sections 120.57(3) and 337.11, Florida Statutes, and Rule Chapter 28-110, F.A.C., any person adversely affected by the agency decision or intended decision shall file with the agency both a notice of protest in writing and bond within 72 hours after the posting of the notice of decision or intended decision, or posting of the solicitation with respect to a protest of the terms, conditions, and specifications contained in a solicitation and will file a formal written protest within 10 days after the filing of the notice of protest. The formal written protest shall be filed within 10 days after the date of the notice of protest if filed. The person filing the Protest must send the notice of intent and the formal written protest to:

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

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

## H. Non-Responsive Proposals

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

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

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.

1. Constructability Analysis (If required):

The major objective of this activity is to provide the Department the justification analysis and recommendations for each individual Task Work Order when it is requested to ensure the readiness for the work to be completed. This analysis will identify any potential conflicts of, but not limited to, above or underground utilities, Right of Way, environmental concerns, variations, exceptions, or any other issues that may cause delay or cancellation of Task Work Orders if these issues were not identified and resolved beforehand. Each analysis shall require a final recommendation report and all documentation related to design variations, exceptions, etc. will be generated and processed by the Design-Build Firm. The NEPA documentation will be prepared by the Department and will be provided to the Design-Build firm. A constructability analysis may not be required for all Task Work Orders or all projects under a Task Work Order.

## a.) DESCRIPTION OF CONSTRUCTABILITY ANALYSIS SERVICES:

The constructability analysis required for a specific Task Work Order might include but in some cases might not be limited to a Utility Analysis, and a General and Design Standards Analysis. Payment for each constructability analysis will be a predetermined compensation based on a percentage of the cost of construction as submitted in response to this RFP. The period of performance will be negotiated and documented as part of each Task's NTP.

The Design-Build Firm shall prepare and submit complete feasibility summary reviews describing the analysis, findings, and improvement recommendations for specific locations requested by the Department. The proposed recommended improvements should be presented in sufficient detail to allow the contract scope to be prepared directly from this study or report.

Engineering cost-estimates shall also be provided to the Department by the Design-Build Firm. The Design-Build Firm will also be required to support the Department in the development, evaluation, and documentation identifying all utility facilities from the Utility Agency/Owners (UA/O) ensuring no conflicts exist between utility facilities and the Department's construction project or determine that adjustments can be made without affecting construction costs or duration, such that the Task Work Order will have to be withdrawn. The Department will make the final decision on whether or not to withdraw a Task Work Order.

The Design-Build Firm shall prepare and submit a final report with a copy of a preliminary plan set, identifying the status of the project with respect to the proposed scope of the assigned Task Work Order. The Design-Build Firm shall also identify all utility facilities underground and/or topographic including FDOT ITS facilities. This report shall be submitted to the Department Project Manager no later than thirty (30) days from the date this study Task Work Order is issued. If there are potential Right of Way conflicts, utility conflicts, above or underground, the Design-Build Firm shall inform the Department via this report and provide design alternatives or suggest complete omission of this specific location.

If there are potential design standards variations or exceptions from the AASHTO and Department current Design Standards or Guidelines, the Design-Build Firm shall inform the Department via the report and provide specific areas of variations or exceptions required for the completion of the construction project.

The Design-Build Firm shall contact the appropriate Department Maintenance Office or local agencies if the project is off-system, to obtain the latest as-built plans available for each location in the assigned Task Work Order. The Design-Build Firm shall utilize the as-built plans to determine the available Right of Way and locations of utilities for the proposed improvements at each location. If adequate Right of Way information is not available in the as-built plans, the Consultant will contact the Departments Right of Way Office to obtain any available Right of Way data.

Based on the information obtained from the as-built plans, the Design-Build Firm shall conduct a field review of the existing conditions at each assigned locations to confirm the existing geometry, facilities, and to determine if there is adequate Right of Way and clear areas to construct the proposed improvements. Additionally, the Design-Build Firm will verify through the appropriate Department Construction and Maintenance offices and with other local agencies (i.e., Counties and local municipalities) that there are no conflicts with existing or proposed projects.

The Design-Build Firm shall prepare and submit one electronic and one paper formatted report of the complete constructability analysis from the information collected in the field, to the Department no later than thirty (30) days from the date this study Task Work Order is issued. The results of the initial engineering and constructability analysis shall include an executive summary in a pdf format document maximum 10 pages long with minimum font 10 Arial size. The report shall include project design controls, physical constraints if any, aerial view or plan sheet with scale 1"=50' including a baseline survey or construction baseline with assumed datum; design variations/exceptions required, coordination of on-going design projects by the department or private or public permit applications in the same vicinity, coordination with local agencies (i.e., cities, counties and other pertaining municipalities) for current LAP on-going projects. The constructability analysis shall include improvement recommendations in sufficient detail to permit contract scope modifications if needed to be prepared directly from it. Adequate engineering cost estimates shall also be provided.

# b.) PAYMENT METHOD

The Design-Build Firm will be paid one lump sum amount for each constructability analysis completed. The lump sum shall be paid for as a percentage of the proposed construction cost, and it shall not exceed two percent (2%) of the proposed engineer estimated construction cost for non-structural analysis and a maximum of five percent (5%) for analysis requiring underground investigations. The Design-Build Firm shall propose and bid for this lump sum compensation along with the initial Task Work Order. This shall be used as a standard method of payment for all Task Work Orders assigned thereafter.

## 2. Design-Build Phase:

The Department will enter into a Task Work Order driven contract with the successful Design-Build Firm. Compensation for the Initial Task Work Orders (projects described in this RFP) shall be a lump sum amount equal to the Price Proposal of the successful Design-Build Firm for the Initial Task Work Orders. This lump sum amount includes the design cost, constructability analysis cost (if necessary) and the construction cost as described in Section V and Section VI of this RFP, and in each specified Task Work Order scope.

If there are potential design standards variations or exceptions from the AASHTO and Department current Design Standards or Guidelines, the Design-Build Firm will be responsible for obtaining them.

The Design-Build Firm shall contact the appropriate Department Maintenance offices or local agencies if the project is off-system, to obtain the latest as-built plans available for each location in the assigned Task Work Orders. The Design-Build Firm shall utilize the as-built plans to determine the available Right of Way for the proposed improvements at each location. If adequate Right of Way information is not available in the as-built plans, the Consultant will contact the Department's Right of Way Office to obtain any available Right of Way data.

The Design-Build Firm shall be responsible for utility coordination and obtaining utility location information.

Based on the information obtained from the as-built plans, the Design-Build Firm shall conduct a field review of the existing conditions at each assigned locations to confirm the existing geometry, facilities, and to determine if there is adequate Right of Way and clear areas to construct the proposed improvements. Additionally, the Design-Build Firm will verify through the appropriate Department Construction and Maintenance offices and with other local agencies (i.e., Counties and local municipalities) that there are no conflicts with existing or proposed projects.

The Design-Build Firm is responsible to secure any and all necessary permits and licenses required to perform work within the Departments and/or any other local jurisdiction (i.e. cities or counties) rights of way in accordance with Section 7-2 of FDOT Standard Specification for Road and Bridge Construction. This may include but not limited to: special use and/or Right of Way use permits.

The Price Bid Proposal shall itemize the Design Cost portion of the bid as a percentage of the Construction Cost, without MOT or MOB. This Design Cost shall be proposed by the Proposer in the initial Task Work Orders and the level of complexity as low, medium or high shall be identified. This proposed percentage shall not exceed 20% of the proposed construction cost, without MOT or MOB. The lowest percentage will represent the least complexity and the highest percentage will represent the highest complexity. This 20% does not include the reimbursement for the constructability analysis mentioned in section III.K.1. For each Task Work Order after the initial assignment, the design cost of the lump sum compensation shall be a percentage of the proposed construction cost, without MOT or MOB, related to the level of complexity of the project (low, medium or high).

When the design cost portion is set for each Task Work Order, the Department shall not pay any additional design fees due to construction cost overruns or any other cost increases after any portion of this Task Work Order is released for construction.

In the event that there is no design service provided by the Design-Build Firm, the Department will pay no design cost for that Task Work Order. In the event that there is a partial design service provided by the Design-Build Firm, the Department will pay the partial design cost for that Task Work Order. The amount for the partial design costs will be negotiated and reimbursed through a Supplemental Agreement. The Department reserves the right to provide a partial or a complete design plan set for each assigned Task Work Order.

For each Task Work Order issued after the initial assignment, the Department will provide a Task Work Order maximum budget and maximum duration as part of the Notice to Proceed. The final lump sum compensation covering the construction costs for each Task Work Order issued after the

initial assignment will be based on the actual pay items and quantities that would be needed to complete the work as part of the final signed and sealed design documents, plus lump sum Mobilization (MOB) and lump sum Maintenance of Traffic (MOT). This will be set by the Release for construction plans.

In the construction cost portion for each project of the initial Task Work Orders, the lump sum Maintenance of Traffic (MOT) (Pay Item 102-1) and the lump sum Mobilization (MOB) (Pay Item 101-1) shall be paid for as a percentage of the proposed construction cost, and this cost (MOT + MOB) shall not exceed 20% of the proposed construction cost. The MOT items, MOB items, and all other pay items that are necessary for this construction Task Work Order shall be-listed with quantities and unit prices on the bid blank form. Pay item or unit prices submitted on this form shall be the same as those submitted in the Master Pay Item List. The MOB and MOT percentage (%) established on the initial Task Work Orders will be used on all subsequent Task Work Orders.

For pay item(s) in the subsequent Task Work Orders that may not be included on the pay item list, the Department must execute a Supplemental Agreement that pay item(s) will be paid for at a unit price(s) to be negotiated in accordance with the Department's specifications.

If the Department determines that the performance of the Design-Build Firm is not satisfactory, the Department may notify the Prime Contractor of the deficiency with the requirement that the deficiency be corrected within a specified time, but not less than 10 days. Otherwise, the Agreement will be terminated at the end of such time or thirty (30) days, whichever is sooner.

If the Department requires termination of the Agreement for reasons other than unsatisfactory performance of the Design-Build Firm, the Department will notify the Prime Contractor of such termination, with instructions as to the effective date of work stoppage or specify the stage of work at which the Agreement is to be terminated.

If the Agreement is terminated before performance of work is completed, the Design-Build Firm will be paid for the work that was satisfactorily performed. Payment is to be on the basis of substantiated costs, not to exceed an amount which is the same percentage of the contract price as the amount of work satisfactorily completed is a percentage of the total work called for by the Agreement. Compensation will be made through a Supplemental Agreement.

3. Contract Tracking/Inventory and Evaluation Phase:

The Department requires the Design-Build Firm to collect and utilize specific data before, during, and after construction of projects for reporting and evaluation purposes. The evaluation will directly support and measure the Federal Highway Administration's safety goals and the Department's mission.

The Design-Build Firm shall provide a progress / status report on a yearly basis. The report will demonstrate the effectiveness of the completed Task Work Orders assigned as well as the overall benefits of each Task Work Order completed under this innovative type of contract. The Design-Build Firm shall use the collected data and present it in a logical way to support and measure the effectiveness of the Design-Build Push Button Contract in terms of addressing traffic operations and safety, American Disability Acts (ADA), timeliness, efficiency, and whether or not this contract is an effective life-saving tool for the public.

Supporting documentation will be required of under construction and completed projects. The report will also provide the timeline in which each task was completed to demonstrate the time

effectiveness of this kind of contract approach. It is also required that the report contains a detailed description of all activities and deliverables submitted to the Department per Task Work Order assigned.

When required by the Department, the Design-Build Firm shall prepare and submit at least one electronic and five paper form reports, with complete details as outlined above, no later than ninety (90) days from the requested date.

Payment shall be made for services provided under this phase separate from the design and construction fees and is a one-time negotiated lump sum, implemented through a Supplemental Agreement.

# M. Acceptance of Work:

Completion of all work associated with a Task Work Order will be documented by the Department's Resident Engineer as Partial Acceptance of the contract in accordance with Specifications 5-10.3. The Department shall provide written notice of Partial Acceptance to the Contractor and the Contractor's obligations for indemnification, defense and to hold the Department harmless under Section 7-12.1 shall cease for the accepted portion of the contract. However, the Contractor shall be responsible under Section 7-12.1 as it applies to direct performance of work items of final striping, landscape establishment period, signalization or any other contract item which requires performance, warranty or maintenance after the completion of all other contract items for the accepted portion of the contract.

# N. Task Work Order Liquidated Damages:

A maximum number of days for completion of all work associated with each Task Work Order shall be identified in the Task Work Order Notice to Proceed.

Liquidated Damages shall be established and applied according to Section 8-10, Liquidated Damages for Failure to Complete Work, per the applicable edition of the Florida Department of Transportation Standard Specifications of Road and Bridge Construction, Liquidated Damages will be assessed for the contractors failure to complete all work and obtain Partial Acceptance of all work associated with a Task Work Order within the established Contract Time identified in the Task Work Order Notice to Proceed.

Completion of a Task will be established by the Engineer and will be based on the date the Engineer issues Partial Acceptance of all work associated with a Task Work Order. Contract time for the Task Work Order may be adjusted in accordance with Standard Specification 8-7, Computation of Contract Time. Such extensions will be documented by the Department.

# O. Price Adjustments

There will be no pay item unit price adjustments on this contract. All references to any price adjustments included in the Standard Specifications for Road and Bridge Construction are not applicable to this contract.

## 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 realistically be achieved on this Project based on the number of DBE's associated with the different types of work that will be required.

Under 49 Code of Federal Regulations Part 26, if the overall goal is not achieved, the Department may be required to return to a race-conscious program where goals are imposed on individual contracts. The Department encourages all of our Design-Build Firms to actively pursue obtaining bids and quotes from Certified DBE's.

The Department is reporting to the Federal Highway Administration the planned commitments to use DBE's. This information is being collected through the Department's Equal Opportunity Compliance (EOC) system.

# B. DBE Supportive Services Providers:

The Department has contracted with a consultant, referred to as DBE Supportive Services Provider, to provide managerial and technical assistance to DBE's. This consultant is also required to work with prime Design-Build Firms, who have been awarded contracts, to assist in identifying DBE's that are available to participate on the Project. The successful Design-Build Firm should meet with the DBE Supportive Services Provider to discuss the DBE's that are available to work on this Project. The current DBE Supportive Services Provider for the State of Florida can be found in the Equal Opportunity website at: http://www.fdot.gov/equalopportunity/serviceproviders.shtm.

# C. Bidders Opportunity List:

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

A Bid Opportunity List should be submitted through the Equal Opportunity Compliance system which is available at the Equal Opportunity Office Website. This information should be returned to the Equal Opportunity Office within three days of submission.

# V. Project Requirements and Provisions for Work.

## A. Governing Regulations:

The services performed by the Design-Build Firm shall be in compliance with all applicable Manuals and Guidelines including the Department, FHWA, AASHTO, and additional requirements specified in this document. Except to the extent inconsistent with the specific provisions in this document, the current edition, including updates, of the following Manuals and Guidelines shall be used in the performance of this work. Current edition is defined as the edition in place and adopted by the Department at the date of advertisement of this contract with the exception of the Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications, Manual on Uniform Traffic Control Devices (MUTCD), Design Standards and Revised Index Drawings. The Design-Build Firm shall use the edition of the Standard Specifications, Design Standards and Revised Index Drawings II & III), Special Provisions and Supplemental Specification (Divisions II & III), Special Provisions for Road and Bridge Construction (Divisions and Supplemental Specifications, Construction (Divisions II & III), Design Standards and Revised Index Drawings. The Design-Build Firm shall use the edition of the Standard Specifications, Design Standards and Revised Index Drawings II & III), Special Provisions and Supplemental Specifications (Divisions II & III), Special Provisions for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications, Design Standards and Revised Index Drawings

in effect at the time the bid price proposals are due in the District Office. The Design-Build Firm shall use the 2009 edition of the MUTCD (as amended in 2012). It shall be the Design-Build Firm's responsibility to acquire and utilize the necessary manuals and guidelines that apply to the work required to complete this Project. The services will include preparation of all documents necessary to complete the Project as described in Section I of this document.

- 1. Florida Department of Transportation Roadway Plans Preparation Manuals (PPM) <u>http://www.fdot.gov/roadway/PPMManual/PPM.shtm</u>
- 2. Florida Department of Transportation Specifications Package Preparation Procedure <u>http://www.fdot.gov/programmanagement/PackagePreparation/Handbooks/630-010-005.pdf</u>
- 3. Florida Department of Transportation Design Standards <u>http://www.fdot.gov/roadway/DesignStandards/Standards.shtm</u>
- 4. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications <u>http://www.fdot.gov/programmanagement/default.shtm</u>
- 5. Florida Department of Transportation Surveying Procedure 550-030-101 http://www.fdot.gov/procedures/procedures.shtm
- 6. Florida Department of Transportation EFB User Handbook (Electronic Field Book) <u>http://www.fdot.gov/geospatial/doc\_pubs.shtm</u>
- 7. Florida Department of Transportation Drainage Manual, Drainage Design Guide, and Erosion and Sediment Control Manual <u>http://www.fdot.gov/roadway/Drainage/ManualsandHandbooks.shtm</u>
- 8. Florida Department of Transportation Soils and Foundations Handbook <u>http://www.fdot.gov/structures/Manuals/SFH.pdf</u>
- 9. Florida Department of Transportation Structures Manual <u>http://www.fdot.gov/structures/DocsandPubs.shtm</u>
- 10. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Manual http://www.fdot.gov/cadd/downloads/publications/CADDManual/default.shtm
- 11. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Production Criteria Handbook <u>http://www.fdot.gov/cadd/downloads/publications/CriteriaHandBook/</u>
- 12. Florida Department of Transportation Production Criteria Handbook CADD Structures Standards http://www.fdot.gov/cadd/downloads/publications/CriteriaHandBook/
- 13. Instructions for Design Standards http://www.fdot.gov/structures/IDS/IDSportal.pdf
- 14. AASHTO A Policy on Geometric Design of Highways and Streets https://bookstore.transportation.org/collection\_detail.aspx?ID=110
- 15. MUTCD 2009 http://mutcd.fhwa.dot.gov/

- 16. Safe Mobility For Life Program Policy Statement <u>http://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/FormsA</u> <u>ndProcedures/ViewDocument?topicNum=000-750-001</u>
- 17. Traffic Engineering and Operations Safe Mobility for Life Program http://www.fdot.gov/traffic/TrafficServices/SafetyisGolden.shtm/
- 18. Florida Department of Transportation American with Disabilities Act (ADA) Compliance – Facilities Access for Persons with Disabilities Procedure 625-020-015 <u>http://www.fdot.gov/procedures/procedures.shtm</u>
- 19. Florida Department of Transportation Florida Sampling and Testing Methods <u>http://www.fdot.gov/materials/administration/resources/library/publications/fstm/disclai</u> <u>mer.shtm</u>
- 20. Florida Department of Transportation Flexible Pavement Coring and Evaluation Procedure <u>http://www.fdot.gov/materials/administration/resources/library/publications/materialsman</u> <u>ual/documents/v1-section32-clean.pdf</u>
- 21. Florida Department of Transportation Design Bulletins and Update Memos http://www.fdot.gov/roadway/Bulletin/Default.shtm
- 22. Florida Department of Transportation Utility Accommodation Manual <u>http://www.fdot.gov/programmanagement/utilities/UAM.shtm</u>
- 23. AASHTO LRFD Bridge Design Specifications https://bookstore.transportation.org/category\_item.aspx?id=BR
- 24. Florida Department of Transportation Flexible Pavement Design Manual <u>http://www.fdot.gov/roadway/PM/publicationS.shtm</u>
- 25. Florida Department of Transportation Rigid Pavement Design Manual <u>http://www.fdot.gov/roadway/PM/publicationS.shtm</u>
- 26. Florida Department of Transportation Pavement Type Selection Manual <u>http://www.fdot.gov/roadway/PM/publicationS.shtm</u>
- 27. Florida Department of Transportation Right of Way Manual <u>http://www.fdot.gov/rightofway/Documents.shtm</u>
- 28. Florida Department of Transportation Traffic Engineering Manual <u>http://www.dot.state.fl.us/Trafficoperations/TrafficServices/Studies/TEM/tem.shtm</u>
- 29. Florida Department of Transportation Intelligent Transportation System Guide Book <u>http://www.fdot.gov/traffic/Doc\_Library/Doc\_Library.shtm</u>
- 30. 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
- 31. AASHTO Guide for the Development of Bicycle Facilities https://bookstore.transportation.org/collection\_detail.aspx?ID=116
- 32. Federal Highway Administration Hydraulic Engineering Circular Number 18 (HEC 18). http://www.fhwa.dot.gov/engineering/hydraulics/library\_arc.cfm?pub\_number=17
- 33. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways <u>http://www.fdot.gov/roadway/FloridaGreenbook/FGB.shtm</u>

- 34. Florida Department of Transportation Project Development and Environment Manual, Parts 1 and 2 http://www.fdot.gov/environment/pubs/pdeman/pdeman1.shtm
- 35. Florida Department of Transportation Driveway Information Guide http://www.fdot.gov/planning/systems/programs/sm/accman/pdfs/driveway2008.pdf
- 36. AASHTO Highway Safety Manual <u>http://www.highwaysafetymanual.org/</u>
- 37. Florida Statutes <u>http://www.leg.state.fl.us/Statutes/index.cfm?Mode=View%20Statutes&Submenu=1&Ta</u> <u>b=statutes&CFID=14677574&CFTOKEN=80981948</u>

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

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

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

## C. Geotechnical Services:

#### 1. General Conditions:

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

## **D. Department Commitments:**

The Design-Build Firm will be responsible for adhering to the project commitments identified for each Task Work Order issued under this Contract.

## E. Environmental Permits:

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

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

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

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

Department prior to submittal to the agencies.

All applicable data shall be prepared in accordance with Chapter 373 and 403, Florida Statutes, Chapters 40 and 62, F.A.C.; Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, 23 CFR 771, 23 CFR 636, and parts 114 and 115, Title 33, Code of Federal Regulations. In addition to these Federal and State permitting requirements, any dredge and fill permitting required by local agencies shall be prepared in accordance with their specific regulations. Preparation of all documentation related to the acquisition of all applicable permits and complete permit packages will be the responsibility of the Design-Build Firm. The Design-Build Firm is responsible for the accuracy of all information included in permit application packages. As the permitee, the Department is responsible for reviewing, approving, and signing, the permit application package including all permit modifications, or subsequent permit applications. This applies whether the project is Federal or state funded. The Department will have up to 15 calendar days (excluding weekends and Department observed holidays) to review and comment on the draft permit package. The Design-Build Firm will address all comments by the Department and obtain Department approval, prior to submittal of the permit application. 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 package, prior to submittal of the permit application(s) by the Design-Build Firm to the regulatory agency(ies). Once the Department has approved the permit application, the Design-Build Firm is responsible for submitting the permit application to the environmental permitting agency. A copy (electronic and hard copy) of any and all correspondence with any of the environmental permitting agencies shall be sent to the District Environmental Permits Office. If any agency rejects or denies the permit application, it is the Design-Build Firm's responsibility to make whatever changes necessary to ensure the permit application is approved. The Design-Build Firm from the beginning of the contract must aggressively, efficiently, and effectively pursue acquisition of all permits including the utilization of any and all reasonably available means and methods to secure the permits.

The Design-Build Firm will be required to pay all permit fees. Any fines levied by permitting agencies shall be the responsibility of the Design-Build Firm. The Design-Build Firm shall be responsible for complying with all permit conditions. The Design-Build Firm shall be solely responsible for all costs associated with these permitting activities and shall include all necessary permitting activities in their schedule.

Permits from the following agencies may be required: the United States Army Corps of Engineers (USACOE), the Water Management District (WMD), or the Florida Department of Environmental Protection (FDEP).

The Design-Build Firm, under the control and direction of the Department, shall be responsible for all activities and costs associated with any wetland impacts including mitigation and/or wildlife-related permit, commitments, requirements, understandings, or agreements throughout the life of the project. The goal of the project is to avoid impacts, minimize where impacts cannot be avoided, and then mitigate for the minimized impacts.

The Design-Build Firm shall be responsible for all mitigation costs to offset impacts to both wetlands and protected species.

The Design-Build Firm shall coordinate all discussions of wetland and protected species impact mitigation through the Department's Permits Section and Environmental Management Office and mitigation proposals shall be reviewed and approved by the Department prior to submittal to any regulatory agency. If mitigation is required the Design-Build Firm shall purchase credits directly from a permitted mitigation bank. In the event that permitted mitigation bank credits are unavailable or insufficient to meet the Department project needs, the Design-Build Firm will be responsible for providing alternative mitigation consistent with the provisions of section 373.4137, Florida Statutes, and

acceptable to the permitting agency(ies).

The Design-Build Firm must make all efforts to eliminate or reduce flood plain impacts. If flood plain impacts are unavoidable, then floodplain compensation must be provided within existing ROW.

The Design-Build Firm must ensure that the project is constructed and maintained (until final acceptance by the Department) in accordance with all conditions of each permit. The Design-Build Firm is responsible for all commencement and termination of construction notices as well as the preparation and submittal of any post construction certifications, as-built plans and transferring of the construction permit to an operations permit. The Design-Build Firm is responsible for advertising all public notifications and their costs. The Department is not responsible for any delays caused by third party objections to permits that were not properly noticed by the Design-Build Firm.

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 form of any determination made by the District Construction Engineer under this provision.

## F. Contamination:

The Department will be responsible for contamination assessment and cleanup based on information provided by the Design-Build Firm. The Design-Build Firm shall provide plans to the DCIC to review for potential contamination issues. The Department will have a minimum of two weeks to review and comment on these plans for potential contamination issues. The Design-Build Firm will coordinate with the Department's District Contamination Impact Coordinator (DCIC) and their remediation contractor to perform any necessary assessment and remediation at contaminated areas.

If contamination impacts to the project are known or suspected, the Department will provide an Impact to Construction Assessment Report within 120 days of receipt of the plans or notification of a contamination issue.

The Department will provide plan markings and notes for areas of potential or known contamination. The Design-Build Firm shall coordinate the schedule of construction activities with the DCIC and the Department's District-Wide Contamination Assessment/Remediation Contractor (CAR Contractor). The Design-Build Firm shall give at least four weeks advance notice to the DCIC/CAR Contractor before working in contaminated areas that require support from the CAR contactor. This is to allow the CAR Contractor sufficient time to acquire, mobilize and set up equipment to treat contaminated dewatering effluent, and to handle contaminated soil.

If necessary, the Design-Build Firm shall provide an area (or areas) for temporary stockpiling of contaminated soil. The stockpile area(s) shall be within the project limits. The CAR Contractor will replace the excavated contaminated soil with suitable clean material, backfilling to pre-excavation elevations, if

required. If there is suitable excess material on the project, it shall be made available by the Design-Build Firm for these backfilling operations.

If dewatering of contaminated groundwater is required, the Design-Build Firm shall provide an area(s) to accommodate all water treatment equipment. These areas shall be as close as possible to the dewatering operation, and in no case shall they be outside the project limits (unless directed by the Department).

The Design-Build Firm shall coordinate with the Department and CAR Contractor in setting up dewatering apparatus to avoid dewatering contaminated areas along with uncontaminated areas. If the Design-Build Firm wishes to dewater a contaminated area and adjacent uncontaminated area(s) simultaneously, they will use a separate header section(s) and additional pump(s) to keep the discharge(s) separate.

All the above conditions and requirements shall also pertain to all utility work included in, associated with, or affected by the project and discovery of contaminated areas during construction.

## G. Railroad Coordination:

The District Rail Office will conduct the required contract negotiations and plans review coordination with the affected Railroad Company. Copies of the approved Agreements will be made available to the Design-Build Firm if needed. The Design-Build Firm must comply with the terms of these agreements as well as the Standard Specifications for Road and Bridge Construction, 7-11.4. Operations within Railroad Right of Way. The Design-Build Firm must make the necessary arrangements with the District Rail Office concerning any encroachments into the railroad rights-of-way.

This general Railroad Coordination will be reviewed and addressed on a project by project basis.

## H. 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.

The Design-Build Firm shall provide final Right of Way survey and mapping services for the Project. The scope of work shall include performing appropriate Right of Way survey for the proposed Project, including mainline alignment, side streets as needed, as well as all Right of Way interests.

The Design-Build Firm shall provide final Right of Way maps. These maps and any associated sketches, legal descriptions and all associated necessary documentation, field data collection and any other supporting documentation shall be included as part of the Construction Set of plans submitted by the Design Build Firm.

## I. 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.

## J. Submittals:

#### 1. Component Submittals:

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

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 bridges are limited to foundation, substructure, and superstructure. For bridges over navigable waterways, submittals are limited to foundation, approach substructure, approach superstructure, main unit substructure, and main unit superstructure. Further dividing the foundation, substructure, or superstructure into individual elements (i.e. Pier 2, Abutment 1, Span 4, etc.) will not be accepted.

#### 2. Phase Submittals:

The Design-Build Firm shall provide the documents for each phase submittal listed below to the Department's Project Manager in electronic format. 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".

## 60% Phase Submittal

1 Electronic (PDF) copy of 11" X 17" plans
 CADD Files
 1 Electronic (PDF) preliminary geotechnical report

## 90% Phase Submittal

 1 Electronic (PDF) cop of 11" X 17" plans
 1 Electronic (PDF) copy of signed and sealed geotechnical report
 1 Electronic (PDF) copy of Settlement and Vibration Monitoring Plan (SVMP) for Department acceptance and update throughout the construction period
 1 Electronic (PDF) copy of the signed and sealed Bridge Hydraulic Report
 1 Electronic (PDF) copy of design documentation
 1 Electronic (PDF) copy of Technical Special Provisions
 Bridge Load Rating Calculations
 Completed Bridge Load Rating Summary Detail Sheet
 Load Rating Summary Form Independent Peer reviewer's comments and comment responses

#### **Final Submittal**

1 Electronic (PDF) copy of signed and sealed 11" X 17" plans

1 Electronic (PDF) copy of signed and sealed design documentation

1 Electronic (PDF) copy of Settlement and Vibration Monitoring Plan (SVMP)

1 Electronic (PDF) copy of final documentation

1 Electronic (PDF) copy of the signed and sealed Bridge Load Rating Summary Detail Sheet

1 Electronic (PDF) copy of the signed and sealed Load Rating Summary Form

1 Electronic (PDF) copy of the signed and sealed Construction Specifications Package or Supplemental Specifications Package

1 Electronic (PDF) copy of Technical Special Provisions

Independent Peer Reviewer's signed and sealed cover letter that all comments have been addressed and resolved.

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."

## **3.** Requirements to Begin Construction:

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. 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 will be in an electronic format including report with details, 8 1/2" X 11" sheets, or 11" X 17" sheets, and only the information needed by the Design-Build Firm to construct the specific activity needs to be shown. Beginning construction prior to the Department stamping the plans and specifications Released for Construction does not reduce or eliminate the Phase Submittal requirements.

## As-Built Set:

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

The Design-Build Firm shall complete the As-Built Plans as the Project is being constructed. All changes made subsequent to the "Released for Construction" Plans shall be signed/sealed by the EOR. The As-Built Plans shall reflect all changes initiated by the Design-Build Firm or the Department in the form of revisions. The As-Built plans shall reflect Chapter 5.12 of the Construction Project Administration Manual (TOPIC No. 700-000-000). 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 certify the As-Built Plans per Chapter 5.12 of the Construction Project Administration Manual (TOPIC No. 700-000-000).

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

- 1 set of 11" X 17" signed and sealed plans
- 1 copy of Landscape Opportunity Plans
- 1 signed and sealed copy of the Bridge Load Rating based on as-built conditions
- 1 set of final documentation (if different from final component submittal)

#### 5. Railroad Submittals:

Plan sheets listed below are required for review by the railroad. The plans are to be submitted to the District Rail Administrator and Resident Engineer electronically. The required sheets are:

- Key Sheet
- Typical Section(s)
- Plan & Profile Sheet(s)
- Rail-highway grade crossing detail sheet
- Signing and Pavement Marking Sheet(s)
- Cross Section Sheets

#### K. Contract and Task Work Order Duration:

The Department has established a Contract Duration of 1095 calendar days for the subject Contract.

Subsequent Task Work Orders will have Contract Time not to exceed 365 days. The Contract Time for each subsequent Task work Order time will be documented in the Task Work Order Notice to Proceed.

#### L. Project Schedule:

The Design-Build Firm shall submit a Schedule for each Task Work Order and an overall Contract 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 involvement and the Schedule shall allow for up to twenty (20) calendar days (excluding weekends and Department observed Holidays) for these reviews.

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

Special Events will be identified in accordance with Specification 8-6.4:

• Special Events will be identified by the Design Build Firm for each Task Work Order issued under this Contract. For any construction only tasks, the Department will issue special events notification.

The minimum number of activities included in the Schedule shall be those listed in the Schedule of Values and those listed below:

- Anticipated Award Date
- Design Submittals
- Shop Drawing Submittals
- Other Contractor-Initiated Submittals including RFI's, RFM's, RFC's, and NCR's
- Design Survey
- Submittal Reviews by the Department and FHWA
- Design Review / Acceptance Milestones
- Materials Quality Tracking
- Geotechnical Investigation
- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Embankment/Excavation
- Environmental Permit Acquisition
- Foundation Design
- Foundation Construction
- Substructure Design
- Substructure Construction
- Superstructure Design
- Superstructure Construction
- Walls Design
- Walls Construction
- Roadway Design
- Roadway Construction
- Signing and Pavement Marking Design
- Signing and Pavement Marking Construction
- Signalization and Intelligent Transportation System Design
- Signalization and Intelligent Transportation System Construction
- Lighting Design
- Lighting Construction
- Maintenance of Traffic Design
- Permit Submittals
- Maintenance of Traffic Set-Up (per duration)
- Erosion Control
- Holidays and Special Events (shown as non-work days)
- Additional Construction Milestones as determined by the Design-Build Firm
- Final Completion Date for All Work

# M. 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.

For each assigned Task Work Order, the Design-Build Firm shall designate a Project Manager who will be the representative of the Design-Build Firm. This person will be the key contact person between the Department and the Design-Build Firm for communication purposes including, but not limited to, design issues/resolutions, construction issues/resolutions, and all other issues. In the event the Design-Build Firm employs more than one designer and/or sub-contractor, this designated Project Manager will represent all of those designers and sub-contractors. At the Department's discretion, during the design phase of an assigned Task Work Order, the Design-Build Firm shall provide a representative who is available on a continuing basis as required by the Department, and who is capable of providing continuous accurate design knowledge of information associated with an assigned Task Work Order.

# N. 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.

## **O.** 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
- Public Workshops
- Public Meetings
- Local government agency coordination
- Scoping Meetings
- System Integration Meetings

During design, the Design-Build Firm shall meet with the Department's Project Manager on a bi-weekly basis and provide a two week 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 three-week look ahead for activities to be performed.

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

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

System Integration Meetings will be held on mutually agreeable dates.

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

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

#### P. 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. A Public Involvement Consultant (PIC) has been hired by the Department to carry out an exhaustive Public Involvement Campaign and a marketing effort. The Design-Build Firm will continue to be part of the Public Involvement effort as described below.

#### 2. Community Awareness:

The Design-Build Firm will provide assistance to the PIC in the creation of a Community Awareness Program for the project.

## 3. **Public Meetings:**

The Design-Build Firm shall provide all support necessary for the PIC to hold various public meetings, which may include:

- Kick-off or introductory meeting
- Metropolitan Planning Organization (MPO) Citizens Advisory Committee Meetings
- MPO Transportation Technical Committee Meetings
- MPO Meetings
- Public Information Meetings
- Elected and appointed officials

• Special interest groups (private groups, homeowners associations, environmental groups, minority groups and individuals)

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

For any of the above type meetings the Design-Build Firm shall provide all technical assistance, data and information necessary and provide display boards, printed material, video graphics, computerized graphics, etc., and information necessary for the day-to-day exchange of information with the public, all agencies and elected officials in order to keep them informed as to the progress and impacts that the proposed project will create. This includes workshops, information meetings, and public hearings.

The Design-Build Firm shall, on an as-needed basis, attend the meetings with an appropriate number of personnel to assist the Department's Project Representative/PIC. The Design-Build Firm shall forward all requests for group meetings to the PIC. The Design-Build Firm shall inform the PIC of any meetings with individuals that occur without prior notice.

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

The Design-Build Firm shall provide all the support services listed in No. 3 above. All legal/display ads announcing workshops, information meetings, and public meetings will be prepared and paid for by the Design-Build Firm and must be reviewed and approved by the PIC prior to release.

The Department will be responsible for the legal/display advertisements for design concept acceptance. The Design-Build Firm will be responsible for preparing and mailing (includes postage) for all letters announcing workshops and information meetings and must be reviewed and approved by the PIC prior to release.

## 5. **Public Involvement Data:**

The Design-Build Firm is responsible for the following:

- Coordinating with the Public Involvement Consultant.
- Identifying possible permit and review agencies and providing names and contact information for these agencies to the PIC and Project Manager.
- Providing required expertise (staff members) to assist the PIC on an as-needed basis.
- Preparing color graphic renderings and/or computer generated graphics to depict the proposed improvements for coordination with the Department, local governments, the Urban Design Guidelines Committee, and other agencies.

The collection of public input occurs throughout the life of the project and requires maintaining files, newspaper clippings, letters, and especially direct contacts before, during and after any of the public meetings. Articles such as those mentioned shall be provided to the PIC for their use and records.

In addition to collecting public input data, the Design-Build Firm may be asked by the PIC to prepare responses to any public inquiries as a result of the public involvement process. The Department shall review all responses prior to mailing.

# Q. 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 Contract 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 gaining Department's for instructions on access to the 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 the Standard Specifications.

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

#### R. 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.

#### 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 for each Task Work Order. Final payment will be made upon partial acceptance by the Department of the Design-Build Task Work Order. 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 for each Task Work Order to the Department for approval. No estimates requesting payment shall be submitted prior to Department approval of the schedule of values. The Design-Build firm shall also include a summary sheet with cost breakdowns by FIN and Task Work Order.

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

## T. Computer Automation:

Project assigned by Task Work Orders shall be developed utilizing computer automation systems in order to facilitate the development of the contract plans. Various software and operating systems were developed to aid in assuring quality and conformance with Department policies and procedures. The Department supports MicroStation and GEOPAK as its standard graphics and roadway design platform as well as Autodesk's AutoCAD Civil 3D as an alternate platform. Seed Files, Cell Libraries, User Commands, MDL Applications and related programs developed for roadway design and drafting are available in the FDOT CADD Software Suite. Furnish record 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 Intergraph / MicroStation format.

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

## 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 and weld, 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
- Post-tensioning systems
- ITS Products
- ITS system(s) and sub-system(s)
- 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.

# X. Adjoining Construction Projects:

The Design-Build Firm shall be responsible for coordinating construction activities with other construction projects that are impacted by or impact this project. This includes projects under the jurisdiction of local governments, the Department, or other regional and state agencies.

## 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 Inspector. If the issue cannot be resolved by the Construction Inspector in one (1) day it will then be escalated to the Project Administrator. If the issue cannot be resolved by the Project Administrator, it will then be escalated to the Construction Project Manager or the Design Project Manager as applicable. If the issue cannot be resolved by the Project Managers it will then be escalated to the Resident Engineer. If the issue cannot be resolved by the Resident Engineer, the Resident Engineer shall forward the issue to the District Construction Engineer who will coordinate with the District Design Engineer, 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.

# Z. Roadway Plans and Specifications

All plans and design for assigned Task Work Orders are to be prepared in accordance with the applicable standards, criteria, manuals, handbooks, guidelines, and specifications adopted by AASHTO and the Department and shall be accurate, legible, complete in design, drawn to the appropriate scale, and furnished in reproducible form on material acceptable to the Department. The Design-Build Firm is to provide the Department with all Special Provisions, Technical Special Provisions, and Developmental Specifications particular to a given Task Work Order as part of the Roadway Plan submitted. All plans of the proposed construction shall include a baseline of survey and/or reference centerline of construction to tie elements of proposed construction with stations/offsets for reference by construction personnel and as-built drawings. This may be established in the field by location survey, recovery of previous survey records or as-built plans.

# AA. Drainage Plans:

All drainage plans and designs for assigned Task Work Orders are to be prepared in accordance with applicable Department's memorandums, Department's Drainage Manual, and 23 CFR 650, and the requirements in this document. All plans of the proposed construction shall include a baseline survey and/or reference baseline construction to tie elements of proposed construction with stations/offsets for reference by construction personnel and as-built drawings. This may be established in the field by location survey, recovery of previous survey records or as-built plans.

# **BB.** Structures Plans:

All structures plans for assigned Task Work Orders shall be prepared in accordance with applicable Structures Manual, AASHTO LRFD Bridge Design Specifications and interims and other Department's standards, policies, procedures, applicable temporary design bulletins and directions from the State Structures Design Engineer. These plans shall be accurate, legible, complete in design, and drawn to appropriate scale and furnished in reproducible form on material acceptable to the Department. All category level II bridge plans shall be peer reviewed by a pre-qualified independent firm not involved with the design

team, prior to submittal to the Department. All plans of the proposed construction shall include a baseline survey and/or reference baseline construction to tie elements of proposed construction with stations/offsets for reference by construction personnel and as-built drawings. This may be established in the field by location survey, recovery of previous survey records or as-built plans.

All foundations will require deep removal unless information is provided to justify shallow removal for each location identified. The information shall clearly identify conflicts or hazards that would be unavoidable if deep foundation removal is performed. Review and approval will be given for each location requested.

# CC. Signing and Marking Plans:

All Signing and Marking plans for assigned Task Work Orders are to be prepared in accordance with applicable Design Standards and practices (Manual on Uniform Traffic Control Devices), Department's Standard Specifications, Indexes, Department's Plans Preparation Manual, and shall be accurate, legible, complete in design, and drawn to the scale indicated in the Department's manuals and furnished in reproducible form. All plans of the proposed construction shall include a baseline survey and/or reference baseline construction to tie elements of proposed construction with stations/offsets for reference by construction personnel and as-built drawings. This may be established in the field by location survey, recovery of previous survey records or as-built plans.

# **DD.** Signalization Plans:

All Signalization plans for assigned Task Work Orders are to be prepared in accordance with applicable Design Standards and practices, Department's Standard Specifications, Indexes, Department's Plans Preparation Manual, and shall be accurate, legible, complete in design, and drawn to the scale indicated in the Department's manuals and furnished in reproducible form. All plans of the proposed construction shall include a baseline survey and/or reference baseline construction to tie elements of proposed construction with stations/offsets for reference by construction personnel and as-built drawings. This may be established in the field by location survey, recovery of previous survey records or as-built plans.

# **EE.** Lighting Plans:

All Lighting plans for assigned Task Work Orders are to be prepared in accordance with applicable Department Design Standards, Department Standard Specifications, Indexes, Department's Plans Preparation Manual, and instructions issued by the Department to the Consultant, and shall be accurate, legible, complete in design and drawn to the scale as directed by the Department, and furnished in reproducible form. All plans of the proposed construction shall include a baseline survey and/or reference baseline construction to tie elements of proposed construction with stations/offsets for reference by construction personnel and as-built drawings. This may be established in the field by location survey, recovery of previous survey records or as-built plans.

# FF. Partial Payments:

The Department's Construction Project Administrator will make partial payments on monthly estimates based on the amount of work that the Contractor completes each Task Work Order during the month. The Department's Construction Project Administrator will make approximate monthly payments, and the Department will correct all partial estimates and payments in the subsequent estimates and in the final estimate and payment each Task Work Order.

The Department will base the amount of such payments on the total value of the work that the Contractor

has performed to the date of the estimate, based on the certified submittal by the Contractor less quantities completed and the Contract prices, less payments previously made and less any retainage withheld. Retainage does not apply to each Task Work Order.

### 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 in addition to those identified that will be monitored for vibrations during the construction period.
- Establish the maximum vibration levels. The maximum vibration levels stated for existing structures shall not be exceeded.
- Identify any existing structures in addition to those identified that will be monitored for settlement during the construction period.
- Establish the maximum settlement levels for the existing structures that must not be exceeded. The maximum settlement level stated shall not be exceeded.
- Identify any existing structures in addition to those identified that require preconstruction and post-construction surveys.

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

#### C. Geotechnical Services

#### 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 Osterberg Cell Load Test or Statnamic Load Test. For Osterberg Cell Load Tests use the same loading and unloading intervals, as well as the same loading times specified for the Modified Quick Test. Comply with the instrumentation requirements of 455-2.4. Before the resistance factors for static/statnamic load testing may be used for drilled shafts, a minimum number of successful load tests must be performed in representative locations.

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 integrity tests on these shafts.
- 7. Providing all personnel and equipment to perform a load test program on the load test shafts.
- 8. Determining the production shaft lengths.
- 9. Documenting and providing a report that includes all load test shaft data, analysis, and recommendations to the Department.
- 10. Constructing all drilled shafts to the required tip elevation and socket requirement in accordance with the specifications.
- 11. Inspecting and documenting the construction of all drilled shafts in accordance with the specifications.
- 12. Performing Cross-Hole Sonic Logging (CSL) or Thermal Integrity tests on all nonredundant drilled shafts supporting bridges. For redundant drilled shaft bridge foundations and drilled shafts for miscellaneous structures, perform CSL or Thermal Integrity testing on any shaft suspected of containing defects.
- 13. Repairing all detected defects and conducting post repair integrity testing using 3D tomographic imaging and gamma-gamma density logging.
- 14. Submitting Foundation Certification Packages in accordance with the specifications.
- 15. Providing safe access, and cooperating with the Department in verification of the drilled shafts, both during construction and after submittal of the certification package.

#### **Spread Footings Foundations**

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. Preparing and submitting an Auger Cast Pile Installation Plan for the Department's acceptance.

- 4. Inspecting and documenting the spread footing construction.
- 5. Submitting Foundation Certification Packages in accordance with the specifications.
- 6. Providing safe access, and cooperating with the Department in verification of the spread footing, both during construction and after submittal of the certification package.

### Auger Cast Piles for Sound Barrier Walls

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

- 1. Evaluating geotechnical conditions and designing the foundations, including diameter and lengths.
- 2. Constructing all auger cast piles to the required tip elevation and socket requirements, in accordance with the specifications.
- 3. Preparing and submitting an Auger Cast Pile Installation Plan for the Department's acceptance.
- 4. Inspecting and documenting the auger cast pile installation.
- 5. Submitting Foundation Certification Packages in accordance with the specifications. 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. The certification package shall include the results of all the field testing, instrumentation and lab testing performed and a signed and sealed letter by the GFDEOR certifying that the specialty geotechnical work meets the requirements. The Department may issue comments and require additional verification testing.

## **D.** Utility Coordination:

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

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

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

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

Utility Agency/Owners (UA/O's) will be identified by the Department on a project by project basis as having facilities within the Project corridor for which the Department contemplates an adjustment, protection, or relocation is possible.

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

<u>UAO</u>	Contact Info			
SR 80 RAIL				
CITY OF FORT MYERS	NICOLE MONAHAN	(239) 321 - 7459		
COMCAST	Mark Cook	(239) 432-1805		
FLORIDA POWER & LIGHTLEE	JOEL BRAY	(386) 586 - 6403		

 Table B - Summary of UAO Having Facilities within the Proposed Project Limits

COMCAST CABLE	1			
COMMUNICATION, INC.	Mark Cook	(239) 432-1805		
SUMMIT BROADBAND INC.	MIKE REBER	(239) 325 - 4105 x261		
LEVEL 3 COMMUNICATIONS	NETWORK RELATIONS	(877) 366 - 8344 x2		
LEE COUNTY SIGNAL DEPARTMENT	Mike Padgett	(239) 533-9500		
LEE COUNTY UTILITIES	Victor Gagnon	(239) 533-8178		
CENTURYLINK (FORMERLY QWEST COMMUNICATIONS)	GEORGE MCELVAIN	(303) 992 - 9931		
CENTURYLINK FT MYERS	JAMES NTTINGHAM	(239) 336 - 2035		
US 98 AT POLK				
BRIGHT HOUSE NETWORKS - POLK	Darin Daniels	863-233-4764		
FRONTIER COMMUNICATIONS	Fred Valdes	863-688-9714		
CITY OF LAKELAND ELECTRIC	Richard Fox	863-834-6204		
CITY OF LAKELAND WATER	Tom Macttiacci	863-834-8316		
SR 37 AT EDGEWOOD				
FIBERLIGHT LLC.	TIM GREEN	813 877-7183		
BRIGHT HOUSE NETWORKS - POLK	Darin Daniels	863-233-4764		
FRONTIER COMMUNICATIONS	Fred Valdes	863-688-9714		
CITY OF LAKELAND ELECTRIC	Richard Fox	863-834-6204		
CITY OF LAKELAND WATER	Tom Macttiacci	863-834-8316		
CITY OF LAKELAND WASTEWATER	KATRINA SHEDD	863-834-8277 x2		
TECO PEOPLES GAS- LAKELAND	Alex Mcfarlane	813-275-3762		
SR 17 (LAKEVIEW DR) AT CRESCENT DR				
COMCAST CABLEVISION	Tony Springsteel	561-804-0973		
CITY OF SEBRING - WATER	Garvin Elkhill	863-471-5113		
CITY OF SEBRING - WWC	JIM JACKSON	863-471 - 5156		
DUKE ENERGY	USIC DISPATCH / Mark Manner	800-778-9140 / 863-678- 4476		
НСВСС	GERALD (JED) SECORY	863-402-6523		
SEBRING GAS SYSTEM INC	JIM CORRELL	863-385-0194		
CENTURYLINK	Fen Lutz	863-452-3185		

If necessary, the Design-Build Firm may request utility relocation.

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.

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

### E. Roadway Plans:

#### General:

When applicable to a Task Work Order as determined by the Department, the Design-Build Firm shall prepare the Roadway Plans Package. This work effort includes the roadway design and drainage analysis needed to prepare a complete set of Roadway Plans, Traffic Control Plans, Environmental Permits and other necessary documents.

#### **Design Analysis:**

When applicable to a Task Work Order as determined by the Department, the Design-Build Firm shall develop and submit a signed and sealed Typical Section Package, Pavement Design Package and Drainage Analysis Report for review and concurrence by the Department and FHWA on Federal Aid Oversights Projects.

Any deviation from the Department's design criteria will require a Design Variation and any deviation from AASHTO will require a Design Exception.

These packages shall include the following:

### F. Roadway Design:

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

## 1. **Typical Section Package:**

- Transmittal letter
- Location Map
- Roadway Typical Section(s)
  - 1. Pavement Description (Includes milling depth)
  - 2. Minimum lane, shoulder, median widths
  - 3. Slopes requirements
  - 4. Barriers
  - 5. Right of Way
- Data Sheet
- Design Speed

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

- Pavement Design
  - 1. Minimum design period
  - 2. Minimum ESAL's
  - 3. Minimum design reliability factors
  - 4. Resilient modulus for existing and proposed widening (show assumptions)
  - 5. Roadbed resilient modulus
  - 6. 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

#### 3. Drainage Analysis:

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

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

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

• Open-Channel Conveyance (ditches with sidedrains), Storm-drain conveyance, pavement hydraulics, Stormwater Management facilities, Location Hydraulics, Bridge Hydraulics (including Scour Analysis, Bridge Hydraulics Recommendation Sheet, and a FEMA No-Rise Certificate), Erosion and Sediment Control.

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

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

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

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

The Design-Build Firm shall provide the Department's District Drainage Engineer a signed and sealed

Drainage Design Report. It shall be a record set of all drainage computations, both hydrologic and hydraulic. The engineer shall include all necessary support data.

## G. Geometric Design:

The Design-Build Firm shall prepare the geometric design for the Project using the Design Standards 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.

# 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  $8\frac{1}{2}$ " x 11". The data shall be in a hard-back folder for submittal to the Department. At the Project completion, a final set of design notes and computations, signed by the Design-Build Firm, shall be submitted with the record set of plans and tracings.

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

- 1. Design Standards 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 insure that the final geotechnical and hydraulic recommendations and reports required for bridge design are submitted with the 90% bridge plans.
    - c. The Design-Build Firm shall "Load Rate" all bridges in accordance with the Department Procedure 850-010-035 and the Structures Manual. The Bridge Load Rating Calculations, the Completed Bridge Load Rating Summary Detail Sheet, and the Load Rating Summary Form shall be

submitted to the Department for review with the 90% superstructure submittal. The final Bridge Load Rating Summary Sheet and Load Rating Summary Form shall be submitted to the Department for review with the Final superstructure submittal. A final, signed and sealed Bridge Load Rating, updated for as-built conditions, shall be submitted to the Department for each phase of the bridge construction prior to placing traffic on the completed phase of the bridge. A final, signed and sealed Bridge Load Rating, updated for the as-built conditions as part of the As-Built Plans submittal, shall be submitted to the Department before any traffic is placed on the bridge. The Bridge Load Rating shall be signed and sealed by a Professional Engineer licensed in the State of Florida.

- d. The Design-Build Firm shall evaluate scour on all bridges over water using the procedures described in HEC 18.
- e. Any erection, demolition, and any proposed sheeting and/or shoring plans that may potentially impact the railroad must be submitted to and approved by the railroad. This applies to areas adjacent to, within and over railroad rights of ways.
- f. The Engineer of Record for bridges shall analyze the effects of the construction related loads on the permanent structure. These effects include but are not limited to: construction equipment loads, change in segment length, change in construction sequence, etc. The Engineer of Record shall review all specialty engineer submittals (camber curves, falsework systems, etc.) to ensure compliance with the contract plan requirements and intent.

## 2. Criteria

c.

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. Bridge Widening: In general, match the existing as per the Department Structures Manual.
  - Critical Temporary Retaining Walls: Whenever the construction of a structural component (such as a wall, footing, or other such component) requires excavation that may endanger the public or an existing structure that is in use the Design-Build Firm must protect the existing facility and the public. If a critical temporary retaining wall is, therefore, required during the construction stage only, it may be removed and reused after completion of the work. Such systems as steel sheet 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.
- d. For bridges over navigable waterways, establish the required pier strengths

using the MathCad program furnished by the Department if no specific pier strength is listed in the Design and Criteria Package. 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

### 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, all Division II and III specifications provided as Attachments to this RFP, and any signed and sealed Technical Special Provisions. Any subsequent modifications to the Construction Specifications Package shall be prepared, signed and sealed as a Supplemental Specifications Package. The Specifications Package shall be prepared, signed and sealed by the Design-Build Firms Engineer of Record who has successfully completed the mandatory Specifications Package Preparations Training.

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

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

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

https://www2.dot.state.fl.us/SpecificationsPackage/Utilities/Membership/login.aspx?ReturnUrl=%2fspecificationspackage%2fDefault.aspx.

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 Departments Plans Preparation Manual. 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. The Department shall review the Shop Drawing(s) to evaluate compliance with project requirements and provide any findings to the Design-Build Firm. The Departments procedural review of Shop Drawings is to assure that the Design-Build Firm's EOR has approved and signed the drawing, the drawing has been independently reviewed and is in general conformance with the plans. The Departments review is not meant to be a complete and detailed review. 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 Traffic Control Plan (TCP) 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. Temporary Traffic Control Plan:

1. Traffic Control Analysis:

The Design-Build Firm shall design a safe and effective Temporary Traffic Control Plan to move vehicular and pedestrian traffic during all phases of construction. Topics to be addressed shall include, but are not limited to, construction phasing, utility relocation, drainage structures, signalization, ditches, front slopes, back slopes, drop offs within clear zone, temporary roadway lighting and traffic monitoring sites. Special consideration shall be given to the drainage system when developing the construction phases. Positive drainage must be maintained at all times.

The Temporary Traffic Control Plan shall address how to assist with maintenance of traffic throughout the duration of the contract.

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

Transportation Management Plans (TMPs) are required for significant projects which are defined as:

1. A project that, alone or in combination with other concurrent projects nearby, is anticipated to cause sustained work zone impacts.

2. All Interstate system projects within the boundaries of a designated Transportation Management Area (TMA) that occupy a location for more than three days with either intermittent or continuous

lane closures shall be considered as significant projects.

A TMP will consist of three components:

- (1) Temporary Traffic Control (TTC) plan component;
- (2) Transportation Operations (TO) component; and
- (3) Public Information (PI) component

Additional information can be found in Volume 1 / Chapter 10 of the PPM.

### 2. Temporary Traffic Control Plans:

The Design-Build Firm shall utilize Index Series 600 of the Department's Design Standards where applicable. Should these standards be inadequate, a detailed Temporary Traffic Control Plan shall be developed. The Design-Build Firm shall prepare plan sheets, notes, and details to include the following: typical section sheet(s), general notes and construction sequence sheet(s), typical detail sheet(s), traffic control plan sheet(s).

The Design-Build Firm shall prepare additional plan sheets such as detours, cross sections, profiles, drainage structures, temporary roadway lighting, retaining wall details, and sheet piling as necessary for proper construction and implementation of the Temporary Traffic Control Plan.

For Pedestrian and Bicycle Access, the Design-Build Firm shall maintain existing pedestrian access on all sidewalks, transit facilities, and at all intersections. Pedestrian sidewalks and paths shall be maintained and continue to conform to ADA requirements. When the Design-Build Firm allows work areas to encroach upon a sidewalk or crosswalk area, and a minimum clear width of 4' cannot be maintained for pedestrian use, an alternative accessible pedestrian route shall be provided.

## 3. Traffic Control Restrictions:

For each assigned project, lane closures, detours and pacing operations may be restricted by the Department to specific hours. A lane may only be closed during active work periods. All lane closures, including ramp closures, must be reported to the local emergency agencies, the media and the District One information officer. Also, the Design-Build Firm shall develop the Project to be able to provide for all lanes of traffic to be open in the event of an emergency or if the lane closure causes a driver delay greater than 5 minutes. The Design-Build Firm must utilize the latest restrictions provided by the District One Construction office regarding Special Events when a Task requires work that will be affected by one of the Special Events.

Special Events and Lane Closure restrictions will be developed for each Task Work Order and submitted for approval by the Engineer.

## O. Environmental Services/Permits/Mitigation:

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

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

For each Task Work Order, the Design-Build Firm must notify the Department of any unanticipated environmental issues including any of the following:

- 1. Cultural Resources
- 2. Public Lands
- 3. Wetlands and Mitigation
- 4. Wildlife and Habitat
- 5. Contaminated Materials

## P. Signing and Pavement Marking Plans:

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

The Design-Build Firm shall be responsible for the design of all new or retrofit sign supports (post, overhead span, overhead cantilever, bridge mount and any applicable foundations). The Design-Build Firm shall show all details (anchor bolt size, bolt circle, bolt length, etc.) as well as all design assumptions (wind loads, support reactions, etc.) used in the analysis. Mounting types for various signs shall not be changed by the Design-Build Firm (i.e. if the proposed or existing sign is shown as overhead it shall be overhead and not changed to ground mount) unless approved by the Department. Any existing sign structure to be removed shall not be relocated and reused, unless approved by the Department.

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

## Q. Lighting Plans:

The Design-Build Firm shall prepare lighting plans in accordance with Department criteria.

The Design-Build Firm shall develop and submit for approval, a Load Center/Circuit/Pole Number identification plan that is compatible with the adjacent lighting systems maintenance identification scheme.

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

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

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

Existing light poles, luminaire arms, luminaires, and load centers identified for removal shall be coordinated with the Department as to whether these features will become the property of Design-Build Firm or

salvaged, transported, and delivered to the Department 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 scope of work. This review includes: conductors, conduit, grounding, enclosures, voltages, mounting heights, pullboxes, etc. This review also includes circuits outside the scope of work that originate or touch this Project's scope of work.

All deficiencies within the Project scope shall be identified and corrected. Deficiencies outside the Project scope shall be brought to the attention of the Department.

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

Where new electrical services are required, the Design-Build Firm shall coordinate the final locations of distribution transformer and service pole to minimize service and branch circuit conductors and conduit lengths. Each service point shall be separately metered.

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

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

#### 1. General

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

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
- Detail sheets on:
  - DMS Structure, DMS attachment, DMS display/layout
  - AVI structure, AVI attachment, AVI operation/layout
  - CCTV structure, CCTV attachment, CCTV operation/layout
  - MVDS structure, MDVS attachment, MDVS operation/layout
  - Fiber optic splice and conduit
  - Power Service Distribution
  - Generator backup systems
  - Wiring and connection details
  - Conduit, pull box, and vault installation
  - Communication Hub and Field Cabinets

- System-level block diagrams
- Device-level block diagrams
- Field hub/router cabinet configuration details
- Fiber optic Splicing Diagrams
- System configuration/Wiring diagram/Equipment Interface for field equipment at individual locations and communications hubs.
- Maintenance of Communications (MOC) Plan

The Design-Build firm is responsible for ensuring project compliance with the Regional ITS Architecture and Rule 940 as applicable. This includes, but is not limited to, the development or update of a concept of operations, the development or update of a Project Systems Engineering Management Plan (PSEMP), and requirement traceability verification matrix (RTVM) as well as coordination of document review.

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

#### 2. Design and Engineering Services:

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

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

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

- Replacement of any ITS System components that are impacted by the Design-Build Firm's scope of work as approved by the Department. All equipment shall be new unless otherwise specified.
- DMS Includes sign support structures, static signs, and mounting brackets for lane control, lane status, toll amount, travel time and full size DMS.
- CCTV Includes concrete poles, camera lowering devices and mountings to provide 100% CCTV coverage of the project corridor. In addition, each DMS shall have a dedicated verification CCTV.
- MVDS Includes concrete poles and mountings to detect all general purpose and express lanes along the project corridor. MVDS devices shall be spaced at ½ mile intervals on each side of the roadway.
- Cabinet Installation All new Signalization/ITS cabinets shall be mounted per Design Standard 17841 and shall provide for safe and efficient maintenance access. This cabinet shall meet the technical requirements of FDOT and be listed on the FDOT Approved Products List (APL).
- Removal of any ITS System components that are impacted by the Design-Build Firms scope of work as approved by the Department.
- Removal of the existing lateral drops from the backbone to the existing mainline toll facilities and from the existing ramp toll facilities that will or may be removed as part of this project. The

lateral drops disconnected from the backbone shall be re-spliced "in-kind" to match respective fiber strand(s) and buffer tube(s) as approved by the Department. The existing lateral drop conduit(s), pull boxes and splice boxes shall be removed as described in Section C - Utility Coordination of this RFP.

- Testing of fiber optic backbone and lateral drops furnished and installed or modified by the Design-Build Firm.
- Testing of the Intelligent Transportation System.

Coordinate with the Design-Build Firm to avoid conflicts with landscape plans within the Department Right of Way. While procedures are being revised to facilitate this increased collaboration and cooperation, the Design-Build Firm is required to ensure that the design and construction of each ITS project and each landscape project is entirely coordinated with existing and proposed ITS facilities and landscapes. Both programs have been determined to be important components of the state transportation system.

## **3.** Construction and Integration Services:

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

### 4. Testing and Acceptance:

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

## 5. Existing Conditions

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

The ITS components shall be defined as follows:

- Closed Circuit Television (CCTV) Camera System: The CCTV Camera System consists of pantilt-zoom (PTZ) cameras along the corridor that are typically spaced at one (1) mile intervals. The CCTV cameras are used by Department staff for incident management and traffic monitoring. The cameras are integrated and communicate with Local Hubs along the corridor via the single mode FOC communications backbone installed along the corridor.
- Dynamic Message Sign System (DMS). The DMS consists of both mainline and arterial dynamic message signs (ADMS) and provide roadway information and travel times. The mainline DMS are located at select locations along the corridor. The ADMS are located on each approach of select major arterials throughout the roadway system. The mainline DMS are connected and communicate via the single mode FOC communications backbone installed along the corridor. The ADMS communicate with wireless radios to a hub site connected to the single mode FOC communications backbone installed along the corridor.

- Vehicle Detection Systems (VDS): The VDS consists of non-intrusive, microwave technology sensors used to collect vehicle volume, speed and occupancy data from mainline travel lanes. The detectors are typically located at approximately one-half (1/2) mile intervals. The detectors are installed on stand-alone concrete poles and/or attached to other ITS device structures in a side-fired configuration to detect data on a lane by lane basis. The VDS is used for incident detection by Department staff and communicate with the single mode FOC communications backbone installed along the corridor.
- Automatic Vehicle Identification (AVI): An AVI detection system uses one or more different methods to collect information that can be used to establish a unique identifier for each vehicle detected and the time and location that the vehicle was detected. AVI detection systems collect data using radio-frequency identification (RFID), optical character recognition, magnetic signature analysis, laser profiling, Bluetooth®, or other methods to establish vehicle identifier, time, and location. Ensure that above-ground detectors can be mounted on existing poles or sign structures, or on new poles. The AVI is used to provide speed data and travel times for a road segment and communicate through wireless or fiber communications.
- Fiber Optic Network (FON): The FON infrastructure provides communications for ITS and Tolls components. The FON is composed of the FOC communications backbone, lateral connections and communications equipment including but not limited to field and HUB Ethernet switches, port servers, routers, fiber patch panels installed at the various ITS device(s) serving as a local HUB.
- For clarification purposes, any reference in this RFP to the mainline fiber optic backbone that is installed along the corridor shall be defined as the "backbone". The fiber optic cable between the backbone and ITS components shall be defined as the "ITS lateral".
- The FOC communications backbone consists of a single mode fiber optic cable and four (4), 1.25-inch HDPE conduit, locate tone wire, warning tape, fiber route markers, pull boxes, and splice boxes. Three (3) of the four (4), 1.25-inch HDPE conduits are spare conduits. The backbone provides access points for the various ITS components along the corridor for network connectivity as previously described.
- The majority of ITS components are connected to the backbone through a lateral twelve (12) count single mode fiber optic cable inside two (2), 1.25-inch HDPE conduits of which one is a spare. ITS components on arterials, such as ADMS, connect with the backbone through LHUBs which are physically connected to the backbone through a lateral fiber optic cable connection.
- The Departments Communications Network includes but is not limited to the fiber optic drops from the backbone to each toll plaza as well as fiber optic cable that interconnects ramp toll plazas within the various interchanges and all other associated communications elements. The lateral drops for the existing toll plaza consist of a twenty-four (24) count single mode fiber optic cable for ramp plazas and forty-eight (48) count single mode fiber optic cable for mainline toll plazas. The lateral drops typically consist of two (2), 2 inch underground conduits of which one is a spare.

# VII. <u>Technical Proposal Requirements:</u>

## 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 be submitted in PDF format including bookmarks for each section. Bookmarks which provide links to content within the Technical Proposal are allowed. Bookmarks which provide direct 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 1 Original Electronic copy of the Technical Proposal in PDF format.

The minimum information to be included:

Section 1: Project Approach

- Paper size: 8<sup>1</sup>/<sub>2</sub>" x 11". The maximum number of pages shall be 10 singlesided, typed pages including text, graphics, tables, charts, and photographs. Double-sided 8<sup>1</sup>/<sub>2</sub>" x 11" sheets will be counted as 2 pages. 11"x17" sheets are prohibited.
- Describe how the proposed design solutions and construction means and methods meet the project needs described in this Request for Proposal. Provide sufficient information to convey a thorough knowledge and understanding of the project and to provide confidence the design and construction can be completed as proposed.
- Provide the term, measureable standards, and remedial work plan for any proposed Value Added features that are not Value Added features included in this RFP, or for extending the Value Added period of a feature that is included in this RFP. Describe any material requirements that are exceeded.
- Provide a Written Schedule Narrative that describes the Design and Construction phases and illustrates how each phase will be scheduled to meet the Project needs required of this Request for Proposal. Bar or Gantt charts are prohibited.

Section 2: Plans

- All information such as typical sections, special emphasis details, structure plans, etc., shall be provided on 11" X 17" sheets.
- Provide Technical Proposal Plans in accordance with the requirements of the Plans Preparation Manual, except modified herein.
- Paper size: 11" X 17". Provide Technical Proposal Plans and Signalization sheets in accordance with the requirements of the Plans Preparation Manual.
- The Plans shall complement the Project Approach.

### C. Evaluation Criteria:

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

Item		Value
1.	Design	35
2.	Construction	35
3.	Innovation	5
4.	Value Added	5
Maximum Score		80
The following is a desc	ription of each of the above referenced items:	
1.	Design (35 points)	
Credit will be given for	the quality and suitability of the following elements:	
	• Structures design	
	<ul> <li>Roadway design / and safety</li> </ul>	
	<ul> <li>Drainage design</li> </ul>	
	Environmental Design	
	<ul> <li>Design coordination plan minimizing design changes</li> </ul>	
	<ul> <li>Geotechnical investigation plan</li> </ul>	
	<ul> <li>Geotechnical load test program</li> </ul>	
	<ul> <li>Minimizing impacts through design to:</li> </ul>	
	1. Environment	
	2. Public	
	3. Adjacent Properties	
	4. Structures	
	Traffic Control Plan design	
	Incident Management Plan	
	• Aesthetics	
	Utility Coordination and Design	

• Design considerations which improve recycling and reuse opportunities

Credit will be given for aesthetics features of the design including but not limited to the following: considerations in the geometry, suitability and consistency of structure type, structure finishes, shapes, proportions and form throughout the limits of the project.

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

Credit will be given for design and utility coordination efforts that minimize the potential for adverse impacts and project delays due to utility involvement.

Credit will be given for development of design approaches which minimize periodic and routine maintenance. The following elements should be considered: access to provide adequate inspections and maintenance, access to structure's lighting system, and impacts to long term maintenance costs.

### 2. **Construction (35 points)**

- Credit will be given for the quality and suitability of the following elements: Safety
- Structures construction
- Roadway construction
- Drainage construction
- Construction coordination plan minimizing construction changes
- Minimizing impacts through construction to:
  - o Environment
  - o Public
  - o Adjacent Properties
  - o 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

Credit will be given for 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.

Credit will be given for insuring all environmental commitments are honored.

Credit will be given for construction and utility coordination efforts that minimize the potential for adverse impacts and project delays due to utility conflicts.

#### 3. **Innovation (5 points)**

Credit will be given for introducing and implementing innovative design approaches and construction techniques which address the following elements:

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

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

Credit will be given for the following Value Added features:

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

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

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

#### **D.** Final Selection Formula:

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

 $\frac{(0.60)BPP + (0.40)ML}{TS} = \text{Adjusted Score}$ 

BPP = Bid Price Proposal for Initial Task Work Orders assigned project locations as identified in this RFP including design cost, MOT, MOB and constructability analysis

ML = Master Pay Item Lists Pricing\*

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

\*Note: The Department will provide the pay items and bid quantities in the Master Pay Item List, ML. When pay items included in the Master Pay Item List are needed for the initially assigned project locations, the unit prices shall be identical. If submitted unit prices for identical pay items are different, the lower of the prices shall be used for the current and all future Task Work Orders.

The Design-Build Firm selected will be the Design-Build Firm whose adjusted score is lowest.

#### **E.** Final Selection Process:

After the sealed bids are received, the Department will have a public meeting for the announcement of the Technical Scores and opening of sealed Bid Price Proposals. This meeting will be recorded. At this meeting, the Department will announce the score for each member of the Technical Review Committee, by category, for each Proposer and each Proposer's Technical Score. Following announcement of the Technical Scores, the sealed Bid Price Proposals will be opened and the adjusted scores calculated. The Selection Committee should meet a minimum of two (2) calendar days (excluding weekends and Department observed holidays) after the public opening of the Technical Scores and Bid Price Proposals. The Department's Selection Committee will review the evaluation of the Technical Review Committee and the Bid Price Proposal of each Proposer as to the apparent lowest adjusted score and make a final determination of the lowest adjusted score. The Selection Committee has the right to correct any errors in the evaluation and selection process

that may have been made. The Department is not obligated to award the contract and the Selection Committee may decide to reject all proposals. If the Selection Committee decides not to reject all proposals, the contract will be awarded to the Proposer determined by the Selection Committee to have the lowest adjusted score.

# VIII. <u>BID PROPOSAL REQUIREMENTS.</u>

### 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 and the number of calendar days 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 CD of the Master Pay Item List, only, completely filled out shall be submitted in addition to one (1) hard copy of the Bid Price Proposal shall be delivered in a separate sealed package to the following:

Linda Roberts ATTN: Robin Stevens 801 N. Broadway Ave. Bartow, Fl, 33830

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.