Florida Department of Transportation
District 5

DESIGN-BUILD
REQUEST FOR PROPOSAL
for

I-4 (SR 400) at Sand Lake Road Interchange from West of SR 528 to West of SR 435 & I-4 (SR 400) from West of Central Florida Parkway to West of SR 528

Financial Projects Number(s): 444315-1-52-01 and 444315-3-52-01

Federal Aid Project Number(s): D521-023-B and D521-100-B

Contract Number: **E59A6**

Table of Contents

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.

Appendix A: Project Advertisement
Appendix B: Division I Design-Build Specifications
- Award and Execution of Contract – Public Records (SP0030900DX)
- Legal Requirements and Responsibilities to the Public – E-Verify (SP0072900)
- Legal Requirements and Responsibilities to the Public – Scrutinized Companies (SP0073000)
- Legal Requirements and Responsibilities to the Public – Wage Rates for Federal Aid Projects (SP0073000)
- Contaminated Material - Mercury-Containing Devices and Lamps (SP0080409)
- Prosecution and Progress – Damage Recovery (SP0081200)

Appendix C: Divisions II and III Special Provisions identified by the Department to be used on the Project:
- Mobilization (SP1010000DB)
- Contractor Quality Control General Requirements (SP1050813DB)
- Structures Foundations (SP4550000DB)

Appendix D: Value Added Developmental Specifications
- Value Added Bridge Component (DEV475)

Appendix E: Drainage Report and Drainage Memo
Appendix F: Permits
Appendix G: Approved Typical Section Package
Appendix H: Minimum Pavement Design Requirements
Appendix I: Approved Design Exceptions
Appendix J: Approved Design Variations
Appendix K: General Tolling Requirements
Appendix L: Environmental Commitments
Appendix M: Toll Site Schedule of Values Template
Appendix N: Toll Siting Technical Memorandum
Appendix O: Existing Bridge Load Ratings
Appendix P: Landscape Opportunity Plans for the I-4 (SR 400) and Sand Lake Road (SR 482) Interchange
Appendix Q: Concept Signing Plan
Appendix R: District 5 ITS Minimum Technical Requirements
Appendix S: Proprietary Product Certification
Appendix T: UWHC Agreements and Appendix A of Assurances
Appendix U: Orange County Aesthetics Agreement
Appendix V: Turnpike Design Handbook
Appendix W: ROW Commitments
Appendix X: Outstanding Parcel Acquisitions
Appendix Y: Developmental Specification 403
Appendix Z: Modified Special Provision 109
Appendix AA: Final Judgement of Case No. 2011-CA-001327-O

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)

REFERENCE DOCUMENTS

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

Reference 1: As-Built Plans
Reference 2: Concept Plans
Reference 3: Bridge Concept Reports
Reference 4: Bridge Inspection Reports
Reference 5: Geotechnical Data
Reference 6: Inventory of Welding Inspection(s)
Reference 7: I-4 Beyond the Ultimate PD&E Study and Re-evaluation(s)
Reference 8: Survey Data
Reference 9: FDOT AADT Traffic Data and Equivalent Single Axle Loading (ESAL) values
Reference 10: Resilient Modulus Recommendations and LBR
Reference 11: FDOT Pavement Survey and Evaluation Report
Reference 12: Existing Cross Slope Data
Reference 13: Profilograph Data
Reference 14: Florida's Turnpike Enterprise (FTE) Shop Drawing Review Process for Design-Build (Non-Conventional) Projects
Reference 15: Adjoining Project Plans
Reference 16: I-4 SAMR, I-4 SOUTH SAMR Reevaluation Study, and I-4/Sand Lake Road IMR
Reference 17: Developmental Design Criteria
Reference 18: Electrical Power Cost Estimates
Reference 19: Concept Design Roadway Documentation
Reference 20: CADD Files for Concept Plans
Reference 21: Concept Design Drainage Documentation
Reference 22: CADD Files for Sand Lake Road Interchange 60% Design
Reference 23: Right-of-Way Maps
Reference 24: Advanced Utility Coordination Information
Reference 25: Design Traffic Report
Reference 26: CADD Files for Daryl Carter Interchange Final Design

Reference 27: VISSIM Models for ATC Process
Reference 28: I-4 Ultimate and I-4 Beyond the Ultimate Systems Engineering Management Plans

I. Introduction.

The Florida Department of Transportation (Department) has issued this Request for Proposal (RFP) to solicit competitive bids and proposals from Proposers for the I-4 (SR 400) at Sand Lake Road Interchange from West of SR 528 to West of SR 435 & I-4 (SR 400) from West of Central Florida Parkway to West of SR 528 Project in Orange County.

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

If the Design-Build Firm changes the alignments such that the Landscape Opportunity Plans for the I-4 (SR 400) and Sand Lake Road (SR 482) Interchange (Appendix P), need to be modified, the Design-Build Firm shall include a Landscape Architect duly authorized to practice Landscape Architecture in the State of Florida consistent with State Statute 481 part II. The Design-Build Firm's Landscape Architect (DBLA) shall review and modify future unencumbered landscape areas for this Project. This Project shall reserve landscape opportunities that meet the intent of the FDOT Highway Beautification Policy. Landscape construction will be performed by others and not included with this Project. Areas shall be identified in the Design-Build Firm's Proposal Plans as "future landscape areas to be constructed by others". Coordination will be required by the Design-Build Firm and the District Landscape Architect. Coordination between Design-Build Firm's Landscape Architect, the District Landscape Architect and Engineer will be required during the Design-Build plans development process to ensure landscape opportunities are accommodated within the project limits. The DBLA shall be included in the project kick-off meeting and subsequent progress meetings.

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

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

Design-Build Firm. These costs include, but are not limited to consultant acquisition, appraisal services, court fees, attorney and any expert fees, property cost, etc. The Department will have sole discretion with respect to the entire acquisition process of the additional Right of Way.

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

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

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

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

Description of Work

1. The proposed roadway improvements shall include, but are not limited to the following:

    1.1. The existing I-4 (SR 400) / Sand Lake Road interchange shall be reconstructed to include ramp connections between the I-4 (SR 400) General Use Lanes and Sand Lake Road, between I-4 (SR 400) WB General Use Lanes and Turkey Lake Road, and Sand Lake Road WB with Turkey Lake Road.
    1.2. I-4 (SR 400) shall be reconstructed from west of SR 482 to I-4 Ultimate. Transitions shall tie the reconstructed I-4 (SR 400) to the existing I-4 (SR 400) to the west of SR 482.
    1.3. A single buffer separated Express Lane shall be constructed in the median in the WB direction

adjacent to existing I-4 (SR 400) from west of Central Florida Parkway to west of SR 482.
- 1.3.1. Friction course in the single buffer separated Express Lane will be installed by others
- 1.3.2. Flexible Tubular Delineators for the single buffer separated Express Lane will be installed by others

1.4. I-4 (SR 400) WB shall be milled and resurfaced within the limits of the single buffer separated Express Lane constructed in the WB direction as shown in the Concept Plans.

1.5. Turkey Lake Road, a four-lane divided arterial roadway, shall be modified as follows.
- 1.5.1. Mill and resurface the intersection of Turkey Lake Road at Phillips Village Entrance.
- 1.5.2. Widen from south of Ramp M2 to Sand Lake Road

1.6. Sand Lake Road, a six-lane divided arterial roadway, shall be modified as follows
- 1.6.1. Widen, mill and resurface west of Turkey Lake Road
- 1.6.2. Reconstruct between Turkey Lake Road and International Drive.

1.7. Milling and resurfacing of several ramps as shown in the Concept Plans.

2. The proposed drainage improvements shall include, but are not limited to the following:

2.1. Installation of a drainage systems or modifications to existing drainage systems that meet the requirements of the FDOT Drainage Manual, South Florida Water Management District (SFWMD) and US Army Corps of Engineers (USACE)/Florida Department of Environmental Protection (FDEP), as applicable.

3. The proposed structures improvements include, but are not limited to the following:

3.1. Reconstruction of I-4 (SR 400) WB General Use Lanes and Express Lanes over Sand Lake Road

3.2. Reconstruction of I-4 (SR 400) EB General Use Lanes and Express Lanes over Sand Lake Road

3.3. New Ramp M2 over Sand Lake Road and Ramp J

3.4. New Ramp M2 over Ramp M

3.5. Widening of I-4 (SR 400) WB over Central Florida Parkway

3.6. Retaining walls at bridge and elevated roadway locations

3.7. Toll gantry

3.8. Miscellaneous minor structures, including but not limited to
- 3.8.1. Sign supports and signal Mast arm supports
- 3.8.2. Drainage structures

4. The proposed Signing and Marking improvements include, but are not limited to the following:

4.1. Installation of guide signs in accordance with the Concept Signing Plan (Appendix Q)

4.2. Installation of new signing and pavement markings to address the roadway improvements and replacement of any signing and pavement marking impacted by the Project.

4.3. Design and installation of all other signing and marking required for the roadway improvements

4.4. Installation of Flexible Tubular Delineators and thermoplastic pavement markings will be performed by others.

5. The proposed Lighting improvements include, but are not limited to the following:

5.1. Identification and correction of existing lighting deficiencies in the corridor

5.2. Installation of new interchange lighting at the I-4 (SR 400) / Sand Lake Road interchange

5.3. Installation of intersection lighting at newly constructed and rebuilt signalized intersections to

current standards for new traffic signals:
- 5.3.1. Sand Lake Road and Turkey Lake Road intersection
- 5.3.2. Sand Lake Road and I-4 (SR 400) WB ramps intersection
- 5.3.3. Sand Lake Road and I-4 (SR 400) EB ramps intersection
- 5.3.4. Turkey Lake Road and I-4 (SR 400) WB ramps intersection

5.4. Retrofit signalized intersection lighting for Sand Lake Road and International Drive
5.5. Replacing of any existing lighting impacted by the Design-Build Firm's work

6. The proposed ITS improvements include, but are not limited to the following:

6.1. Removal and replacement of existing ITS infrastructure impacted by the Project.
6.2. Maintenance of Communication for all communication networks and ITS devices within the project limits throughout the project's duration.
6.3. Installation of express lane ITS infrastructure for operation and monitoring of the WB I-4 (SR 400) Express Lanes.
6.4. Reconstruction of impacted wrong way vehicle detection systems for the Sand Lake Road eastbound and westbound off ramps, and installation of a new wrong way vehicle detection system for the Turkey Lake Road and I-4 (SR 400) WB off-ramp.
6.5. Expansion of the vehicle detection subsystem to cover the express lane extensions.
6.6. Expansion of CCTV coverage to provide full coverage of all travel lanes and ramps within the project limits and to provide verification cameras for all express lane DMS.
6.7. Replacement of PTMS and TTMS sites with ITS network connected sites with permanent traffic counters (vehicle speed/classification units) and loops and piezoelectric axle sensors.

7. The proposed Signalization improvements include, but are not limited to the following:

7.1. Installation of new traffic signal at Sand Lake Road and Turkey Lake Road intersection
7.2. Installation of new traffic signal at Sand Lake Road and I-4 (SR 400) WB ramps intersection
7.3. Installation of new traffic signal at Sand Lake Road and I-4 (SR 400) EB ramps intersection
7.4. Installation of new traffic signal at Turkey Lake Road and I-4 (SR 400) WB ramps intersection
7.5. Modification of the signal at Sand Lake Road and International Drive intersection
7.6. Connection of new traffic signals into the existing signal communications network

8. The proposed Tolling improvements include, but are not limited to the following:

8.1. Installation of a new tolling site necessary to operate the new WB Express Lane
8.2. End to End Testing of new tolling site and ITS devices

9. The proposed Architectural improvements in accordance with Orange County Aesthetics Agreement (Appendix U) include, but are not limited to the following:

9.1. Installation of four planter walls along I-4 (SR 400) at Sand Lake Road
9.2. Installation of four corner treatment pylon structures with changeable decorative LED lighting along I-4 (SR 400) at Sand Lake Road
9.3. Installation of two pylon structures with changeable decorative LED lighting in the median of Sand Lake Road
9.4. Landscaping to be provided by others based on the Landscape Opportunity Plans for the I-4 (SR 400) and Sand Lake Road (SR 482) Interchange (Appendix P) or as amended by the Design-Build Firm.

10. All other elements and activities described in this RFP

It is the intent to always preserve existing vegetation including trees and palms that do not conflict with proposed improvements. Tree and palm protection shall comply with FDOT Standard Plans for Road and Bridge Construction (Standard Plans), Index 110-100. Within the project limits and within the Project Right of Way, it will be the responsibility of the Design-Build Firm to identify and remove all Category 1 invasive exotics as defined by the Florida Exotic Pest Plant Council (www.fleppc.org) and as identified in the Landscape Opportunity Plans for the I-4 (SR 400) and Sand Lake Road (SR 482) Interchange (Appendix P), or as amended by the Design-Build Firm.

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

A. Design-Build Responsibility

The Design-Build Firm shall be responsible for survey, geotechnical investigation, design, preparation of all documentation 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 (Appendix F) if necessary, maintenance of traffic, demolition, and construction on or before the Project completion date indicated in the Proposal. The Design-Build Firm shall coordinate all utility relocations.

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

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

The Design-Build Firm is responsible for coordinating with the District Environmental Office and providing all needed assessments, calculations, or any other information required for NEPA Re-evaluation(s). This information shall be provided to the District Environmental Office at least four months prior to construction of any design changes. The Design-Build Firm will not be compensated for any additional costs or time associated with NEPA Re-evaluation(s) resulting from proposed design changes.

The Design-Build Firm may propose changes which differ from the approved Interchange Access Request (if applicable) and/or the PD& Study. Proposed changes must be coordinated through the Department. If changes are proposed to the configuration, the Design-Build Firm shall be responsible for preparing the necessary documentation required for the Department to analyze and satisfy requirements to obtain approval of the Department, and if applicable, the Office of Environmental Management (OEM) for the NEPA document, or FHWA for the Interchange Access Request document. The Design-Build Firm shall provide the required documentation for review and processing at least four months prior to construction of any design changes. Approved revisions to the configuration may also be required to be included in the Re-evaluations of the NEPA document, per Section O (Environmental Services/Permits/Mitigation) of the RFP. The Design-Build Firm will not be compensated for any additional costs or time resulting from proposed changes.

The Design-Build Firm shall examine the Contract Documents and the site of the proposed work carefully before submitting a Proposal for the work contemplated and shall investigate the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished and as to the requirements of all Contract Documents. Written notification of differing site conditions discovered during the

design or construction phase of the Project will be given to the Department's Project Manager.

The Design-Build Firm shall examine boring data, where available, and make their own interpretation of the subsoil investigations and other preliminary data, and shall base their bid on their own opinion of the conditions likely to be encountered. The submission of a proposal is prima facia 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 shall provide litter removal and mowing along Sand Lake Road and Turkey Lake Road in accordance with Specification Section 107 with a thirty (30) day mowing frequency and a fifteen (15) day litter removal frequency from November 1 through April 30 and a fifteen (15) day mowing frequency and a fifteen (15) day litter removal frequency From May 1 through October 31. The Design-Build Firm shall provide litter removal and mowing in all other areas of the project limits in accordance with Specification Section 107 with a thirty (30) day mowing frequency and a thirty (30) day litter removal frequency.

B. Department Responsibility

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

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

The Department will determine the environmental impacts and coordinate with the appropriate agencies during the preparation of NEPA re-evaluations. The NEPA Re-evaluations will be processed by the Department's EMO Office for approval by the appropriate lead federal agency, which may be FHWA or OEM pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016 and executed by the FHWA and the Department.

II. Schedule of Events.

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

Date	Event
10-11-2021	Planned Advertisement
10-25-2021	Current Advertisement
11-15-2021	Letters of Interest for Phase I of the procurement process due in District Office by 5:00 pm local time

Date	Event
11-29-2021	Proposal Evaluators submit Letter of Interest Scores to Contracting Unit 3:00 pm local time
11-30-2021	Contracting Unit provides Letter of Interest scores and Proposal Evaluators comments to Selection Committee 3:00 pm local time
12-06-2021	Public Meeting of Selection Committee to review and confirm Letter of Interest scores 9:30 am local time
12-06-2021	Notification to Responsive Design-Build Firms of the Letter of Interest scores 3:00 pm local time
12-06-2021	Shortlist Posting Date.
12-14-2021	Final RFP provided to Design-Build Firms continuing to Phase II of the procurement process 5:00 pm local time
12-15-2021	Utility Pre-Proposal Meeting facilitated by the District Utility Engineer at 8:00 am local time at FDOT D5 RTMC, 4975 Wilson Road, Sanford, FL 32771.
12-21-2021	Mandatory Pre-Proposal meeting at 10:00 am local time in 719 S. Woodland Boulevard, DeLand, FL 32720.
12-21-2021	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 1 5:00 pm local time
12-28-2021	Deadline for Design-Build Firm to submit preliminary list of Alternative Technical Concepts prior to One-on-One Alternative Technical Concept Discussion Meeting No. 1 5:00 pm local time
01-04-2022	One-on-One Alternative Technical Concept Discussion Meeting No. 1. 90 Minutes will be allotted for this Meeting.
01-18-2022	Deadline for submittal of Alternative Technical Concept Proposals 5:00 pm local time.
01-18-2022	Final deadline for submission of requests for Design Exceptions or Design Variations. 5:00 pm local time
02-22-2022	Addendum issued for approved Design Exceptions.
03-01-2022	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 2 5:00 pm local time
03-08-2022	One-on-One Alternative Technical Concept Discussion Meeting No. 2. 60 Minutes will be allotted for this Meeting. This ATC meeting is for continuing discussion on ATCs submitted prior to 1-18-2022 for which the Department requested additional information and were not approved or for new ATCs that are a direct response to an Addendum issued on or after 01-05-2022.
03-15-2022	Deadline for submittal of Alternative Technical Concept Proposals for which the Department requested additional information and were not approved or for new ATCs that are a direct response to an Addendum issued on or after 03-09-2022. Deadline is 5:00 pm local time.
03-28-2022	DDE completes review of ATCs and notifies Design-Build Firms.
04-11-2022	Deadline for submittal of questions, for which a response is assured, prior to the submission of the Technical Proposal. All questions shall be submitted to the Pre-Bid Q&A website.
04-18-2022	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.

Date	Event
04-20-2022	Technical Proposals due in District Office by 2:30 p.m. local time
04-20-2022	Deadline for Design-Build Firm to "opt out" of Technical Proposal Page Turn meeting.
04-26-2022	Technical Proposal Page Turn Meeting. Times will be assigned during the Pre-Proposal Meeting. 30 Minutes will be allotted for this Meeting.
05-10-2022	Question-and-Answer Written Reponses. Deadline for the Department to provide a list of questions/clarifications for the Design-Build Firm to answer.
05-17-2022	Deadline for submittal of Question-and-Answer Written Responses to the Department's questions/clarifications from the Design-Build Firm. 5:00 pm local time
05-24-2022	Deadline for submittal of follow up questions to previously submitted Question-and-Answer Written Responses to the Department's questions/clarifications from the Design-Build Firm. 5:00 pm local time
05-31-2022	Deadline for submittal of Question-and-Answer Written Responses to the Department's follow up questions. 5:00 pm local time.
05-31-2022	Deadline for submittal of questions, for which a response is assured, prior to the submission of the Price Proposal. All questions shall be submitted to the Pre-Bid Q&A website. 5:00 pm local time
06-06-2022	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.
06-06-2022	Deadline for the Design-Build Firm to submit a written statement per Section III. Threshold Requirements, F. Question-and-Answer Written Responses. 5:00 pm local time
06-08-2022	Price Proposals due in District Office by 2:30 pm local time.
06-08-2022	Public announcing of Technical Scores and opening of Price Proposals at 2:30 pm local time in 719 S. Woodland Boulevard, DeLand, FL 32720.
06-13-2022	Public Meeting Date of Selection Committee to determine intended Award
06-13-2022	Final Selection Posting Date
06-27-2022	FHWA Concurrence to Award
07-01-2022	Anticipated Award Date
07-18-2022	Anticipated Execution Date

III. Threshold Requirements.

A. Qualifications

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

B. Joint Venture Firm

Two or more Firms submitting as a Joint Venture must meet the Joint Venture requirements of Section 14-22.007, F.A.C. Parties to a Joint Venture must submit a Declaration of Joint Venture and Power of Attorney Form No. 375-020-18, prior to the deadline for receipt of Letters of Interest.

If the Proposer is a Joint Venture, the individual empowered by a properly executed Declaration of Joint Venture and Power of Attorney Form shall execute the proposal. The proposal shall clearly identify who will be responsible for the engineering, quality control, and geotechnical and construction portions of the Work. The Joint Venture shall provide an Affirmative Action Plan specifically for the Joint Venture.

C. Price Proposal Guarantee

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

D. Pre-Proposal Meeting

Attendance at the pre-proposal meeting is mandatory. Any Short-Listed Design-Build Firm failing to attend will be deemed non-responsive and eliminated from further consideration. The purpose of this meeting is to provide a forum for the Department to discuss with all concerned parties the proposed Project, the design and construction criteria, Critical Path Method (CPM) schedule, and method of compensation, instructions for submitting proposals, Design Exceptions, Design Variations, and other relevant issues. In the event that any discussions at the pre-proposal meeting require official additions, deletions, or clarifications of the Request for Proposal, the Design and Construction Criteria, or any other document, the Department will issue a written addendum to this Request for Proposals as the Department determines is appropriate. No oral representations or discussions, which take place at the pre-proposal meeting, will be binding on the Department. FHWA will be invited on Projects of Division Involvement (PoDIs), in order to discuss the Project in detail and to clarify any concerns. Proposers shall direct all questions to the Departments Question-and-Answer website:

https://fdotwp1.dot.state.fl.us/BidQuestionsAndAnswers/

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

E. Technical Proposal Page-Turn Meeting

The Department will meet with each Proposer, formally for thirty (30) minutes, for a page-turn meeting. FHWA will be invited on Projects of Division Involvement (PoDIs). The purpose of the page-turn meeting is for the Design-Build Firm to guide the Technical Review Committee through the Technical Proposal, highlighting sections within the Technical Proposal that the Design-Build Firm wishes to emphasize. The page-turn meeting will occur between the date the Technical Proposal is due and the

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

F. Question-and-Answer Written Responses

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

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

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

G. Protest Rights

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

in a solicitation and will file a formal written protest within 10 days after the filing of the notice of protest. The formal written protest shall be filed within 10 days after the date of the notice of protest if filed. The person filing the Protest must send the notice of intent and the formal written protest to:

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

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

H. Non-Responsive Proposals

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

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

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

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

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

I. Waiver of Irregularities

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

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

2. Preliminary design submittals may vary from the requirements of the Design and Construction Criteria. The Department, at their discretion, may elect to consider those variations in awarding points to the proposal rather than rejecting the entire proposal.

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

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

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

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

7. Those changes to the Design Concept shown in the Concept Plans 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 separate schedules of values for the work associated with 444315-1-52-01 and 444315-3-52-01 to the Department for their approval. The total of the two separate Schedules 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.

M. Financial Qualifications and Project Financial Plan (Financial Proposal):

N/A

IV. Disadvantaged Business Enterprise (DBE) Program.

A. DBE Availability Goal Percentage:

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

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

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

B. DBE Supportive Services Providers:

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

C. Bidders Opportunity List:

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

All Contractors must enter their bid opportunity information in the Equal Opportunity Compliance (EOC)

system within three business days of submission of the bid or proposal. The link to the EOC system is located in Chapter 1 Section 1.4, Directory of Compliance Websites & Addresses. Failure of bidders to enter Bid Opportunity List information is a violation of 49 C.F.R. 26.11 and grounds for compliance actions up to and including withholding of progress payments. Note: All registered primes submitting a bid will need to apply for EOC User ID and Password to gain access to the EOC system.

V. Requirements and Provisions for Work

A. Governing Regulations:

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

1. Florida Department of Transportation Design Manual (FDM)
   http://www.fdot.gov/roadway/FDM/
   Note: the use of FDM Part 9 requires approval by the District Design Engineer

2. Florida Department of Transportation Specifications Package Preparation Procedure
   http://www.fdot.gov/programmanagement/PackagePreparation/Handbooks/630-010-005.pdf

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

4. Standard Plans Instructions (Refer to Part I, Chapter 115, FDM)
   http://www.fdot.gov/roadway/FDM/

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

6. Florida Department of Transportation Surveying Procedure 550-030-101
   http://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/FormsAndProcedures/ViewDocument?topicNum=550-030-101

7. Florida Department of Transportation EFB User Handbook (Electronic Field Book)
   http://www.fdot.gov/geospatial/doc_pubs.shtm

8. Florida Department of Transportation Drainage Manual
   http://www.fdot.gov/roadway/Drainage/ManualsandHandbooks.shtm

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

10. Florida Department of Transportation Structures Manual
http://www.fdot.gov/structures/DocsandPubs.shtm

11. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Manual
http://www.fdot.gov/cadd/downloads/publications/CADDManual/default.shtm

12. AASHTO – A Policy on Geometric Design of Highways and Streets
https://bookstore.transportation.org/collection_detail.aspx?ID=110

13. MUTCD - 2009
http://mutcd.fhwa.dot.gov/

14. Safe Mobility for Life Program Policy Statement
http://www.fdot.gov/traffic/TrafficServices/PDFs/000-750-001.pdf

15. Traffic Engineering and Operations Safe Mobility for Life Program
http://www.fdot.gov/traffic/TrafficServices/SafetyisGolden.shtm/

16. Florida Department of Transportation American with Disabilities Act (ADA) Compliance – Facilities Access for Persons with Disabilities Procedure 625-020-015
https://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/?viewBy=0&procType=pr

17. Florida Department of Transportation Florida Sampling and Testing Methods
http://www.fdot.gov/materials/administration/resources/library/publications/fstm/disclaimer.shtm

18. Florida Department of Transportation Flexible Pavement Coring and Evaluation Procedure
http://www.fdot.gov/materials/administration/resources/library/publications/materialsmanual/documents/v1-section32-clean.pdf

19. Florida Department of Transportation Design Bulletins and Update Memos
http://www.fdot.gov/roadway/Bulletin/Default.shtm

20. Florida Department of Transportation Utility Accommodation Manual
https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/programmanagement/utilities/docs/uam/uam2017.pdf?sfvrsn=d97fd3dd_0

21. AASHTO LRFD Bridge Design Specifications
https://bookstore.transportation.org/category_item.aspx?id=BR

22. Florida Department of Transportation Flexible Pavement Design Manual
http://www.fdot.gov/roadway/PM/publicationS.shtm

23. Florida Department of Transportation Rigid Pavement Design Manual
http://www.fdot.gov/roadway/PM/publicationS.shtm

24. Florida Department of Transportation Pavement Type Selection Manual
http://www.fdot.gov/roadway/PM/publicationS.shtm

25. Florida Department of Transportation Right of Way Manual
http://www.fdot.gov/rightofway/Documents.shtm

26. Florida Department of Transportation Traffic Engineering Manual
http://www.fdot.gov/traffic/TrafficServices/Studies/TEM/tem.shtm

27. Florida Department of Transportation Intelligent Transportation System Guide Book
http://www.fdot.gov/traffic/Doc_Library/Doc_Library.shtm

28. Federal Highway Administration Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Plans and Specifications
http://www.fhwa.dot.gov/engineering/geotech/pubs/reviewguide/checklist.cfm

29. AASHTO Guide for the Development of Bicycle Facilities
https://bookstore.transportation.org/collection_detail.aspx?ID=116

30. Federal Highway Administration Hydraulic Engineering Circular Number 18 (HEC 18).
http://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=17

31. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways
http://www.fdot.gov/roadway/FloridaGreenbook/FGB.shtm

32. Florida Department of Transportation Project Development and Environment Manual, Parts 1 and 2
http://www.fdot.gov/environment/pubs/pdeman/pdeman1.shtm

33. Florida Department of Transportation Driveway Information Guide
http://www.fdot.gov/planning/systems/programs/sm/accman/pdfs/driveway2008.pdf

34. AASHTO Highway Safety Manual
http://www.highwaysafetymanual.org/

35. Florida Statutes
http://www.leg.state.fl.us/Statutes/index.cfm?Mode=View%20Statutes&Submenu=1&Tab=statutes&CFID=14677574&CFTOKEN=80981948

36. Florida Department of Transportation Equal Opportunity Construction Contract Compliance Manual
http://www.fdot.gov/equalopportunity/contractcomplianceworkbook.shtm

37. Florida Building Code, 7th Edition
Florida Building Codes - ICC Digital Codes (iccsafe.org)

All work at the toll site, shown in the Concept Plans and Toll Siting Technical Memorandum (Appendix N), shall be in accordance with the General Tolling Requirements (Appendix K).

B. Innovative Aspects:

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

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

1. Alternative Technical Concept (ATC) Proposals

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

The ATC process allows innovation, flexibility, time and cost savings on the design and construction of Design-Build Projects while providing the best value for the public. Any deviation from the RFP that the Design-Build Firm seeks to obtain approval to utilize prior to Technical Proposal submission is, by definition, an ATC and therefore must be discussed and submitted to the Department for consideration through the ATC process. ATCs also include items defined in FDM, Part 1, Chapter 121.3.2. The proposed ATC shall provide an approach that is equal to or better than the requirements of the RFP, as determined by the Department. ATC Proposals which reduce scope, quality, performance, or reliability should not be proposed. A proposed concept does not meet the definition of an ATC if the concept is contemplated by the RFP.

The following are not permitted to be changed by the Design-Build Firms except where specifically allowed for in the RFP:

- Deck girders with longitudinal deck joints for bridges with two or more spans;
- Full-depth precast deck panels for interstate bridges.
  ATC proposals for full-depth precast deck panels on non-interstate bridges shall include detailed connection details, step-by-step construction sequences, grout/UHPC material requirements, connection mock-up requirements including mock-up acceptance criteria.
- Partial-depth precast deck panels;
- Reinforcing steels other than allowed by SDG 1.4.1.B except in drilled shafts and auger-cast piles. This is not intended to include non-corrosive materials that are allowed for by the RFP.
- Elimination of deck grooving;
- Replacing transverse bridge deck grooving with longitudinal bridge deck grooving;
- Elimination of deck planing;
- The elimination of cross frames in bays of steel bridges that are phase constructed;
- Partial depth deck removal of outside bays on steel bridge widenings in order to provide transverse reinforcing per SDG Table 4.2.5-1. Full depth removal is required to avoid unwanted deck stresses induced by the girder rebounding upward as it is unloaded;
- Non-framed, non-integral straddle pier caps that are not permanently anchored or stabilized on one end (e.g. pinned bolsters, sole plate and anchor bolts, pot or disc bearings etc.).
- Full height MSE Wall panels (piano walls).
- Reductions in the length of the WB Express Lane from west of Central Florida Expressway to west of SR 482
- Modifications to the Minimum Pavement Design Requirements set forth in Appendix H.
- Approved Typical Section requirements listed below and depicted in Appendix G.
  - number of travel lanes;
  - lane widths;
  - shoulder widths; and,
  - design speeds.
- Roadside Tolling Cabinet (RTC) sites shall not be used for the toll site as described in the General Tolling Requirements (Appendix K).

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

- New Design Exceptions required or modifications to Department Approved Design Exceptions (Appendix I).
- Significant changes in scope as determined by the Department.
- Modifications to the toll infrastructure that require a GTR Deviation beyond those documented in the RFP.

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

- Modifications to the horizontal and/or vertical alignments greater than 5'H/5'V
- Modifications to the horizontal and/or vertical alignments greater than 0'H/0'V at the toll site
- Modifications to the Approved Typical Section Package (Appendix G) directly related to the horizontal and/or vertical geometry
- Modifications to the separation between I-4 (SR 400) General Purpose Lanes and Express Lanes
- Modifications to the I-4 (SR 400) and Sand Lake Road Interchange Configuration
- Modifications to the locations of I-4 (SR 400) Express Lane Ingress and Egress
- Use of FDM Part 9 as the basis for format and assembly of the Contract Plans Set.

2. One-on-One ATC Proposal Discussion Meetings

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

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

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

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

3. Submittal of ATC Proposals

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

The Department will allow the submission of draft ATCs at any time following the Shortlist Posting until the date on which the last One-on-One ATC discussion meeting is held as defined in the Schedule of Events. The submission must be clearly marked as DRAFT. The Design-Build Firm, by submitting a Draft ATC, understands that the purpose of the submission is to provide information to facilitate the discussion during ATC meetings and that the Department will discuss the concept but is not obligated to reply to the draft submission as if it were a formal ATC submittal. However, at any time prior to the formal Alternative Technical Concept Proposal submittal, the Department may provide the Design-Build Firm with a draft written response. The draft written response shall be clearly marked as DRAFT.

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

a) Description: A description and conceptual drawings of the configuration of the ATC or other appropriate descriptive information, including, if appropriate, product details and a traffic operational analysis as applicable;

b) Usage: The locations where and an explanation of how the ATC would be used on the Project;

c) Deviations: References to requirements of the RFP which are inconsistent with the proposed ATC, an explanation of the nature of the deviations from the requirements and a request for approval of such deviations along with suggested changes to the requirements of the RFP which would allow the alternative proposal;

d) Analysis: An analysis justifying use of the ATC and why the deviation, if any, from the requirements of the RFP should be allowed;

e) Impacts: A preliminary analysis of potential impacts on vehicular traffic (during construction), environmental impacts, community impacts, safety, and life-cycle Project and infrastructure costs, including impacts on the cost of repair, maintenance, and operation;

f) Risks: A description of added risks to the Department or third parties associated with implementation of the ATC;

g) Quality: A description of how the ATC is equal or better in quality and performance than the requirements of the RFP including the traffic operational analysis if requested by the Department;

h) Operations: Any changes in operation requirements associated with the ATC, including ease of operations;

i) Maintenance: Any changes in maintenance requirements associated with the ATC, including ease of maintenance;

j) Anticipated Life: Any changes in the anticipated life of the item comprising the ATC;

k) Future Expandability: An analysis of impacts associated with the ATC on the future expandability of the I-4 (SR 400) Express Lane system to two lanes in each direction.

l) Tolling: Any change that directly or indirectly modifies the toll site or related infrastructure requirements

4. Review and Approval of ATC Submittals

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

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

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

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

ATC's are accepted by the Department at the Department's discretion and the Department reserves the right to reject any ATC submitted. The Department reserves the right to issue an Addendum to the RFP based upon a previously denied ATC Proposal, without regard to the confidentiality of the denied ATC Proposal. All Department approvals of ATC submissions are based upon the known impacts on the Project at the time

of submission. The Department reserves the right to require a modification or amendment to a previously approved ATC as a result of a contract change which is issued by an addendum subsequent to the Department's initial approval of the ATC.

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

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

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

C. Geotechnical Services:

1. **General Conditions**:

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

D. Department Commitments:

The Design-Build Firm will be responsible for adhering to the Environmental Commitments (Appendix L) and ROW Commitments (Appendix W).

E. Environmental Permits:

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

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

2. **Permits:**

The Department has obtained Permits (Appendix F), specifically a South Florida Water Management District (SFWMD) Environmental Resource Permit (ERP) (Permit No. 48-01243-P) and a US Army Corps of Engineers (USACE) Permit (Permit No. SAJ-2017-02720) for improvements for the I-4 (SR 400) Beyond the Ultimate Segment 2 from west of SR 528 to west of Kirkman Road for stormwater treatment and attenuation requirements and wetland impact requirements. Impacts due to dewatering are not included in the permit. The Design-Build Firm should recognize the Project constraints and limited areas available for dewatering.

The Design-Build Firm shall be responsible for obtaining a South Florida Water Management District (SFWMD) Environmental Resource Permit (ERP) and a US Army Corps of Engineers (USACE)/Florida Department of Environmental Protection (FDEP) Permit for improvements for the WB Express Lane from west of Central Florida Parkway to west of SR 482.

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

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

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

The Department is responsible for providing mitigation of all wetland impacts identified in the following documents

- Section 404 permit (U.S. Army Corps of Engineers/Florida Department of Environmental Protection) (Permit No. SAJ-2017-02720)
- Environmental Resource Permit (South Florida Water Management District) (Permit No. 48-01243-P)

If any design modifications by the Design-Build Firm propose to increase the amount of wetland impacts such that mitigation is required, the Design-Build Firm shall be responsible for providing the Department information on the amount and type of wetland impacts as soon as the impacts are identified (including

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

Any additional mitigation required due to design modifications proposed by the Design-Build Firm shall be the responsibility of the Design-Build Firm and shall be satisfied through the purchase of mitigation bank credits. The Design-Build Firm shall purchase credits directly from a permitted mitigation bank. In the event that permitted mitigation bank credits are unavailable or insufficient to meet the project needs, the Design-Build Firm will be responsible for providing alternative mitigation consistent with the provisions of section 373.-4137, Florida Statutes, and acceptable to the permitting agency(ies)**.** The Design-Build Firm shall be solely responsible for all costs associated with permitting activities and shall include all necessary permitting activities in their schedule.

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

F. Railroad Coordination:

N/A

G. Survey:

The Design-Build Firm shall perform all surveying (Terrestrial, Mobile and/or Aerial) and mapping services necessary to complete the Project. Survey services must also comply with all pertinent Florida Statutes (Chapters 177 and 472, F.S.) and applicable rules in the Florida Administrative Code (Rule Chapter 5J-17, F.A.C.). All field survey data will be furnished to the District Surveyor in a Department approved digital format, readily available for input and use in CADD Design files. All surveying and mapping work must be accomplished in accordance with the Department's Surveying and Mapping Procedure, Topic Nos. 550-030-101, and the Surveying and Mapping Handbook.

The Design-Build Firm shall provide final Right of Way survey and mapping services unless the Department determines it is not needed 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 unless the Department determines it is not needed. 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.

Utility Location and Surveying

It is the Design-Build Firm's responsibility for the verification and location of all utility facilities, including Subsurface Utility Engineering (SUE) work that is required as part of the design process. The Design-Build Firm is responsible for all costs associated with all utility location and surveying including Department owned facilities (i.e. ITS Communication, ITS Power, Lighting). Additionally, please note that Department owned facilities will not be located by the Department nor through notification to "Sunshine 811".

H. Verification of Existing Conditions:

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

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

I. Submittals:

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

For all Phase Submittals and all Milestone Submittals, comments and responses shall be exchanged using the Department's Statewide Electronic Review Comment (ERC) System.

1. Component Submittals:

The Design-Build Firm may submit components of the contract plans set instead of submitting the entire contract plan set; however, sufficient information from other components must be provided to allow for a complete review. In accordance with the FDOT Design Manual, components of the contract plans set are roadway, signing and pavement marking, signalization, ITS, lighting, landscape, architectural, structural, and toll facilities. The Department will designate in the review comments if the next submittal will be a resubmittal of the 90% phase submittal or if the plans and supporting calculations are significantly developed to proceed to the Final Submittal.

Refer to the General Tolling Requirements (Appendix K) for Tolls subcomponent submittal requirements.

The Design-Build Firm may divide the Project into separate areas and submit components for each area; however, sufficient information on adjoining areas must be provided to allow for a complete review. Submittals for Category 1 bridges are limited to foundation, substructure, and superstructure.
For Category 2 structures, submittals for bridges are limited to "units" as previously described, or a complete bridge submittal.

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

Category 1 and 2 bridge submittals shall contain the following:

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

2. Phase Submittals:

The Design-Build Firm shall provide the documents for each phase submittal listed below to the Department’s Project Manager. The particular phase shall be clearly indicated on the documents. The Department’s Project Manager will send the documents to the appropriate office for review and comment. Once all comments requiring a response from the Design-Build Firm have been satisfactorily resolved as determined by the Department, the Department’s Project Manager will initial, date and stamp the signed and sealed plans and specifications as “Released for Construction”.

All comments shall be resolved to the Department's satisfaction prior to making the next phase submittal. The Department will designate in the review comments if the next submittal will be a resubmittal of the 90% phase submittal or if the plans and supporting calculations are significantly developed to proceed to the Final Submittal.

60% Phase Submittal (Required for Category 2 structures)

1 copy of 11" x 17" Structures plans meeting the requirements of FDM Tables 121.14.1 and 121.14.2 for 60% Structures Plans
1 copy of draft geotechnical report
1 copy of draft Bridge Hydraulic Report
1 copy of design documentation (calculations not required)
1 copy of draft Technical Special Provisions
1 copy of Roadway Project Layout and TTCP plans
Any other information required for the Department to perform an Independent Department Review as discussed in the Independent Design Review Kickoff Meeting

90% Phase Submittal

1 copy of 11" X 17" plans (all required components)
1 copy of signed and sealed geotechnical report
1 copy of signed and sealed geotechnical report
1 copy of Settlement and Vibration Monitoring Plan (SVMP) for Department acceptance and update throughout the construction period
1 copy of signed and sealed Bridge Hydraulic Report
1 copy of design documentation
1 copy of Technical Special Provisions
1 copy of Landscape Opportunity Plans (if necessary due to changes in alignments)
1 copy of Bridge Load Rating Calculations
1 copy of Completed Bridge Load Rating Summary Detail Sheet
1 copy of Load Rating Summary Form
1 copy of all design changes introduced since the 60% plan submittal that affect the modeling or component design of various bridge components
All QC plans and documentation for each component submittal shall be electronic in .pdf format

The Department will designate in the review comments if the next submittal will be a resubmittal of the 90% phase submittal or if the plans and supporting calculations are significantly developed to proceed to the Final Submittal. If the Department requires more than 2 resubmittals a submittal workshop between the Department and the Design-Build Firm must be held to resolve any outstanding issues or comments.

Final Submittal

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

1 copy of signed and sealed design documentation
1 copy of Settlement and Vibration Monitoring Plan (SVMP)
1 copy of Landscape Opportunity Plans (if necessary due to changes in alignments)
1 set of final documentation
1 signed and sealed copy of the Bridge Load Rating Summary Detail Sheet
1 signed and sealed copy of the Load Rating Summary Form
1 signed and sealed Construction Specifications Package or Supplemental Specifications Package
1 copy of signed and sealed copy of Construction Specifications Package or Supplemental Specifications Package
1 of electronic copy of Technical Special Provisions in .pdf format
1 copy of all major design changes introduced since the 90% plan submittal that affect the modeling or component design of various bridge components
1 copy of all the Independent Department Review comments and the EOR's response
1 copy of the Proposed Maintenance Plan for the Construction Period along Sand Lake Road and Turkey Lake Road

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

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

3. Requirements to Begin Construction:

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

The Design-Build Firm may choose to begin construction prior to completion of the Phase Submittals and the Department stamping the plans and specifications Released for Construction except for bridge construction. No permanent structures work, including fabrication of bridge members, may begin without signed and sealed plans or shop drawings (whichever controls the design and details utilized to construct/erect the specific structural component) that have been Released for construction. To begin

construction the Design-Build Firm shall submit signed and sealed plans for the specific activity; submit a signed and sealed Construction Specifications Package or Supplemental Specifications Package; obtain regulatory permits as required for the specific activity; obtain utility agreements and permits, if applicable; and provide five (5) days notice before starting the specific activity. The plans to begin construction may be in any format including report with details, 8 1/2" X 11" sheets, or 11" X 17" sheets, and only the information needed by the Design-Build Firm to construct the specific activity needs to be shown. Beginning construction prior to the Department stamping the plans and specifications Released for Construction does not reduce or eliminate the Phase Submittal requirements.

To begin toll equipment building construction, permit review and approvals must be complete and the Design-Build Firm shall obtain an executed building permit application from the building department along with State Fire Marshal approval.

Prior to construction along Sand Lake Road and Turkey Lake Road, the Design-Build Firm shall submit for Department review and approval its Proposed Maintenance Plan for the Construction Period along Sand Lake Road and Turkey Lake Road.

As-Built Set:

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

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

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

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

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

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

- 1 Final Project submittal containing the information above shall be electronic in .pdf format

4. Milestones:

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

Prior to any 90% component submittals, the Design-Build Firm shall obtain approvals from the Department for the following items:

- Pavement Design Package
- Typical Section Package modifications
- Design Exception Package modifications
- Design Variation Package modifications

Prior to submittal for environmental permits, the Design-Build Firm shall provide the Department for review and comment:

- 2 sets 11" x 17" Project Plans
- 2 copies of final Geotechnical Report
- 2 sets of Roadway and Drainage documentation
- 2 copies of Technical Special Provisions
- 2 CD's, DVD's or Flash Drives with PDF files of all documents listed above

Upon submittal of Permit documentation to permitting agencies, the Design-Build Firm shall provide the Department:

- The specific number of copies required for each of the various agencies
- 2 copies for the Department
- Where permits require the signature by the owner, the Department will provide said signature.

At least four months prior to construction of any design changes, the Design-Build Firm shall coordinate with the District Environmental Office and provide all needed assessments, calculations, or any other information required for NEPA reevaluation(s).

5. Railroad Submittals:

N/A

J. Contract Duration:

The Department has established a Contract Duration of 1280 calendar days for the subject Project.

K. Project Schedule:

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

The Design-Build Firm's Schedule shall allow at least the following durations between the 60% and 90% phase submittals to allow for initial IDR development:

- Bridge No. 750142, SR 400 (I-4) Westbound over Central Florida Parkway – twenty (20) calendar days
- Bridge No. 750966, SR 400 (I-4) Westbound over SR 482 (Sand Lake Road) - twenty (20) calendar days
- Bridge No. 750967, SR 400 (I-4) Eastbound over SR 482 (Sand Lake Road) - twenty (20) calendar days
- Bridge No. 750969, Ramp M2 over SR 482 (Sand Lake Road) and Ramp J – thirty (30) calendar days
- Bridge No. 750947, Ramp M2 over Ramp M – twenty (20) calendar days
- Aesthetic Pylons – twenty (20) calendar days

The Design-Build Firm shall allow at least the following calendar days between the 90% and 100% submittals for the IDR:

- Bridge No. 750142, SR 400 (I-4) Westbound over Central Florida Parkway – sixty (60) calendar days
- Bridge No. 750966, SR 400 (I-4) Westbound over SR 482 (Sand Lake Road) - sixty (60) calendar days
- Bridge No. 750967, SR 400 (I-4) Eastbound over SR 482 (Sand Lake Road) - sixty (60) calendar days
- Bridge No. 750969, Ramp M2 over SR 482 (Sand Lake Road) and Ramp J – sixty (60) calendar days
- Bridge No. 750947, Ramp M2 over Ramp M – sixty (60) calendar days
- Aesthetic Pylons – sixty (60) calendar days

The Design-Build Firm shall allow at least the following calendar days for 100% submittal for the IDR:

- Bridge No. 750142, SR 400 (I-4) Westbound over Central Florida Parkway – twenty (20) calendar days
- Bridge No. 750966, SR 400 (I-4) Westbound over SR 482 (Sand Lake Road) - twenty (20) calendar days
- Bridge No. 750967, SR 400 (I-4) Eastbound over SR 482 (Sand Lake Road) - twenty (20) calendar days
- Bridge No. 750969, Ramp M2 over SR 482 (Sand Lake Road) and Ramp J – twenty (20) calendar days
- Bridge No. 750947, Ramp M2 over Ramp M – twenty (20) calendar days
- Aesthetic Pylons – twenty (20) calendar days

Note that the above durations exclude weekends and Department observed Holidays. For bridges with multiple superstructure units, the IDR review time for units within the same bridge may be concurrent. Otherwise, concurrent submissions will require Department approval.

IDR durations are subject to change based on the Design-Build Firm's Technical Proposal submittal. Upon review of each Firm's Technical Proposal, new IDR review times may be provided to each Firm as part of the Question-and-Answer Written response session. For the review of all additional Category 2 structures resubmittals the Schedule shall allow for up to twenty (20) calendar days (excluding weekends and Department observed Holidays) for these reviews. Category 2 structure resubmittals must include all required submittal documentation per Section V.I (Submittals). This duration may require modification by the Department depending on the extent of changes included within a resubmission. The Independent Department Review of Category 2 structures will be performed concurrently, and of similar duration, with the normal Department review of submittals. Review will not begin until submittals are deemed complete

by the Department.

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

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

- Working Day before Martin Luther King Jr. Day
- Working Day before President's Day
- Day before/after Independence Day (July 3rd and July 5th)
- Friday before Easter
- Friday before Memorial Day

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
- Kickoff meeting with the Department's Independent Review consultant
- Design Submittals
- Completed Category 2 bridge design for Independent Department review
- Shop Drawing Submittals
- Other Contractor-Initiated Submittals including RFI's, RFM's, RFC's, and NCR's
- Design Survey
- Submittal Reviews by the Department and FHWA
- Design Review / Acceptance Milestones
- Materials Quality Tracking
- Geotechnical Investigation
- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Embankment/Excavation
- Environmental Permit Acquisition
- Foundation Design (60%, 90%, Final,)
- Foundation Construction
- Substructure Design (60%, 90%, Final, RFC)
- Substructure Construction
- Superstructure Design (60%, 90%, Final, RFC)
- Superstructure Construction
- Walls Design
- Walls Construction
- Roadway Design
- Roadway Construction
- Signing and Pavement Marking Design
- Signing and Pavement Marking Construction
- Signalization and Intelligent Transportation System Design
- Signalization and Intelligent Transportation System Construction
- Toll Gantry Foundation Design
- Toll Gantry Foundation Construction

- Toll Gantry Structure Construction
- Toll Kickoff Meeting
- Toll Site Permit Submissions (per site)
- Tolling Infrastructure and Toll Equipment Building Design and Building Permits
- Tolling Infrastructure and Toll Equipment Building Construction
- Toll Equipment Building Delivery to the project site
- Primary Toll Site Walk Through (per site)
- 30 Consecutive Working Days Notice to FTE prior to Toll Equipment Installation Period
- 21 Work Days per toll site, per mainline direction of travel for TEC toll equipment installation and testing
- ITS Testing and Integration
- ITS Burn-In Period
- Toll Systems End to End Testing
- Lighting Design
- Lighting Construction
- Maintenance of Traffic Design
- Landscape Opportunity Plans (if necessary due to changes in alignments)
- 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

L. Key Personnel/Staffing:

The Design-Build Firm's work shall be performed and directed by key personnel identified in the Letter of Interest and/or Technical Proposal by the Design-Build Firm. In the event a change in key personnel is requested, the Design-Build Firm shall submit the qualifications of the proposed key personnel and include the reason for the proposed change. Any changes in the indicated personnel shall be subject to review and approval by the District Construction Engineer. The Department shall have sole discretion in determining whether or not the proposed substitutions in key personnel are comparable to the key personnel identified in the Letter of Interest and/or Technical Proposal. The Design-Build Firm shall have available professional staff meeting the minimum training and experience set forth in Florida Statute Chapter 455.

M. Partner/Teaming Arrangement:

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

N. Meetings and Progress Reporting:

The Design-Build Firm shall anticipate periodic meetings with Department personnel and other agencies

as required for resolution of design and/or construction issues. These meetings may include, but are not limited to:

- Department technical issue resolution
- Local government agency coordination
- Maintenance of Traffic Workshop
- Pavement Design Meeting
- Permit agency coordination
- Scoping Meetings
- System Integration Meetings
- Tolls Meetings
- Adjoining Project Coordination Meetings
- Partnering Meetings
- DRB Meetings
- Public Involvement Meetings/Events
- Comment Resolution Meetings
- Design Meetings/Workshops
- Project/Stakeholder Coordination Meetings

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

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

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

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

System Integration Meetings will be held on mutually agreeable dates.

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

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

O. Public Involvement:

1. General:

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

2. Community Awareness:

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

3. Public Meetings:

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

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

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

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

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

4. Public Workshops, Information Meetings:

The Design-Build Firm shall provide all the support services listed in No. 3 above.
All legal/display advertisements announcing workshops, information meetings, and public meetings will be prepared and paid for by the Department.

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

5. **Public Involvement Data:**

The Design-Build Firm is responsible for the following:

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

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

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

P. Quality Management Plan (QMP):

- **Design:**

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

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

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

- **Construction:**

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

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

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

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

Q. Liaison Office:

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

R. Engineers Field Office:

The Design-Build Firm will provide an Engineers Field Office in accordance with Modified Special Provision 109 (Appendix Z).

S. Schedule of Values:

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

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

Submit the schedule of values for each toll site using the Toll Site Schedule of Values Template (Appendix M).

T. Computer Automation:

The Project shall be developed utilizing computer automation systems in order to facilitate the development of the contract plans. Various software and operating systems were developed to aid in assuring quality and conformance with Department policies and procedures. The Department supports 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 in the FDOT CADD Software Suite. Furnish As-Built documents for all building related components of the Project in AutoCAD format. It is the responsibility of the Design-Build Firm to obtain and utilize current Department releases of all CADD applications.

The Design-Build Firm will be required to furnish the Project's CADD files after the plans have been Released for Construction. The Design-Build Firm's role and responsibilities are defined in the Department's CADD Manual. The Design-Build Firm will be required to submit final documents and files which shall include complete CADD design and coordinate geometry files in MicroStation and/or AutoCAD design files format.

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

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

- And any other products or features the Design-Build Firm desires.

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

The Design-Build Firm shall warranty the performance of all structural components in accordance with Section 475, Value Added Bridge Components, included as Appendix D.

X. Adjoining Construction Projects:

The Design-Build Firm shall be responsible for coordinating all design, permitting, and construction activities with other design, construction, and maintenance Projects that are impacted by or impact this Project. This includes Projects under the jurisdiction of local governments, the Department, other regional and state agencies, or private entities. Adjoining design, construction, and maintenance projects include, but are not limited to:

1. 432193-1 I-4 Managed Lanes from Kirkman to SR 434
2. 441113-1 I-4 at Daryl Carter Parkway Interchange
3. 407143-4 SR 482 (Sand Lake Road) from West of International Drive to Universal Boulevard and International Drive from Jamaican Court to North of Sand Lake Road
4. 407143-5 SR 482 (Sand Lake Road) from West of Universal Boulevard to West of CR 423 (John Young Parkway)
5. 439880-1 Orange County Pedestrian Lighting Bundle A
6. 242484-7 I-4 from Central Florida Parkway to west of SR 435 (Kirkman Road)
7. 242484-8 I-4 from east of SR 522 Osceola Parkway (Osceola / Orange County line) to Central Florida Parkway
8. 440947-1 I-4 landscaping from west of SR 528 to west of Kirkman Road
9. 448915-1 I-4/SR 400 from east of SR 528 to west of SR 528
10. 443817-1 SR 435 Kirkman Road Extension from South of Sand Lake Road to Carrier Drive
11. 445362-4 I-4/SR 400 from Polk County Line to Downtown Orlando
12. Potential Brightline corridor extension from Orlando Station to Tampa Station

This list is not intended to be all inclusive, and it will be the Design-Build Firm’s responsibility for determining the complete inventory of adjoining projects (present and planned) and the required coordination.

All work associated with coordinating the design and construction, and related field work necessary to make suitable connections adjoining the I-4 Managed Lanes from Kirkman to SR 434 Project (432193-1) shall be considered with the Proposed Contract Time and included in the Bid Price Proposal.

The Design-Build Firm shall be responsible for coordinating all phases of the maintenance of traffic with the adjoining projects. The on-going work on I-4 at Daryl Carter Parkway Interchange (441113-1), SR 528 Interchange (448915-1), and SR-535 Interchange (448914-1) is anticipated to extend into the schedule of this project. The Design-Build Firm shall accommodate all maintenance of traffic phases to interface at all times with the on-going reconstruction on I-4. The Design-Build Firm shall include any additional phasing and maintenance of traffic costs including any cost for anticipated impacts to the adjoining projects in their Price Proposal. The Design-Build Firm shall be responsible for any delays and costs incurred by the adjoining project, as determined by the Department, associated with the maintenance of traffic interface.

The Design-Build Firm shall consider and include in the Construction Plans and Bid Price Proposal, any and all temporary detours or diversions required to facilitate traffic movements into and out of the project limits; notwithstanding the alignment, lane positioning and/or grade differences of traffic conditions on those adjoining projects.

Y. Issue Escalation:

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

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

The Design-Build Firm shall provide a similar issue escalation process for their organization with personnel of similar levels of responsibility.

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

VI. Design and Construction Criteria.

A. General:

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

B. Vibration and Settlement Monitoring:

The Department has identified vibration sensitive sites along the Project corridor that are listed below. The Design-Build Firm shall be responsible for the identification of and coordination with these sites and any additional vibration sensitive sites impacted by the Work for the duration of the construction period.

- Rosen Medical Center

- IMA Medical Group Corporate Offices

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

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

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

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

C. Geotechnical Services:

The Design-Build Firm shall be solely responsible for all geotechnical aspects of the Project. The design and construction phase geotechnical services are described in the following sections.

General Conditions-Design:

The Design-Build Firm shall be responsible for identifying and performing any geotechnical field-testing laboratory testing, analysis and foundation design required to meet the needs of the Project. The geotechnical field investigation and laboratory testing shall be conducted in accordance with the Governing Regulations, except as noted herein.

The soil boring frequencies, boring depths and sampling/testing requirements presented in the FDOT Soils and Foundations Handbook (SFH), except for the requirements specifically addressed in this section, shall be the minimum requirements for this Design-Build Project. Structure foundation borings shall be located at each structure foundation unit (pier, bent, wall, shaft, etc.) whenever possible; in any case, borings shall be within 60 feet of the structure foundation to be considered acceptable for use in foundation design with the exception of toll gantry borings which shall be within 20 feet. Bridge soil borings shall achieve all of

the SFH boring depth criteria, including boring depth below final foundation tip elevations and penetration into dense bearing material. Wall borings shall be extended to a depth of twice the wall height, or until the induced soil pressure is less than 10% of the original overburden pressure, whichever is deeper.

If a boring location is difficult to access during the design phase without closing travel lanes, the boring can be performed during the construction phase after traffic control has been established. However, all of the borings must be completed and reported, and the geotechnical report accepted by FDOT, prior to foundation installation.

For purposes of determining the frequency of roadway borings in accordance with SFH 3.2.1.b, the soil conditions shall be considered variable.

Soil classification testing for structure borings shall be performed at a minimum frequency of 1 test per 25 feet of boring and shall include, as a minimum, percent fines content for non-cohesive soil; percent fines content, organic content and natural moisture content for organic soil; and percent fines content, liquid limit, plastic limit and natural moisture content for cohesive soil. Soil consolidation and shear strength testing shall be performed for all cohesive and/or organic layers that require consolidation settlement calculations and stability analysis, respectively. Soil boring and sampling plans shall be presented to the District Geotechnical Engineer, or his representative, to verify compliance prior to conducting geotechnical field activities.

General Conditions-Construction:

The Design-Build Firm shall be responsible for identifying and performing all foundation construction, load testing, integrity testing and inspection required for the Project. The bridge shall be supported using deep foundations tipped no higher than the following:

From Station 4213+03 to Station 4215+70 (BL of Survey), bridges shall be supported using deep foundations tipped no higher than Elevation +35 ft NAVD.

From Station 7214+09 to Station 7216+75 (BL of Survey), bridges shall be supported using deep foundations tipped no higher than Elevation +35 ft NAVD.

From Station 2307+00 to Station 2316+45 (BL of Survey), bridges shall be supported using deep foundations tipped no higher than Elevation +60 ft NAVD.

From Station 2320+07 to Station 2321+26 (BL of Survey), bridges shall be supported using deep foundations tipped no higher than Elevation +40 ft NAVD.

Driven Pile Foundations for Bridges and Major Structures

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

- Station 4213+03 to Station 4215+66 (BL of Survey), (minimum one test)
- Station 7214+08 to Station 7216+75 (BL of Survey), (minimum one test)
- Station 2307+00 to Station 2316+45 (BL of Survey), (minimum two tests)
- Station 2320+07 to Station 2321+26 (BL of Survey), (minimum one test)

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

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

Drilled Shaft Foundations for Bridges and Miscellaneous Structures

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

- Station 4213+03 to Station 4215+66 (BL of Survey), (minimum one test)
- Station 7214+08 to Station 7216+75 (BL of Survey), (minimum two tests)
- Station 2307+00 to Station 2316+45 (BL of Survey), (minimum one test)

- Station 2320+07 to Station 2321+26 (BL of Survey), (minimum one test)

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

1. Evaluating geotechnical conditions to determine the drilled shaft diameter and length and construction methods to be used.
2. Performing the subsurface investigation and drilling pilot holes prior to establishing the drilled shaft tip elevations and socket requirements. For redundant drilled shaft bridge foundations, perform at least one test boring in accordance with the Soils and Foundations Handbook at each bent/pier.
3. Determining the locations of the load test shafts and the types of tests that will be performed.
4. Performing pilot borings for test holes (also known as test shafts or method shafts) and load test shafts and providing the results to the Department at least one (1) working day before beginning construction of these shafts.
5. Preparing and submitting a Drilled Shaft Installation Plan for the Department's acceptance.
6. Constructing the method shaft (test hole) and load test shafts successfully and conducting thermal integrity tests on these shafts.
7. Providing all personnel and equipment to perform a load test program on the load test shafts.
8. Determining the production shaft lengths.
9. Documenting and providing a report that includes all load test shaft data, analysis, and recommendations to the Department.
10. Constructing all drilled shafts to the required tip elevation and socket requirement in accordance with the specifications.
11. Inspecting and documenting the construction of all drilled shafts in accordance with the specifications.
12. Performing Non-Destructive Drilled Shaft Integrity Testing in accordance with 455-17.6.
13. Repairing all detected defects and conducting post repair integrity testing using 3D tomographic imaging and gamma-gamma density logging.
14. Submitting Foundation Certification Packages in accordance with the specifications.
15. Providing safe access, and cooperating with the Department in verification of the drilled shafts, both during construction and after submittal of the certification package.
16. Complying with the tolling gantry foundation requirements provided in the General Tolling Requirements (Appendix K).

Spread Footings Foundations

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

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

Auger Cast Piles for Sound Barrier Walls

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

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

Specialty Geotechnical Service Requirements:

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

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

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

D. Utility Coordination:

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

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

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

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

Table A provides list of Utility Agency Owners (UAOs) that have been identified by the Department as having facilities within the project corridor for which the Department contemplates an adjustment, protection, or relocation based on the Concept Plans. The Department has provided UWHC Agreements (Appendix T) for the Design-Build Firm's use. The Design-Build Firm may request the utility to be relocated to accommodate changes from the conceptual plans; however, these relocations require the Department's approval.

Table B provides the list of all Utility Agency Owners within the project limits.

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

UAO	Utility Relocation Type	Reimbursable	Department Responsibility	D/B Firm Responsibility
444315-1-52-01				
AT&T Florida	Relocation by UAO	Yes	Yes	

Brighthouse (dba Charter/Spectrum)	Relocation by UAO	Yes	Yes	
CenturyLink – Level 3	Relocation by UAO	Yes	Yes	
Comcast Communications	Relocation by UAO	Yes	Yes	
Duke Energy Distribution	Relocation by UAO	Yes	Yes	
*Orange County Utilities	Relocation by D/B Team via UWHC	Yes	Yes	*$4,600,000.00
*Orlando Utilities Commission (Water)	Relocation by D/B Team via UWHC	Yes	Yes	* $2,000,000.00
Smart City Solutions	Relocation by UAO	Yes	Yes	
Summit Broadband	Relocation by UAO	Yes	Yes	
TECO Peoples Gas	Relocation by UAO	Yes	Yes	
Verizon Business	Relocation by UAO	Yes	Yes	
Zayo Group	Relocation by UAO	Yes	Yes	
444315-3-52-01				
Duke Energy Distribution	Locate and Protect by UAO	Yes	Yes	

(*) The Design-Build Firm shall incorporate the cost of Orange County Utilities and Orlando Utilities Commission (Water) estimates in their bid price. Any additional impacts to these utility facilities that would increase the amount of work to be performed will be at the Design-Build Firm's cost.

Table B - Summary of Department Contemplated Adjustment, Protection, or Relocation Based on Concept Plans

UAO Contact Information	Utility Relocation Type	Design-Build Firm Responsibility
444315-1-52-01		
AT&T Florida Alan Reynolds 407-351-8180 Ar2916@att.com	Relocation by UAO at FDOT Expense	Coordination and Schedule
Brighthouse (dba Charter/Spectrum) Tim Ross 407-532-8148 Timothy.ross@charter.com	Relocation by UAO at FDOT Expense	Coordination and Schedule
CenturyLink – Level 3	Relocation by UAO at	Coordination and Schedule

Kevin Harder 815-451-1688 kharder@terratechllc.net	FDOT Expense	
City of Orlando Julio Morais 407-246-2213 Julio.morais@cityoforlando.net	Protect in Place by UAO	Coordination
Comcast Communications Cesar Rivera 407-312-5944 Cesar_rivera@crowncastle.com	Relocation by UAO at FDOT Expense	Coordination and Schedule
Crown Castle Fiber Venesia Home 407-235-6368 Venesia.home@crowncastle.com	Protect in Place by UAO	Coordination
Duke Energy Distribution Tomas Macias 407-938-6619 Tomas.macias@duke-energy.com	Relocation by UAO at FDOT Expense	Coordination and Schedule
Orange County Utilities Christina Crosby 407-254-9706 Christina.crosby@ocfl.net	Relocation by D/B Team via UWHC	Coordination, Cost (see Table A), Construction, and Schedule
Orlando Utilities Commission (Water) Steve Grubbs 407-434-2560 sgrubbs@ouc.com	Relocation by D/B Team via UWHC	Coordination, Cost (see Table A), Construction, and Schedule
Smart City Solutions David Cawley 407-828-6648 dcawley@smartcity.com	Relocation by UAO at FDOT Expense	Coordination and Schedule
Summit Broadband Michelle Daniel 407-996-1183 mdaniel@summit-broadband.com	Relocation by UAO at FDOT Expense	Coordination and Schedule
TECO Peoples Gas Shawn Winsor 407-420-6663 swinsor@tecoenergy.com	Relocation by UAO at FDOT Expense	Coordination and Schedule
Uniti Fiber James Mosley 251-645-8216 James.mosley@uniti.com	Protect in Place by UAO	Coordination
Verizon Business Tim Cole 407-618-2178 Timothy.cole@verizon.com	Relocation by UAO at FDOT Expense	Coordination and Schedule

Zayo Group Tess Bentayou 813-363-6797 Tess.bentayou@zayo.com	Relocation by UAO at FDOT Expense	Coordination and Schedule
444315-3-52-01		
AT&T Florida Alan Reynolds 407-351-8180 Ar2916@att.com	Protect in Place by UAO	Coordination
Brighthouse (dba Charter/Spectrum) Tim Ross 407-532-8148 Timothy.ross@charter.com	Protect in Place by UAO	Coordination
CenturyLink – Level 3 Kevin Harder 815-451-1688 kharder@terratechllc.net	Protect in Place by UAO	Coordination
Comcast Communications Cesar Rivera 407-312-5944 Cesar_rivera@crowncastle.com	Protect in Place by UAO	Coordination
Crown Castle Fiber Venesia Home 407-235-6368 Venesia.home@crowncastle.com	Protect in Place by UAO	Coordination
Duke Energy Distribution Tomas Macias 407-938-6619 Tomas.macias@duke-energy.com	Protect in Place by UAO Relocation by UAO if necessary	Coordination
Orange County Utilities Christina Crosby 407-254-9706 Christina.crosby@ocfl.net	Protect in Place by UAO	Coordination
Orlando Utilities Commission (Water) Steve Grubbs 407-434-2560 sgrubbs@ouc.com	Protect in Place by UAO	Coordination
Smart City Solutions David Cawley 407-828-6648 dcawley@smartcity.com	Protect in Place by UAO	Coordination
Summit Broadband Michelle Daniel 407-996-1183 mdaniel@summit-broadband.com	Protect in Place by UAO	Coordination
TECO Peoples Gas Shawn Winsor	Protect in Place by UAO	Coordination

407-420-6663 swinsor@tecoenergy.com		
Verizon Business Tim Cole 407-618-2178 Timothy.cole@verizon.com	Protect in Place by UAO	Coordination
Zayo Group Tess Bentayou 813-363-6797 Tess.bentayou@zayo.com	Protect in Place by UAO	Coordination

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

Advanced Utility Coordination:

The Department has conducted limited advanced utility coordination with the UAOs. Information pertaining to this coordination is included in the Attachments, (Appendix T and Reference Document 24: Advanced Utility Coordination Information.

The Design-Build Firm shall make every attempt in their design to avoid existing utilities and minimize impacts.

All federal requirements must be upheld by the Design-Build Firm as prescribed in 'Required Contract Provisions for Federal Aid Contracts (Appendix A of Assurances) Form #710-010-08 and Form #710-010-09, Blank Forms are in Appendix T or can be found at the following link: Procedural Document Library (fdot.gov)

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

The relocation agreements, plans, work schedules, and permit applications are to be forwarded by the Design-Build Firm to the Department (District Utility Office (DUO) and the Department's Construction Manager/Orlando Operations Office) for review. The DUO and Department's Construction Manager only

review the documents and are not to sign them. Once reviewed, the utility permit applications will be forwarded by the Design-Build Firm to the Orlando Operations Office for the permit to be signed and recorded or submitted through the One Stop Permitting (OSP) system.

444315-1-52-01

AT&T Florida
AT&T Florida has a large 12-4" PVC duct bank on the south side of Sand Lake Road with associated manholes. There is also direct buried fiber and copper along the north side of Sand Lake Road to Turkey Lake Road. Along Turkey Lake Road, AT&T has direct buried fiber and copper on the east and west side of the road with associated handholes, with some conduit crossings Turkey Lake Road at multiple locations. AT&T has a customer owned conduit with FOC along the north side of I-4 outside the R/W.

CenturyLink – Level 3
CenturyLink has (3) 1.25: HDPE ducts along the north side of Sand Lake Road. The handhole at the intersection of I-4 at Sand Lake Road will be removed by CenturyLink.

Crown Castle
Crown Castle has (3) 1.25" HDPE ducts along the south side of Sand Lake Road that crosses to the north side east of Turkey Lake Road.

City of Orlando
The City of Orlando has a 14" DIP forcemain crossing I-4 at the Adventure Way off-ramp, increasing to a 20" PVC force main and continuing along the north side of I-4. There is also a 24" PVC gravity sanitary sewer main privately owned running parallel to the force main along the same alignment.

Duke Energy Distribution
Duke Energy Distribution has a 12.47 KV OE along the east side of Turkey Lake Road and lighting with associated poles and 120v BE on the west side. Duke also has sporadic locations of 12.47 KV OE along the south side of I-4, located at or just inside the limited access R/W. Duke Energy plans to relocate along Turkey Lake Road from station 275+15 (B/L of Turkey Lake Road based on the conceptual plans) to the end of the project limits along Turkey Lake Road. Along Sand Lake Road there is a 12.47 kv along the north and south sides of the roadway. Duke Energy plans to relocate the existing overhead at the intersection of Sand Lake Road and Turkey Lake Road.

Orlando Utilities Commission – Water (OUC – W)
Orlando Utilities Commission (Water) intends to have the Design-Build Team construct the WM relocation as shown in the OUC (W) WM 30% design plans and Engineers Estimate which are included in the RFP as reference documents. They intend to have their consultant continue the design based on coordination with the Design-Build Team. The Design-Build Firm shall coordinate with OUC (W) and their consultant on any design changes to their Utility Work by Highway Contractor Plans.

The Design-Build Firm shall perform all necessary relocation, adjustments and removals for the utility work and adhere to Orlando Utilities Commission's Technical Special Provisions. The Design-Build Firm shall coordinate with the Department and OUC (W) for all design approvals.

The existing 16" DIP water main from the intersection of Sand Lake Sound Road and Turkey Lake Road north to Sand Lake Road will be removed and a new 16" DIP water main constructed west of the existing water main alignment. North of Sand Lake Road the existing 16" DIP will also be replaced with a new 16"

DIP west of the existing water main alignment to where the existing water main goes outside the I-4 L/A R/W.

Orange County Utilities
Orange County Utilities intends to have the Design-Build Team construct their utility work as shown in the 60% Orange County Utilities design plans and Engineers Estimate which are included in the RFP as reference documents. They intend to have their consultant continue the design based on coordination with the Design-Build Team. The Design-Build Firm shall coordinate with Orange County Utilities and their consultant on any design changes to their Utility Work by Highway Contractor Plans.

The Design-Build Firm shall perform all necessary relocation, adjustments and removals for the utility work and adhere to the County Technical Special Provisions. The Design-Build Firm shall coordinate with the Department and Orange County Utilities for all design approvals.

Orange County also intends to upsize approximately 1042 LF of 14-inch force main to 24-inch force main along Sand Lake Road from west of Turkey Lake Road to the east and upsize the 16-inch force main to 20-inch from the connection point at Sand Lake Bridge to the south. The cost associated with the betterment will be paid for by Orange County Utilities directly to the Department.

Smart City
Smart City is located on the Duke Energy pole line with some sections of underground that will all be relocated to follow Duke Energy's relocation. Smart City will not be able to relocate their overhead facilities until the new Duke Energy poles and associated overhead electric is in place.

Summit Broadband
Summit Broadband has an existing underground 144ct and 72ct FOC in (3) 1.25" HDPE conduits along the north side of Sand Lake with a crossing east of the I-4 interchange and the west side of International Drive. There is also underground 144ct and 72ct FOC in (3) 1.25" HDPE conduits along the west side of Turkey Lake Road.

TECO Peoples Gas
TECO has a 2" coated steel gas main along the west side of Turkey Lake Road. crossing to the south side at Sand Lake Sound Road. There is also a 4" coated steel gas main along the north side of Sand Lake Road. to Turkey Lake Road and a 4" coated steel gas main along the south side of Sand Lake Road to International Drive. There is a 6" coated steel gas main along the north side of Sand Lake Road from east of the Sand Lake Road and I-4 interchange to International Drive

Uniti Fiber
Uniti has (2) 1.25" ducts along the north side of Sand Lake Road that continues down the west side of Turkey Lake Road.

Verizon
Verizon has (1) 2" HDPE conduits along the east side of Turkey Lake Road from the beginning of the project to Sand Lake Sound Road where it crosses to the west side and continues north. There is a (1) 2" HDPE along the south side of Sand Lake Road to the intersection of Turkey Lake Road.

Zayo
Zayo has (3) 1.25" HDPE conduits along the south side of Sand Lake Road until International Drive where it crosses to the north side and continues east. Zayo also has (3) 1.25" HDPE conduits along the west side of International Drive. Zayo has (5) 1.25" HDPE conduits along the east side of Universal Blvd.

444315-3-52-01

AT&T Florida
From a review of the RGBs AT&T Florida submitted for 441113-1, there is an existing direct buried FOC (0.5" in diameter) along the westbound side of Central Florida Parkway continuing along the westbound side of I-4. No conflicts are anticipated.

Brighthouse (fka Spectrum/Charter)
Brighthouse has BFO along the westbound side of Central Florida Parkway turning north and continues on Turkey Lake Road. No conflicts are anticipated.

CenturyLink – Level 3
TBD

Crown Castle
TBD

Duke Energy Distribution
Duke has a 12.47kv overhead electric line along the outside the limited access westbound right-of-way line starting around station 1311+00 and continues to Central Florida Parkway continuing along Turkey Lake Road to Sand Lake Road. Duke Distribution also has 7.2kv BE along the eastbound limited access right-of-way line to a pad mount transformer at station 1334+30 along the southbound side of Central Florida Parkway where it crosses Central Florida Parkway to a switchgear cabinet outside the limited access right-of-way. There is a 12.47kv BE and a 12.47kv OE along the southbound side of Central Florida Parkway. The underground facilities shown on the submitted RGB will require locates/survey for exact depth and location. The location of these facilities as shown on the RGB are only an approximation (for exact location and depth as survey will be needed). If the survey shows that the noted facilities conflict with the project, then a Reimbursable UWS will be submitted and will be covered by the conservative cost estimate submitted by Duke Energy Distribution. There is also a 12.47kv BE crossing I-4 at approximately station 1400+50 and 1491+00.

Orlando Utilities Commission – Water
Orlando Utilities Commission (OUC Water) has a 12" ductile iron watermain in a 20" steel casing under the existing pavement of I-4 crossing at approximately station 1502+00 that continues outside the limited access right-of way to the east to International Drive. There is also a 16" ductile iron watermain in a 30" steel casing under I-4 crossing at approximately station 1404+00 that continues outside the limited access right-of-way to the east to International Drive along the north side of Exhibit Drive. No conflicts are anticipated.

Orange County Utilities
Orange County Utilities has a 6" and a 4" PVC forcemain along the I-4 westbound limited access right-of-way from east of Daryl Carter Interchange to Central Florida Parkway. Along Central Florida Parkway there is a 6" DIP forcemain, a 24" PVC watermain, a 16" PVC reuse main, and a 10" DIP watermain that continues to the east on the southside of the existing retention pond to Turkey Lake Road. Along Turkey Lake Road there is a 12" PVC watermain, a 16" PVC reuse main, and a 20" PVC forcemain. At approximately station 1428+00 there is a 36" DIP reuse main crossing in a 223' long, 54" steel casing.

Smart City

TBD

Summit Broadband
TBD

TECO Peoples Gas
Teco did not provide RGBs, but stated that no conflicts exist with any gas mains and the proposed express lane.

Verizon
TBD

Zayo
Zayo has three (3) 1-1/4" HDPE ducts with FOC in each along Turkey Lake Rd. from SR 528 to Sand Lake Road.

Procurement of New Electric Services

Where new electrical services are required, the Design-Build Firm shall coordinate the final locations of distribution transformer and service poles to minimize service and branch circuit conductors and conduit lengths. Preliminary electrical service locations have been coordinated with and provided by TBD. The preliminary electrical service locations are shown in/on TBD. Each service point shall be separately metered.

The Design-Build Firm shall coordinate with local power provider(s) for new electrical services for the Project. The aforementioned coordination shall include, but not limited to, demolition/relocation of existing primary circuiting and transformers, routing of the new primary circuiting if required, installation of pull boxes, and service points.

New electrical services and service points for, but are not limited to, the roadway lighting, the toll site, ITS equipment, and traffic signals are anticipated. Existing electrical services, conductors, transformers and utility meters within the Right of Way shall not be re-used.

The local power provider(s) require payment for such services in advance of the work. The Design-Build Firm will pay the local power providers for all actual costs known as Contribution in Aid of Construction (CIAC) associated with the design and installation of the electric services.

The Department has coordinated with the local power provider(s) to obtain preliminary construction cost estimates for electrical power necessary for the Project improvements. The estimates are provided in the Reference Documents of this RFP based on the service point locations shown and are to be used for reference only. The intent of this coordination is to provide bidders an estimated cost for the local power provider(s) work effort based on the concept plans provided. It is the responsibility of the Design-Build Firm to coordinate with the local power provider(s) to confirm the amount of the CIAC and complete all work associated with electrical services. All recurring monthly charges from local power provider(s) during the "burn-in" period for all new systems to be constructed (ITS, tolls, signal, lighting, etc.) shall be paid by the Design-Build Firm until Final Acceptance by the Department.

The Design-Build Firm shall be responsible for applying for and receiving new addresses for service points for power. The Design-Build Firm's Lump Sum Price Bid shall include the cost of installing all secondary

electric facilities from the transformer and/or electric meter to the facility requiring service, per the local power provider(s) specifications, and all other electrical work described within the RFP.

Additional electrical utility service requirements may be specified within the Lighting, Signals, or ITS sections of this RFP and in the General Tolling Requirements (Appendix K).

E. Roadway Plans:

General:

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

Design Analysis:

The Design-Build Firm shall either utilize the signed and sealed Approved Typical Section Package (Appendix G) and comply with the same, or via the ATC process, develop and submit a different signed and sealed Typical Section Package for review and concurrence by the Department and FHWA on Projects of Divisional Involvement (PoDIs).

The Design-Build Firm shall develop and submit a signed and sealed Pavement Design Package and Drainage Analysis Report for review and concurrence by the Department and FHWA on Projects of Division Involvement (PoDIs).

The Design-Build Firm shall develop and submit a signed and sealed Drainage Analysis Report for review and concurrence by the Department and FHWA on Projects of Division Involvement (PoDIs).

Any deviation from the Department's design criteria will require a Design Variation and any deviation from AASHTO will require a Design Exception. All such Design Variations and Design Exceptions must be approved by FDOT and/or FHWA, as applicable.

These packages shall include the following:

F. Roadway Design:

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

1. **Typical Section Package** (if revised by the Design-Build Firm):

- 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. Friction course
     7. Minimum structural asphalt thickness
     8. Minimum base group
     9. Subbase
     10. Cross slope
     11. Identify the need for modified binder
     12. Pavement coring and evaluation
     13. Identify if ARMI layer is required
     14. Minimum milling depth
     15. Toll gantry pavement design requirements provided in the General Tolling Requirements (Appendix K).
   - Pavement Design Summary Sheets
   - Constructability Sketches
   - As-Built Plans
   - Quality Control Checklist
   - Copy of the approved Typical Section Package

The Minimum Pavement Design Requirements (Appendix H) have been provided by the Department and shall be used by the Design-Build Firm in the development of the Pavement Design Package. It is the responsibility of the Design-Build Firm to prepare a Pavement Design Package submittal for review and concurrence by the Department.

Pavement designs shall consider ground water impacts before submitting to the Department for review and consideration.

The temporary pavement shall be adequate to support traffic for the duration of use, with no visual signs of raveling or wear. The Design-Build Firm shall be responsible for maintaining temporary pavement.

Minimum structural course thickness, as required by the FDOT Flexible Pavement Design Manual or the Minimum Pavement Design Requirements (Appendix H) whichever is greater, shall be met regardless of structural number.

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

- Minimum Pavement Design Requirements (Appendix H)
- General Tolling Requirements (Appendix K)

The following documents have been provided by the Department as Reference Documents and should be used by the Design-Build Firm to assist in the development of the pavement design:

- FDOT AADT Traffic Data and Equivalent Single Axle Loading (ESAL) values
- Resilient Modulus Recommendations and LBR
- FDOT Pavement Survey and Evaluation Report
- Existing Cross Slope Data

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

3. **Drainage Analysis:**

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

The exact number of drainage basins, outfalls and water management facilities (retention/detention areas, weirs, etc.) will be the Design-Build Firm's responsibility. If the Design-Build Firm increases pond depths to obtain more embankment material and/or makes any other modifications to ponds, modification of Project permits and coordination with all parties related to modifications to the joint use agreements shall be the responsibility of the Design-Build Firm.

The objective is to obtain approved stormwater treatment/attenuation design. This service shall include, but is not limited to the following: Design of the conveyance system, treatment system, and attenuation system in compliance with all applicable regulations.

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

The Design-Build Firm shall adhere to the following additional design criteria:

1. Positive Drainage shall be maintained throughout the project. Positive drainage means overland, open channel and/or closed conduit flow of runoff by gravity towards or through a stormwater conveyance system from a higher elevation to a lower elevation. Positive Drainage also means providing conveyance where construction activities might divert or trap water and compromise safety and efficiency, including locations on offsite properties.

2. Any proposed berm style weirs, trapezoidal, or otherwise use shall require approval from the District Drainage Design Engineer. If a berm style weir is approved by the Department, the Design- Build Firm shall submit for Department approval a structural design to support the loading of maintenance vehicles without failure for the life of the weir and a geotechnical design to prevent seepage through the pond or swale berm that may result in failure of the pond or swale berm. All berm style weirs in pond or swale berms shall be

designed and constructed to be traversable.

3. Vertical drains shall not be used on this project.

4. Underground stormwater management systems shall not be placed under the pavement within the project limits. Underground stormwater management systems shall not be placed in engineered fill. “Engineered fill” means embankment that is strengthened by methods in addition to compaction; for example, using geotextiles as soil reinforcement.

5. Heavy equipment shall not be operated close enough to pipe endwalls or other structures to cause their displacement.

6. Drainage design and stormwater management systems shall be accommodated within the Project Right of Way except as otherwise noted in the Project’s joint use agreements, unless the Design-Build Firm acquires additional Project Right of Way in accordance with the Contract Documents.

7. If the Design-Build Firm prefers to abandon in-place any drainage structures or culverts, approval must first be obtained from the District Drainage Engineer. The drainage structures and culverts approved by the Department to be abandoned in-place shall be filled completely with flowable fill prior to abandonment. All abandoned drainage structures and culverts shall be depicted on the As-Built Record Plans.

8. All constructed inlets and manholes shall have an outlet storm drain pipe. The most downstream pipe of each storm drain system must be constructed with its outlet flow line at the toe of slope or bottom of any pond or ditch.

9. Temporary drainage calculations shall be submitted to the Department for approval prior to commencement of a given TTCP phase.

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

11. All connected outfalls of adjacent drainage systems or properties shall be maintained throughout construction. Connected outfalls shall comprise all underground and above ground connections including overland flow.

12. If stormwater pipes are proposed to cross a bridge/MSE wall interface (e.g. thru end bent backwalls), such piping shall consist of steel pipe with welded joints and the stormwater piping system and bridge hangers shall be designed for the differential settlement.

13. The control elevations shall not be lowered from the elevations shown in the Concept Plans or existing permits.

14. All embankment on the strap side of an MSE wall not designated as Wall Zone B, as shown in Figure F3 of Appendix D of the FDOT Drainage Manual, shall be considered Wall Zone A regardless of embankment width between MSE walls, regardless of embankment width adjacent to the strap side of an MSE wall, and regardless of whether or not there are MSE walls on both sides of the embankment cross section.

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 Mandatory and is to occur fifteen (15) calendar days (excluding weekends and Department observed holidays) prior to any submittals containing drainage components.

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

G. Geometric Design:

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

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

General:

The Design-Build Firm shall maintain all existing, and accommodate any future planned, pedestrian and bicycle facilities on all cross streets ensuring the most stringent of Department and local agency criteria is met.

Design Speed:

A design speed of 70 mph shall be used for I-4 General Use Lanes and Express Lanes, 40 mph for Sand Lake Road, and 45 mph for Turkey Lake Road. The Design-Build Firm shall maintain the existing design speed for all entrance ramps and exit ramps in the final condition.

Design Vehicle:

The design vehicle shall be a WB-62FL.

Design Variations, and Design Exceptions:

The Department has prepared Approved Design Exceptions (Appendix I) and Approved Design Variations (Appendix J) based on the Concept Plans.

Horizontal and Vertical Alignment Criteria:

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

a) The Design-Build Firm shall make use of the alignments in the Concept Plans as a general basis for establishing the geometric layout within 5' horizontal or 5' vertical.

b) The Design-Build Firm shall make use of the alignments in the Concept Plans as a general basis for establishing the geometric layout within 0' horizontal or 0' vertical at the toll site.

c) The Design-Build Firm shall comply with number of lanes, lane widths, buffer widths, shoulder widths, separation, and maximum front slope shown in the Approved Typical Section Package (Appendix G). Changes to the Approved Typical Section Package (Appendix G) will require resubmittal for Department approval.

d) The Design-Build Firm shall construct auxiliary lanes at the locations shown in the Concept Plans. The length of the auxiliary lanes in the Concept Plans shall be considered a minimum.

e) The Design-Build Firm shall construct turn lanes at the locations shown in the Concept Plans. The length of the turn lanes in the Concept Plans shall be considered a minimum.

f) The Design-Build Firm shall make roadway geometrics provisions for a future Ramp Signal Subsystem (RSS) by others at the Sand Lake Road EB on-ramp and the Sand Lake Road WB on-ramp. The roadway geometric provisions shall include acceleration lengths from a stop condition at the physical gore and queue storage lengths along the ramps as depicted in the Concept Plans.

g) The Design-Build Firm shall construct incident management areas at the locations shown in the Concept Plans. The lengths of the incident management areas in the Concept Plans shall be considered a minimum.

h) The Design-Build Firm shall construct parallel type ramp terminals as shown in the Concept Plans.

i) The Design-Build Firm shall comply with the limits of milling and resurfacing as shown in the Concept Plans. In addition, the Design-Build Firm shall mill and resurface all additional areas impacted by TTCP shifts in accordance with the Minimum Pavement Design Requirements in Appendix H.

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

k) The Design-Build Firm shall use guardrail in conjunction with a permanent turf reinforcement mat in fill sections with a front slope steeper than 1:4 and embankment height less than or equal to 10 feet. Stormwater will be allowed to flow over the shoulder and the miscellaneous asphalt onto the sodded front slope. Shear stress calculations are required for the design/selection of the permanent turf reinforcement mat.

l) The Design-Build Firm shall replace in kind any fencing impacted by Construction. Physical separation with a minimum height of six (6) feet shall be provided at all times between the Limited Access Right of Way and the surrounding area using one of the following three options. The Department shall have final approval authority for the location and type of all installed physical separation.

- FDOT Type B Fence,
- For areas where noise barriers or retaining walls are six (6) feet or greater in height, fencing may be terminated at the retaining or noise wall as shown in the Design Standards unless the Department determines that the fence line shall be installed 6" from the Limited Access Right of Way as typically shown in the Design Standards.
- For areas with outside shoulder concrete barrier, fence may be attached to or located immediately behind the shoulder barrier to provide an installed height of at least six (6) feet.

m) The Design-Build Firm shall prepare and submit requests for opening(s) in the Project Right of Way fence for the Department and FHWA) and/or partnering Governmental Entity approval. Requests shall include sketches for staging areas that the Design-Build Firm wishes to access from outside the existing Project Right of Way fence. Openings shall be controlled by the Design-Build Firm and used only for construction activities. Requested fence openings shall be gated and locked when not actively being used. The Design-Build Firm shall locate all gates outside the roadway clear zone. The Design-Build Firm shall restore any disturbed area to its preconstruction condition.

n) All curbs, curb ramps, sidewalks and pedestrian crosswalks impacted by construction shall be restored to meet current standards. Sidewalk widths shall be in accordance with the Approved Typical Section Package (Appendix G).

H. Design Documentation, Calculations, and Computations:

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

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

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

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

I. Structure Plans:

Structures Design Analysis:

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

b) The Design-Build Firm shall insure that the final geotechnical 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. Load Rating for existing Bridge 750142 and 750486 are included in Attachment O. Existing bridges shall load rate with either an LRFR or LFR inventory rating equal to or greater than 1.0. New bridges shall load rate with an LRFR rating equal to or greater than 1.0. 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 railing replacements on the un-widened side of Bridge 750142 shall utilize the minor widening criteria of SDG 7.3.4.C.

e) The Engineer of Record for bridges shall analyze the effects of the construction related loads on structures. These effects include but are not limited to: construction equipment loads, wind during active and inactive conditions, change in segment length, temporary stability of girders/beams, developing a workable erection plan, change in construction sequence, etc. The Engineer of Record shall review all specialty engineer submittals (camber curves, falsework systems, etc.) to ensure compliance with the contract plan requirements and intent.

f) Wall heights, from the top of leveling pad to the top of wall coping, greater than 40’ shall not be permitted, unless site specific locations have been approved by the Department through the ATC process.

Structures Design Criteria:

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

a) All plans and designs are to be prepared in accordance with the Governing Regulations of Section V. A. The architectural pylons are to be designed to the Florida Building Code.

b) Bridge Widening: In general, match the existing as per the Department Structures Manual. Match the existing bridge deck finishing. The Design-Build Firm shall include the following at Bridge No. 750142.
   i) Existing expansion joints shall be replaced with Poured Joint with Backer Rod (Index 458-110).
   ii) Epoxy inject cracks of 1/16" or wider for reinforced concrete components subject to moisture exposure (Bridge Deck, approach slabs, etc.) as identified in the Bridge Inspection Reports.
   iii) Apply an epoxy concrete overlay to the top slab of the bridge deck in accordance with Development Specification 403 (Appendix Y).
   iv) Address rideability roughness issues at bridge approach roadway transitions (approach asphalt and slabs)
   v) Replace the joint headers with polymer nosing for the full width of the bridge deck.
   vi) Maintain existing minimum vertical clearances.

c) Ensure removal of all garbage/debris, graffiti, nuisance vegetation (any vegetation growing on including but not limited to the bridges, retaining wall joints, adjacent sidewalks, curbs, copings, et cetera), staining, etc. on bridges and associated retaining walls at the completion of bridge widening activities.

d) The Project includes the following four (4) new bridges and widening of one (1) existing bridge, light pole pilaster retrofit of one (1) existing bridge as defined in the Concept Plans.

   i. New bridges:
      1. Bridge No. 750966, SR 400 (I-4) Westbound over SR 482 (Sand Lake Road).
      2. Bridge No. 750967, SR 400 (I-4) Eastbound over SR 482 (Sand Lake Road).
      3. Bridge No. 750969, Ramp M2 Over SR 482 (Sand Lake Road) and Ramp J.
      4. Bridge No. 750947, Ramp M2 Over Ramp M.

   ii. Widenings:
      1. Bridge No. 750142, I-4 Westbound Over Central Florida Parkway

   iii. Light Pole Pilaster Retrofit:
      1. Bridge No. 750486, I-4 Westbound Ramp

e) Pier Caps and Straddle Bents or Piers
   i. Steel – All steel pier caps and steel straddle beams shall be constructed of ASTM

A709 HPS 50W, or HPS 70W.

ii. Concrete Pier Caps – A permanent steel shell for forming and casting is not allowed.

f) Each bridge is to be constructed of a single superstructure type and material.

g) For multi-span bridges, the exterior beams/girders for all spans shall be the same type and height.

h) Provide TL-5 Barriers, on both sides of any bridge or wall sections with radius of 1,200 ft. or less.

i) The Department has identified preliminary environmental classifications for bridges for information only (refer to Geotechnical Data included in the Reference Documents). The Design-Build Firm shall be solely responsible for establishing and recommending a final environmental classification for review and approval by the Department during the design.

Bridge Number	Environmental Classification		
	Superstructure	Substructure	
		Concrete	Steel
750966 & 750967	Slightly Aggressive	Extremely Aggressive (pH=4.3)	Extremely Aggressive (pH=4.3)
750969	Slightly Aggressive	Moderately Aggressive (Resistivity = 2252)	Moderately Aggressive (Resistivity = 2252)
750947	Slightly Aggressive	Slightly Aggressive	Moderately Aggressive (pH = 6.8)
750142	Slightly Aggressive	Slightly Aggressive	Slightly Aggressive

j) Traffic Railings shall be provided or upgraded as follows:

i. Bridge 750142 : Replace existing traffic railing on the un-widened side with Index 521-427 36" Single Slope Railings.

ii. From Begin project limits the traffic railing type shall be Single-Slope in accordance with the Department's Design Standards.

iii. Bridge 750486 and associated retaining walls: Maintain the existing 32" f-shape traffic railing. Sections of railing replaced for the light pole pilaster retrofit shall maintain the similar 32" f-shape shape. The 32" f-shape railing is no longer in the Standards, provide all necessary details in the plans signed and sealed, conforming to previous versions of the Standards.

k) For all new concrete barriers mounted on bridges and/or retaining walls, the Design-Build Firm shall provide three (3) PVC conduit runs (Index 630-010). When additional conduits outside the bridge barriers are required for ITS purposes, these conduits shall be supported directly under the bridge deck, and they shall be in an interior beam bay. A

minimum of two (2) pull boxes shall be provided at each bridge location, one (1) at each bridge end in accordance with Department standards.

l) Existing Bridge Nos. , 750402, 750180, 750087, 750485, and 750486 shall be analyzed for Vehicular Collision in accordance with SDG 2.6. Provide Pier Protection Barrier (Index 521-002) or strengthen any structure found not to satisfy the 600 kip design force. Utilize Index 521-002 barriers unless geometric constraints do not permit for standard pier protection barriers. Any Column strengthening shall be a cast-in-place concrete collar poured around the circumference of the existing columns. Utilize a Type S Shrinkage Reducing admixture per Section 924 of the Specifications. The existing column surface shall be roughened to ¼" amplitude and prepared to the saturated surface dry condition prior to pouring concrete. Do not install the collar the full height of the column, provide sufficient space for concrete pouring activities. The minimum collar height shall sufficient to satisfy the Vehicular Collision criteria of SDG 2.6 and AASHTO LRFD Bridge Design Specifications, 8th Edition.

m) Bridge Drainage:

i. Bridge drainage shall be in accordance with Chapter 22 of the StructuresManual, Volume 2.

ii. All bridge drainage piping shall be mounted on the bottom-side of the deck of an interior beam bay. For new substructure members, bridge drainage piping shall be internal to the structure. Drain piping inside of any box girders/beams and/or post tensioned straddle caps is not permitted.

n) Critical Temporary Retaining Walls: Whenever the construction of a component requires excavation that may endanger the public or an existing structure as defined in FDM 262.2.4 and Chapter 19 of the Structures Manual, Volume 2, provide temporary critical walls. Remove all temporary critical sheet pile walls 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.

p) For permanent retaining walls, partial height walls such as perched or toe-walls, as defined in the FDOT Structures Manual shall not be permitted unless site specific locations have been approved by the Department through the ATC process. See Figure 3.12-1 of the FDOT Structures Manual, Volume 1.

q) Permanent Retaining Walls: Geosynthetic reinforced soil (GRS) walls and abutments shall not be permitted.

r) All permanent sheet pile walls, soldier pile walls, and specialty walls shall have a concrete facing, cap, and coping. If steel walls are used, they shall have a concrete facing.

s) All proposed structural steel (including shapes and plates for bracing members) shall be weathering steel (ASTM A 709 Grades 50W, HPS 50W, and HPS 70W), unless prohibited by site conditions or otherwise stated in the RFP. Miscellaneous hardware, including shapes, plates, and threaded bar stock (except when used on uncoated weathering steel) shall conform to ASTM A709, Grade 36. Do not use ASTM A 709 Grade HPS 100W steel.

See also FHWA Technical Advisory T 5140.22 for additional information.

i. All bolted connections shall be installed as slip critical with Class B Faying Surfaces, with the exception of field splices for painted exterior girders which shall be Class A Faying Surface. Design all bolted connections for Class A Faying Surfaces.
ii. All bolts shall be ASTM F3125 Grade A325 Type 3. Provide nuts and washers with weathering characteristics. For members to be coated, coat the fastener assembly on the coated side similarly, do not coat the fastener assembly surfaces in contact with uncoated weathering steel.

t) Coating of Exterior Superstructure:
   i. For the proposed bridges, if structural steel is used, the exterior girder (exposed top flange, and exterior side of the web and bottom flange) shall be painted with a high-performance coating system in accordance with the Standard Specifications and the Project Aesthetic Requirements (Appendix U). Painting of the interior girders is prohibited.
   ii. For concrete beam bridges, utilize a Class 5 finish in accordance with the Standard Specifications and the Project Aesthetic Requirements (Appendix U). Painting of the interior beams is prohibited.

u) Coat all proposed and existing concrete barrier walls, traffic railings, copings, retaining walls, sheet pile walls, and bridge elements in accordance with the Project Aesthetic Requirements.

v) Coating of Existing Steel Girders:

   i. Coat existing structural steel superstructure elements for Bridges 750485, 750486, and 750487. Submit an Existing Coating Assessment Report, with a narrative report of field observations, field-testing, coating recommendations and photographs of the existing conditions. The reports shall make a final recommendation, with the coating system for the bridges detailed in the structures plans.
   ii. Any reduction in minimum vertical clearance for a temporary containment system is to be submitted to the Department for review and approval no later than the 60% Structures Plans submittal. The minimum vertical clearance for temporary conditions is 16’-0”.

w) Install a sheet pile wall in accordance with the Final Judgement of Case No. 2011-CA-001327-O (Appendix AA)

x) For the proposed bridges, if structural steel is used, substructure units shall be protected from rust runoff of the weathering steel during construction activities. Detail the structures in accordance with Structures Manual, Volume 2 Section 16.12 to prevent corrosion and staining for the service life of the structure.

y) For steel superstructures, the fascia girders shall have no transverse intermediate or longitudinal stiffeners on the fascia side of the girder.

z) The Project includes a Toll Gantry structure as shown in the Toll Siting Technical

Memorandum (Appendix N).

aa) Uprights in the medians shall be 56" Barrier-Mounted Sign Support Shielding – Symmetrical in accordance to Index 521-001.

bb) Mounting sign structure supports to bridges is prohibited, with the exception of Bridge No. 750967.

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 (Appendix C) from the Specifications Workbook in effect at the time the Bid Price Proposals were due in the District Office, along with any approved Developmental Specifications and Technical Special Provisions, that are not part of this RFP. Any subsequent modifications to the Construction Specifications Package shall be prepared, signed and sealed as a Supplemental Specifications Package. The Specifications Package(s) shall be prepared, signed and sealed by the Design-Build Firms Engineer of Record who has successfully completed the mandatory Specifications Package Preparations Training.

The Department has included sample Toll Facilities Specifications as part of the General Tolling Requirements (Appendix K). It is the Design-Build Firm's responsibility to produce a set of Toll Facilities Technical Special Provisions signed and sealed by the Design-Build Firm for the proposed Work.

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

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

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

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

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

K. Shop Drawings:

The Design-Build Firm shall be responsible for the preparation and approval of Shop Drawings. Shop Drawings shall be in conformance with the Department's Division I Specifications for Design-Build Contracts, the Turnpike Design Handbook (Appendix V), and FDM. Shop Drawing submittals must be accompanied by sufficient information for adjoining components or areas of work to allow for proper evaluation of the Shop Drawing(s) submitted for review. When required to be submitted to the Department, Shop Drawings shall bear the stamp and signature of the Design-Build Firm's Contractor, Architect of Record (AOR) and/or Engineer of Record (EOR), and Specialty Engineer, as appropriate. All "Approved" and "Approved as Noted" Shop Drawings submitted to the Department for review shall also include

Engineer of Record QA/QC Shop Drawing check prints along with the AOR and/or EOR stamped set(s). The Department shall review the Shop Drawing(s) to evaluate compliance with Project requirements and provide any findings to the Design-Build Firm. The Departments procedural review of Shop Drawings is to assure that the Design-Build Firm's EOR has approved and signed the drawing, the drawing has been independently reviewed and is in general conformance with the plans. The Department's review is not meant to be a complete and detailed review, but the Department reserves the right to perform a more detailed review, as necessary. Upon review of the Shop Drawing, the Department will initial, date, and stamp the drawing "Release for Construction", "Release for Construction as Noted", or "Resubmit".

The Design-Build Firm shall submit all shop drawings for tolling infrastructure as required in the "Turnpike Shop Drawing Review Process for Design Build (Non-Conventional) Projects", which is included as part of the Reference Documents and as detailed in the Turnpike's GTR.

For tolling infrastructure shop drawing coordination, please contact the Turnpike's Shop Drawing Review Office, Florida's Turnpike Headquarters, Ocoee, FL, 407.264.3405.

L. Sequence of Construction:

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

1. Maintain or improve, to the maximum extent possible, the quality of existing traffic operations, both in terms of flow rate and safety, throughout the duration of the Project.
2. Minimize the number of different Temporary Traffic Control Plan (TTCP) phases, i.e., number of different diversions and detours for a given traffic movement.
3. Take advantage of newly constructed portions of the permanent facility as soon as possible when it is in the best interest of traffic operations and construction activity.
4. Maintain reasonable direct access to adjacent properties at all times, with the exception in areas of limited access Right-of-Way where direct access is not permitted.
5. Coordinate with adjoining Projects and maintaining agencies.
6. Advanced construction WB Express Lane from west of Central Florida Parkway to west of SR 482.

M. Stormwater Pollution Prevention Plans (SWPPP):

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

N. Transportation Management Plan:

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

The Design-Build Firm shall design a safe and effective Temporary Traffic Control Plan to move vehicular, bicycle, 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, traffic monitoring sites, toll site construction, and toll equipment contractor installation. Special consideration shall be given to the drainage system when developing the construction phases. Positive drainage must be maintained at all times (See Section VI.F.3 of this RFP).

Lighting levels matching the existing or permanent conditions shall be maintained at all times during construction. Prior to shifting traffic onto new ramps, new lighting or temp lighting shall be turned on.

The Design-Build Firm shall maintain pedestrian access for all sidewalks, transit facilities and at all intersections where such access exists at the commencement of construction.

The Design-Build Firm shall maintain bicycle access for all sidewalks and bicycle paths at all locations where such access exists at the commencement of construction.

Existing sidewalks that cannot be maintained during construction shall be temporarily replaced with an adjacent temporary facility or a pedestrian detour route. Any and all temporary or alternate facilities must meet ADA requirements. The placement of an adjacent temporary pedestrian facility or pedestrian detour route is subject to review and approval by the Department before implementation.

1. Traffic Control Restrictions:

The Design-Build Firm shall, at a minimum, adhere to the following lane closure restrictions:

- SR 400 EB
  - ONE (1) LANE is allowed to be closed between 11:30 PM to 6:00 AM
  - TWO (2) LANES are allowed to be closed between 12:30 AM to 5:30 AM
  - ALL LANES are allowed to be closed between 2:00 AM and 4:30 AM and traffic detoured
- SR 400 WB
  - ONE (1) LANE is allowed to be closed between 11:30 PM to 6:30 AM
  - TWO (2) LANES are allowed to be closed between 12:30 AM to 5:30 AM
  - ALL LANES are allowed to be closed between 2:30 AM and 4:30 AM and traffic detoured
- Sand Lake Road EB
  - ONE (1) LANE is allowed to be closed between 11:30 PM to 7:00 AM
  - TWO (2) LANES are allowed to be closed between 1:00 AM to 6:00 AM
  - ALL LANES are allowed to be closed between 2:30 AM and 4:30 AM and traffic detoured
- Sand Lake Road WB
  - ONE (1) LANE is allowed to be closed between 11:00 PM to 8:00 AM
  - TWO (2) LANES are allowed to be closed between 12:00 AM to 6:30 AM
  - ALL LANES are allowed to be closed between 2:30 AM and 4:30 AM and traffic detoured
- Turkey Lake Road NB
  - ONE (1) LANE is allowed to be closed between 1:00 AM to 6:00 AM
  - ALL LANES are allowed to be closed between 2:30 AM and 4:30 AM and traffic detoured
- Turkey Lake Road SB
  - ONE (1) LANE is allowed to be closed between 1:00 AM to 6:00 AM
  - ALL LANES are allowed to be closed between 2:30 AM and 4:30 AM and traffic detoured

- Central Florida Parkway EB
  - ONE (1) LANE is allowed to be closed between 12:30 AM to 6:00 AM
  - ALL LANES are allowed to be closed between 2:30 AM and 4:30 AM and traffic detoured
- Central Florida Parkway WB
  - ONE (1) LANE is allowed to be closed between 11:30 PM to 5:00 AM
  - ALL LANES are allowed to be closed between 2:30 AM and 4:30 AM and traffic detoured
- Ramps
  - Single Lane Ramps are allowed to be closed between 12:30 AM and 5:30 AM and traffic detoured
  - ONE (1) LANE is allowed to be closed between 11:30 PM to 6:00 AM on Multilane Ramps

A lane may only be closed during active work periods. There will be NO PACING OPERATIONS allowed on I-4 (SR-400) EB between the hours of 2:00 AM and 4:30 AM and on I-4 (SR-400) WB between the hours of 2:30 AM and 4:30 AM. There will be no DETOURS allowed on I-4 (SR-400) EB between the hours of 2:00 AM and 4:30 AM and on I-4 (SR-400) WB between the hours of 2:30 AM and 4:30 AM. All lane closures, including ramp closures, must be reported to the local emergency agencies, the media and the District Five Public Information Officer, Jessica Ottaviano, a minimum of seven (7) calendar days in advance and be submitted into the Department's Public Involvement Consultant's (PIC) database. Also, the Design-Build Firm shall develop the Project to be able to provide for all lanes of traffic to be open in the event of an emergency.

The Department, or its designated representative, will serve as the Public Involvement Consultant (PIC)

The Design-Build Firm may request, and the Department may approve in its sole discretion modifications to the lane closure restriction times. The Design-Build Firm shall request in writing the proposed modifications accompanied by a signed and sealed Lane Closure Analysis completed by the Engineer of Record using current up-to-date traffic data collected by the Design-Build Firm. The Department reserves its rights to suspend modifications to the lane closure restriction times in its sole discretion.

NO LANE CLOSURES are allowed on the Project during the times shown below so as to minimize potential impacts to the following events:

- During and one hour after the ending of Amway Center Events
- During and one hour after the ending of Universal Studios Halloween Horror Nights Events <<< UNDER CONSIDERATION>>>
- During and one hour after the ending of Camping World Stadium Events
- During and one hour after the ending of Exploria Stadium Events
- During and one hour after the ending of MegaCon at Orange County Convention Center

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

There will be no pavement marking eradication permitted after the final asphalt course is placed. Prior to placement of final pavement markings, a full width overlay or full width milling and resurfacing of the travelled way shall be the only acceptable means of pavement marking eradication for any asphalt roadways where temporary striping is required. Temporary markings on concrete pavement shall be contrast paint.

During the course of this contract, Service Patrol provided by I4 Mobility Partners OpCo. shall continue through the construction area. The Service Patrol is dispatched by the Regional Traffic Management Center (RTMC). The Design-Build Firm shall report any disabled vehicles or crashes to assist with faster response to the construction zone.

The Department also has a program called Rapid Incident Scene Clearance (RISC). RISC vendors are contracted with the Department to respond to large vehicle incidents involving semis, dump trucks, large recreational vehicles, etc. The RISC program shall remain in effect in the construction zone for the duration of the contract at no cost to the Design-Build Firm. RISC is activated by the RTMC.

Within 30 calendar days following NTP, the Design-Build Firm shall submit a Hurricane or Other Catastrophic Event Readiness Plan which will address the measures the Design-Build Firm will implement in preparation for a hurricane or catastrophic event. The Plan shall also stipulate the measures to be taken post-event.

ALL LANES WITHIN THE PROJECT LIMITS SHALL BE OPEN TO TRAFFIC DURING AN EVACUATION NOTICE OF A HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION OR EVENT AS DIRECTED 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.

The following Environmental Services/Permits have been issued, based on the Concept Plans, by the regulatory agencies for this project:

- Section 404 permit (U.S. Army Corps of Engineers) (Permit No. SAJ-2017-02720)
- Environmental Resource Permit (Permit No. 48-01243-P) (South Florida Water Management District)

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

- National Pollutant Discharge Elimination System (Florida Department of Environmental Protection)

The Design-Build Firm shall be responsible for obtaining a South Florida Water Management District (SFWMD) Environmental Resource Permit (ERP) and US Army Corps of Engineers (USACE)/Florida Department of Environmental Protection (FDEP) Permit for improvements for the WB Express Lane from west of Central Florida Parkway to west of SR 482.

The Department has identified additional regulatory permits that will likely be required for this Project and will be the responsibility of the Design-Build Firm for procuring. This list is indicative only and is not meant to be comprehensive:

- Toll Building Permit
- Dewatering Permit (South Florida Water Management District)

The Department has conducted an investigation of the Project site and determined that potential gopher tortoise habitats could be impacted by the Project. All coordination by the Design-Build Firm with the Department regarding gopher tortoises will be completed through the District Environmental Management Office and the District Environmental Permit Office. If the Department has determined that suitable gopher tortoise habitat exists in the project area, then the Design-Build Firm shall be responsible for conducting the gopher tortoise burrow survey for the purpose of identifying potential gopher tortoise habitats that could be impacted by the Project including any areas to be used for construction staging. The habitat will be systematically surveyed according to the current Gopher Tortoise Permitting guidelines published by the Florida Fish and Wildlife Conservation Commission (FWC). The Department must verify the completeness and accuracy of the assessment prior to commencement of any permitting or construction activities. Any areas where the Design-Build Firm proposes to protect burrows to remain on-site with "exclusionary fencing" shall be reviewed and approved by the Department. The Design-Build Firm shall submit an "exclusionary fencing" plan for review prior to any "exclusionary fencing" installation. If there are unavoidable impacts to gopher tortoise burrows, the Design-Build Firm shall be responsible for preparing required documentation for the Department to obtain a FWC permit for the relocation of gopher tortoises and commensals from burrows which cannot be avoided. Preparation of complete permit packages will be the responsibility of the Design-Build Firm. As the "permittee", the Department is responsible for reviewing and approving the permit application package including all permit modifications, or subsequent permit applications. This applies whether the project is Federal or state funded. Once the Department has approved the permit application, the Design-Build Firm is responsible for submitting the permit application to FWC. A copy of the permit and any subsequent reports to FWC must be provided to the District Environmental Management Office or District Environmental Permit Office, as appropriate. If FWC rejects or denies the permit application, it is the Design-Build Firm's responsibility to make whatever changes necessary to ensure the permit application is approved. Once the permit is obtained, the Design-Build Firm shall notify the Department at least one week prior to the relocation of gopher tortoises. If gopher tortoise relocations are phased throughout the construction, the Design-Build Firm shall notify the Department at least one week prior to each relocation phase. The Department will provide oversight of the relocations and ensure permit compliance. The Design-Build Firm shall be responsible for any necessary permit extensions or re-permitting in order to keep the relocation permit valid throughout the construction period. The Design-Build Firm shall provide the Department with draft copies of requests to modify the permits and/or requests for permit extensions, for review and approval by the Department prior to submittal to the Agencies. The Design-Build Firm shall provide the appropriate reports as required by the permit conditions, including closing out the permit. The Design-Build Firm shall note that permits for gopher tortoise relocation for areas outside of the Department owned Right of Way (i.e. utility easements; license agreements) cannot be obtained with the Department as the "permittee", per FWC requirements. Should permits in areas outside of the Right of Way be required, the Department will still perform the oversight of the process as described above. The Design-Build Firm will be required to pay all permit fees including any and all fees associated with the relocation of gopher tortoises. Any fines levied by permitting agencies shall be the responsibility of the Design-Build Firm.

The following Project specific Environmental Services/Permits have been identified as specific requirements for this project. The Design-Build Firm will be responsible for all analysis, assessments, and reports related to

the following in support of all design changes:

1. Cultural Resources
2. Wetlands and Mitigation
3. Floodplains
4. Wildlife and Habitat
5. Noise
6. Contaminated Sites and Materials

Please note that all cultural resources assessments must meet the following requirement: *As per Chapter 1A-46 of the Florida Administrative Code, Principal Investigators shall meet the minimum qualifications for archaeology, history, architecture, architectural history, or historic architecture contained in 36 C.F.R. 61 ("Procedures for Approved State and Local Historic Preservation Programs, Appendix A, Professional Qualifications Standards"), effective 10-97.*

All assessments and reports will be performed according to their respective chapters in the latest version of the FDOT's Project Development and Environment (PD&E) Manual. The Design-Build Firm will coordinate with the District Environmental Office for review of these assessments and reports. The Design-Build Firm will not be compensated for any additional costs or time of these assessments, reports, or other activities to support the proposed design changes.

P. Signing and Pavement Marking Plans:

The Design-Build Firm shall prepare signing and pavement marking plans in accordance with Department and local agency, where applicable roadways not operated and maintained by the Department, criteria.

A Concept Signing Plan (Appendix Q) has been provided by the Department identifying sign locations and messages within the project limits. All signs and structures shown in the Concept Signing Plan (Appendix Q) shall be provided and/or modified, including those outside the project limits described in this RFP. No structural analysis was performed for the Concept Signing Plan (Appendix Q).

The intent conveyed by the guide signing on the Concept Signing Plan (Appendix Q) is based upon the geometrics as presented in the Concept Plans. It is the responsibility of Design-Build Firm to incorporate a final guide signing plan consistent with the final Project geometrics and the criteria noted herein.

- Placement of all overhead guide signs located at ramp exits shall be limited to a maximum deviation of 100' from the painted gore point.

- Placement of all other guide signs, with the exception of ramp exit signage and signs with distances represented in the legends, (overhead, ground mount, bridge mount) shall be in accordance with the Design-Build Firm's geometric design and available right of way.

- Modifications to existing signs outside of the project limits shall be made to provide accurate and appropriate sign messages reflecting the geometric changes included in this project.

- Warning, Regulatory, and Informational signs not depicted shall be the responsibility of the Design-Build Firm to construct in accordance with MUTCD requirements.

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.

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

- Lit and unlit sign panels shall not be mixed on the same structure. If an existing sign panel is being replaced on a truss containing more than one panel, all panels on that structure shall be replaced with Type XI sheeting. Sign panels with Type XI sheeting shall not be lit.

- The Design-Build Firm shall be responsible for meeting current criteria and standards for any existing overhead sign structure on which sign panels are replaced and/or added. If the modified existing structure does not meet current criteria and standards, the Design-Build Firm shall replace the structure.

- The Design-Build Firm shall paint all new sign structures and the backs of all new sign panels black in accordance with the Project Aesthetics Requirements (Appendix U).

- Lynx bus stop signs are not to be moved or removed by the Design-Build Firm. All relocations shall by coordinated with, and handled by, the Lynx Transit Bus Stop Coordinator at (407)254-6316 (Mknispel@golynx.com)

- The Design-Build Firm shall notify Les Brown with Lynx Transit at (407)842-2279 x3503 two weeks prior to the scheduled relocation of any bus benches.

- The Design-Build Firm shall use Standard thermoplastic traffic stripes and markings on all new friction course. The Design-Build Firm shall not use refurbished thermoplastic markings. The thermoplastic markings shall be installed a minimum of 14 days after the friction course is applied and prior to the installation of the Flexible Tubular Delineators and opening of the express lane.

- The Design-Build Firm shall use Permanent Tape on all concrete pavement and riding surfaces for the following markings:
    - White skip lines (10’-30’) with trailing black contrast; i.e. 10 feet white tape plus 10 feet black tape. Use only the alternating skip pattern.
    - White dotted lines (3’-9’) with trailing black contrast; i.e. 3 feet white tape plus 3 feet black tape). Use only the alternating skip pattern.

- Permanent Tape is required for edge lines on bridges with concrete riding surfaces. All existing stripes and markings shall be removed from concrete surfaces before placing new permanent tape.

- All crosswalks in project limits shall be Special Emphasis.

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 guide signing, including ITS signing 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,

but sign panels older than 5 years shall be replaced. It shall be the Design-Build Firm's responsibility to field inventory existing signs outside of the project limits describing tolls, destinations, and other information related to the entry and exit points within the Project limits and perform all required changes needed to provide accurate and helpful information to the motoring public.

All above ground hazards (e.g., sign structures, overhead structures, signal and light poles) shall be placed outside the required clear zones as applicable by the Standard Plans. It will not be acceptable to place guardrails or barrier walls for the sole purpose of protecting those elements placed in the clear zones.

Existing logo signs (gas, food, lodging, camping and attraction blue ground mounted sign structures), shall be maintained and visible to motorists on I-4 during the entire construction period. The logo signs are to be relocated as required. If a logo sign will not be visible for any period of time, the Design-Build Firm shall notify:

Florida Logos, Inc.
Andy Hennosy, General Manager
3764 New Tampa Hwy
Lakeland, FL 33815
(863) 686-5261 office
1-888-608-0833 toll free
(863) 284-2622 fax

Q. Lighting Plans:

The roadway lighting system along I-4 (SR 400), along all Sand Lake Road interchange ramps, and along Sand Lake Road from 350' east of the Turkey Lake Road intersection to the intersection of International Drive will be maintained by FDOT upon final acceptance. The roadway lighting system at the Turkey Lake Road and the I-4 (SR 400) WB ramps intersection and along Turkey Lake Road from the Turkey Lake Road and the I-4 (SR 400) WB ramps intersection to Sand Lake Road will be installed by Duke Energy and maintained by Duke Energy upon final acceptance. All other roadway lighting will be maintained by Orange County upon final acceptance. FDOT and Orange County shall have independent and separately metered load centers for the lighting systems they maintain. The lighting plans must clearly indicate the maintaining agency responsible for each proposed lighting circuit, light pole, load center, lighting power service, and other lighting components.

The Design-Build Firm shall provide a lighting design and a lighting analysis, and prepare lighting plans in accordance with Department criteria.

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

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

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

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

All existing lighting systems and individual light fixtures shall remain operational unless specifically noted to be removed or replaced, or impacted by the Design-Build Firm's work. For new lighting systems or segments, the criteria shall be met without including the illumination from the existing high-mast light fixtures.

The Design-Build Firm shall remove all out of service lighting system components including underground and surface mount conduits, conductors, pole bases, poles, pull boxes, service points, load centers, and all other ancillary components related to the out of service lighting system.

The Design-Build Firm shall provide roadway and pedestrian lighting per FDM requirements for the I-4 at Sand Lake Road interchange matching, at a minimum, the limits shown in the lighting component of the I-4 at Sand Lake Road Interchange Concept Plans provided as a Reference Document to this RFP.

The Design-Build Firm shall provide Intersection Lighting at the following signalized intersections per FDM requirements to new signalized intersection lighting criteria.

- Sand Lake Road and Turkey Lake Road intersection
- Sand Lake Road and I-4 (SR 400) WB ramps intersection
- Sand Lake Road and I-4 (SR 400) EB ramps intersection

The Design-Build Firm shall provide Intersection Lighting at the following signalized intersections per FDM requirements for retrofitting of existing signalized intersection lighting criteria.

- Sand Lake Road and International Drive

The Design-Build Firm shall provide photometric analysis for the following that must be used to guide installation of lighting by Duke Energy, and the Design-Build Firm shall coordinate installation of this lighting with Duke Energy.

- Turkey Lake Road and I-4 (SR 400) WB ramps intersection
- Turkey Lake Road from the Turkey Lake Road and the I-4 (SR 400) WB ramps intersection to Sand Lake Road

The Design-Build Firm is responsible for any modifications of existing load centers required to accommodate the lighting modifications and to meet current National Electrical Code requirements.

For all new FDOT maintained lighting, including both roadway and pedestrian lighting, the Design-Build Firm shall provide light poles and luminaries using a structural shape and black finish matching the aesthetic treatment of light poles and luminaries consistent with the Project Aesthetics Requirements (Appendix U).

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

The Design-Build Firm shall perform detailed field reviews. Review and document all lighting (poles/luminaires, sign luminaires, etc.), circuiting, load centers, service points, utility transformers, etc., within the limits of lighting construction. This review includes: conductors, conduit, grounding, enclosures, voltages, mounting heights, pullboxes, etc. This review also includes circuits outside the limits of lighting construction that originate or touch this Project's scope of work.

All deficiencies within the limits of lighting construction shall be identified and corrected. Any deficiencies outside the limits of lighting construction shall be brought to the attention of the Department.

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

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 project includes a Freeway Management System along I-4 and SR 528, and extension of the I-4 Ultimate Express Lanes system. Existing ITS along I-4 is maintained and operated by FDOT District 5, or their Concessionaire within the limits of I-4 Ultimate and existing ITS along SR 528 is maintained and operated by FTE. FDOT District 5, FTE, and the I-4 Ultimate Concessionaire each operate distinct ITS networks. The existing ITS within the project limits is to be maintained throughout all phases of construction to a fully functional level.

The Design-Build Firm shall prepare Signalization and Intelligent Transportation Plans in accordance with Department criteria. Additionally, all ITS within District 5's maintenance area shall comply with the District 5 ITS Minimum Technical Requirements (Appendix R).

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
    - CCTV structure, CCTV attachment, CCTV operation/layout
    - VDS structure, DVS attachment, DVS operation/layout
    - Wrong Way Vehicle Detection System (WWVDS) structure, detection configuration, and operation/layout
    - Fiber optic splice and conduit
    - Power Service Distribution
    - Wiring and connection details
    - Conduit, pull box, and vault installation
    - Communication Hub and Field Cabinets
    - System-level block diagrams
    - Device-level block diagrams

- Field hub/router cabinet configuration details
- Fiber optic Splicing Diagrams
- System configuration/Wiring diagram/Equipment Interface for field equipment at individual locations and communications hubs.
- Maintenance of Communications (MOC) Plan including but not limited to any phased construction, temporary fiber optic cabling, temporary power services, temporary ITS devices, temporary structures, and temporary splicing required.

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

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

2. Design and Engineering Services:

The Design-Build Firm shall be responsible for all Signalization and ITS design and engineering services relating to the Project. All ITS system components shall be new unless otherwise identified for relocation. The design of the new system shall integrate with the existing devices. The design shall include the necessary infrastructure and components to ensure proper connection of the new ITS components. This shall include but not be limited to all proposed ITS components of this project as well as existing 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. The Design-Build Firm shall design and install all new, relocated or modified DMS elements required in the Conceptual Signing Plan.
- CCTV – Includes concrete poles, camera lowering devices and mountings to provide 100% CCTV coverage of the project corridor including all I-4 (SR 400) travel lanes, express lanes, and ramps. In addition, each express lane DMS shall have a dedicated verification CCTV. CCTV camera coverage for ½ mile CCTV camera coverage in either direction along Sand Lake Road is required as measured from the centerline of I-4, coverage must include all 100% of all travel lanes within these limits.
- VDS - Includes poles, cabinets, and mountings required to detect all general purpose and express lanes along the project corridor.
- Traffic Data Detection Devices – devices and their detection zones shall be spaced at 1/3-mile or less intervals on each side of I-4 where pavement for both EB and WB express lanes is present, whether the express lanes are open to traffic or not. At a minimum, existing VDS spacing along I-4 within the limits of the WB express lanes must be maintained and all VDS within these limits shall be modified, replaced, or upgraded to detect all general purpose and express lanes and meet or exceed the minimum detection accuracy requirements of FDOT's Standard Specifications for each lane monitored, as demonstrated through device testing. All VDS installed must provide presence, volume, occupancy, and speed data for all lanes they are configured to monitor. Each

VDS must monitor all I-4 general purpose lanes, express lanes, and ramps in the vicinity of the VDS. A single VDS must only monitor one direction of travel in areas where EB and WB express lanes are present. VDS must be located to detect traffic entering and exiting I-4 from all Sand Lake Road interchange ramps.

- WWVDS - A Wrong Way Vehicle Detection System (WWVDS) shall be deployed on all Sand Lake Road interchange off-ramps. The WWVDS shall include static wrong-way signs on both sides of the ramps, LED flashers, wrong-way detectors, confirmation CCTV cameras, poles, ITS cabinet, and needed infrastructure for fiber optic communication and utility power supply (cellular communication and solar power are not allowed). The proposed WWVDS shall provide automatic detection of wrong way driving and warning to wrong way drivers, automatically activate flashing beacons, provide camera verification of wrong-way vehicle and alert to the D5 RTMC through SunGuide. The proposed WWDS shall be fully compatible with the Department's existing WWVDS system. The wrong-way detector station for each ramp shall provide dual zones for both wrong-way detection and camera verifications, one forward-facing to detect incoming vehicles, and the other rear-facing to detect departing vehicles. Unless otherwise approved by the Department, each ramp outfitted with WWVDS shall be provided with at least two sets of highlighted wrong way signs, for a minimum of four per ramp.
- Replacement of all existing PTMS and TTMS sites with ITS network connected sites with permanent traffic counters (vehicle speed/classification units) and loops and piezoelectric axle sensors. PTMS sites must be integrated with District 5's SunGuide system. Locations must be approved by the Department.
- Roadside Unit (RSU) – The Design-Build Firm must relocate impacted existing RSUs within the project limits. The Design-Build Firm will be responsible for relocating the RSUs to a new suitable location, that provides one-mile spacing between RSUs along I-4 and maintains existing arterial coverage, including any mounting hardware, brackets, and cabinet equipment. The Design-Build Firm must provide new cabling between the ITS cabinet and the RSU if the existing cabling cannot be reused. If the existing mounting hardware and bracketry cannot be reused for the new RSU location the Design-Build Firm must provide new mounting hardware and bracketry. The Design-Build Firm must physically relocate the RSU and incidentals, and connect the RSU to the network and power supply, but is not responsible for configuration of the RSU's settings—RSU configuration will be handled by the Department. Comply with FCC rules for RSU installation and follow the RSU manufacturer's installation instructions. Notify the District 5 Regional Traffic Management Center within 5 calendar days of RSU relocation so the Department can perform RSU configuration
- Fiber Optic Network (FON):
    - District 5 Backbones:
        a. Design, furnish, and install two new 144 strand single-mode fiber optic backbone cables with one on each side of I-4 to extend District 5's existing FON. On their northern end, these new backbone cables must terminate in FDOT District 5's Master Hub 2: located just north of the Universal Blvd. overpass on the east side of I-4. Additionally, the cables shall be spliced, in splice boxes, to the existing 144 single-mode fiber optic backbone cables installed on either side of I-4 as part of I-4 Ultimate near the Universal Blvd. overpass, such that the concessionaries network traffic can pass through to the concessionaire's existing Master Hub located north of SR 528 on the eastbound side of I-4. On their southern end, the eastbound and westbound 144 strand single-mode fiber optic backbone cables will butt splice to the eastbound and westbound fiber optic backbone cables being

installed as part of the Daryl Carter Interchange Improvements (441113-1-52-01) in splice boxes located just south of Central Florida Parkway: all fibers of the westbound backbones shall be spliced together and all fibers of the eastbound backbones shall be spliced together. The Design-Build Firm shall review the ITS Plans and/or as-built plans for 441113-1-52-01 to determine the specific limits of fiber optic backbone installation required to perform the required butt splicing and perform any coordination with the contractor for 441113-1-52-01 to facilitate said splicing.

b. The new backbone on the westbound side of I-4 must splice to the existing backbone on the westbound side of I-4 and remain on the westbound side of I-4 for its entire length, except for one crossing north of the Universal Blvd. overpass to access FDOT District 5's Master Hub 2 that will be located on the east side of I-4. The new backbone on the eastbound side of I-4 must splice to the existing backbone on the eastbound side of I-4 and remain on the eastbound side of I-4 for its entire length.

- ITS Fiber Drops:

  a. District 5: Design, furnish, and install 24 strand single-mode fiber drops to all District 5 ITS cabinets. Splice the drop fibers to one of the I-4 backbones in a splice box. Terminate all strands of the drop fiber in patch panels located within cabinets.

  b. Tolling: Design, furnish, and install fiber drops to tolling facilities consistent with the FTE's GTR and Turnpike Design Handbook (Appendix V). Each tolling facility must be connected with a fiber drop to one of the District 5 I-4 backbone fibers. The fiber network must provide transmission of all tolling data to FTE that is required for express lane system operation. The Design-Build Firm is responsible for design and construction of the fiber optic connections and network configurations necessary to ensure proper transmission of tolling data.

- Reestablish all 1-gigabit and 10-gigabit links present in Master Hub 2 for connections to existing ITS devices impacted by the project for which new connections shall be designed, constructed, and tested by the Design-Build Firm.
- Reestablish all connections to the I-4 Ultimate Concessionaire's Master Hub, located north of SR 528 on the eastbound side of I-4.
- Provide 1-gigabit rings that connect all District 5 ITS devices, through fiber connections to the local hubs they are connected to, along I-4. Coordinate with the District on fiber strand assignments.
- Replace impacted FTE fiber in-kind and reestablish connections consistent with existing conditions for impacted ITS devices in their new locations.
- Design, construct, and configure the fiber network as to ensure proper routing and transmission of all ITS, tolling, and other data required to operate the project's ITS.
- Remove and dispose of all abandoned FDOT, FTE, and Orange County ITS fiber optic cabling.
- Any fiber drops that are to remain, and are connected to existing fiber backbones that are being removed or replaced, shall be spliced to the new backbone fiber optic cables in a manner that retains existing network functionality for ITS devices or facilities connected to the fiber drops.
- Butt splicing of fiber optic drops is prohibited. Butt splices for permanent backbone fiber

optic cables cannot be within 10,000 feet of a termination or another butt splice unless specifically called for in this RFP or approved by the Department.

- New Conduit:
  - District 5 Backbone: Install a new HDPE fiber optic duct bank along both sides of I-4 for the limits of the new District 5 144 strand single-mode backbone fiber optic cables. These duct banks shall include a minimum of four 1.25" HDPE conduits. One of these conduits will house the District 5 Fiber Optic Backbone.
  - District 5 Drops: Install new HDPE fiber optic duct banks for each fiber drop. Fiber optic duct banks for drop fibers shall include a minimum of two 1.25" HDPE conduits.
  - FTE Conduit: Replace impacted portions of FTE's existing conduit with new conduits as required in the Turnpike Design Handbook (Appendix V).
  - Power Conduit: Use 2" minimum conduit for all ITS power conduits.
  - Fiber, power cabling, and communication cabling cannot share the same conduits, pull boxes, or splice boxes.
  - Use color coded conduits to differentiate use as required in the Turnpike Design Handbook (Appendix V) and District 5 ITS Minimum Technical Requirements (Appendix R).
- Power System:
  - All DMS associated with the express lane system—including all toll amount DMS, lane status DMS, and full-size DMS—and their confirmation cameras shall be connected to backup generators. All ITS equipment within the limits of where pavement for both EB and WB express lanes is present, whether the express lanes are open to traffic or not, shall be connected to backup generators.
  - FTE ITS devices, District 5 ITS devices, Orange County ITS devices, and I-4 Concessionaire ITS devices shall be on separate power services with independent meters and backup generators.
  - All generators shall be outfitted with a remote monitoring and control system.
  - All ITS cabinets shall be outfitted with a network enabled uninterruptible power supply and remote power manager. All ITS devices shall be connected to an uninterruptible power supply. Each ITS device shall be capable of being individually power cycled by a remote power manager.
  - Electrical systems for FTE ITS must comply with the Turnpike Design Handbook (Appendix V).
  - All electrical system must be designed to comply with the NEC. Existing ITS power systems within the project limits shall be upgraded as needed to meet current NEC requirements.
- Pull and Splice Boxes:
  - New pull and splice boxes shall be installed for access to ITS conduit banks, storage of slack cable, and to facilitate cable pulling.
  - Provide lid labels that describe the box usage (fiber, power, etc.) and maintaining agency as required in the Turnpike Design Handbook (Appendix V) and District 5 ITS Minimum Technical Requirements (Appendix R).
  - Fiber and electrical conductors must not share boxes.

  - Communication and power cabling must not share boxes.
  - The maximum spacing between power pull boxes along a power conduit run is 500 feet.

- ITS Cabinets and Equipment Enclosures
  - Provide local hub cabinets to house the communication and power components required to support ITS devices. Local hub cabinets must be sized by the Design-Build Firm, but must not be smaller than 336S.
  - Small equipment enclosures may be used to house surge suppression devices, power supplies, and other miscellaneous ITS components where a local hub is not attached to the same structure as the ITS device it serves.
  - All FTE ITS Cabinets and Equipment Enclosures must comply with the Turnpike Design Handbook (Appendix V).
  - All District 5 ITS Cabinets and Equipment Enclosures must comply with the District 5 ITS Minimum Technical Requirements (Appendix R).
  - Each maintaining agency shall be provided with separate ITS Cabinets and Equipment Enclosures. ITS Cabinets and Equipment Enclosures must only contain or be connected to ITS equipment of a single maintaining agency.
  - 336S cabinets and small equipment enclosures must be pole mounted. All other ITS Cabinets must be affixed to a concrete base.
- Removal of any ITS System components that are impacted by the Design-Build Firms scope of work as approved by the Department.
- Testing of fiber optic backbone and lateral drops furnished and installed or modified by the Design-Build Firm.
- Testing of the Intelligent Transportation System.
- Testing of the end-to-end express lanes system.
- Maintenance of Communication for all communication networks and ITS devices within the project limits throughout the project's duration. No unscheduled downtime is permitted.
- The I-4 Ultimate Concessionaire's Master Hub will remain and be protected from the work.

3. Construction and Integration Services:

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

4. Testing and Acceptance:

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

5. Existing Conditions

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

The ITS components shall be defined as follows:

- Closed Circuit Television (CCTV) Camera System: The CCTV Camera System consists of pan-tilt-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 provides roadway information and travel times and express lane operational status and current toll amount. The DMS are located at select locations along the corridor. The DMS are connected and communicate via the single mode FOC communications backbone installed along the corridor.
- Vehicle Detection Systems (VDS): The VDS consists of non-intrusive, microwave technology sensors used to collect vehicle volume, speed and occupancy data from mainline travel lanes. The detectors are typically located at approximately one-half (1/2) mile intervals. The detectors are installed on stand-alone concrete poles and/or attached to other ITS device structures in a side-fired configuration to detect data on a lane by lane basis. The VDS is used for incident detection by Department staff and communicate with the single mode FOC communications backbone installed along the corridor.
- Fiber Optic Network (FON): The FON infrastructure provides communications for ITS and Tolls components. 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.
- Master Hub: Two master hubs are present within the project limits—FDOT District 5's Master Hub 2 and the I-4 Ultimate Concessionaire's Master Hub. FDOT District 5's Master Hub 2 is located just north of Universal Blvd. on the eastbound side of I-4; I-4 Ultimate Concessionaire's Master Hub is located on the east side of I-4 approximately 4,500' north of SR 528. These master hubs are climate-controlled buildings containing extensive networking equipment, are connected by fiber optic cabling to other ITS devices in the area, and are provided with backup generators. Both hubs are vital to communication of ITS and tolling data.
- The FOC communications backbone consists of a single mode fiber optic cable and HDPE conduit, locate tone wire, warning tape, fiber route markers, pull boxes, and splice boxes. The backbone provides access points for the various ITS and Toll System components along the corridor for network connectivity as previously described.
- The majority of ITS components are connected to the backbone through a lateral single mode fiber optic cable inside HDPE conduits.

6. Portable and Telemetered Traffic Monitoring Sites (PTMS and TTMS)

The Design-Build Firm shall replace all existing PTMS and TTMS along I-4 and any other sites impacted by the Design-Build Firm to provide data for all travel lanes and express lanes. All PTMS and TTMS sites

shall meet the requirements described in the District 5 ITS Minimum Technical Requirements (Appendix R).

The following is a list of TTMS sites in the project limits along I-4:

- Site 750130

The following is a list of PTMS sites in the project limits along I-4:

- Site 750648

7. Ramp Signaling Subsystems (RSS)

The Design-Build Firm shall make roadway geometrics provisions for a future RSS (by others) at the Sand Lake Road EB on-ramp and the Sand Lake Road WB on-ramp. The roadway geometric provisions shall include acceleration lengths from a stop condition at the physical gore and queue storage lengths along the ramps as depicted in the Concept Plans.

8. Signalization

The following signalized intersections shall be reconstructed:

- Sand Lake Road and Turkey Lake Road intersection
- Sand Lake Road and I-4 (SR 400) WB ramps intersection
- Sand Lake Road and I-4 (SR 400) EB ramps intersection
- Turkey Lake Road and I-4 (SR 400) WB ramps intersection

The following signalized intersections may need to be modified:

- Sand Lake Road and International Drive intersection

Signal equipment shall meet the requirements of FDOT Minimum Specifications for Traffic Control Devices and be listed on FDOT's Approved Product List (APL). Signal equipment shall also meet Orange County's requirements in effect at the time of equipment installation. All signal equipment at the Sand Lake Road Interchange and Turkey Lake Road intersection shall be compatible with Orange County's SR 482 adaptive signal control system.

All signalized intersections modified or reconstructed shall be designed and constructed to be smart signal compatible with the District 5 Automated Traffic Signal Performance Measures (ATSPM) database and feature enhanced vehicle detection capable of automated turning movement counts. All signal cabinets must be upgraded to Type 6, TS-2, Type 1 with 64 channels if it is not already of this type. The plans must include detector channel designation details for the enhanced detection system. Document cabinet and controller parameters and settings for inclusion of the intersection on FDOT District Five's ATSPM application. The down-loadable application for the Intersection Inventory Tool can be found and downloaded at the following website: http://www.cflsmartroads.com/tools.html. Review FDOT District 5 ATSPM requirements prior to submittal.

The traffic signal detection system shall include:

- Stop bar detection for all lanes of the intersection which will provide 1 min batch Turning Movement Counts.

- Advance detection for all lanes of the intersection (including turn lanes).
- Communication between the controller and District 5 ATSPM system using fiber optic cable.
- ATC controller that is compatible with the maintaining agency ATMS software and capable of high-resolution data logging.

All signalized intersections modified or reconstructed shall be designed and constructed to be "Accessible Pedestrian Signal Ready" to permit future deployment of Accessible Pedestrian Signals without reconstructing curb ramps or relocating pedestrian poles to meet spacing requirements.

The Design-Build Firm shall coordinate with Orange County to include their most current required notes, details, and other signalization conventions and notes relating to loops/pull boxes, cabinet/controller, signal heads, and internally illuminated street signs. The following shall be included as part of the signalization criteria:

- The type of signals shall be mast arms. Span wire mounting of traffic signals is prohibited.
- Signal heads shall be mounted vertically.
- Mast arm mounting heights shall be calculated for each specific structure. The designer shall provide a mounting height that positions the top of the yellow indication in line with the center of the mast arm.
- Existing signal pole foundations shall be removed completely, unless noted otherwise.
- Prior to full depth removal of existing signal pole foundations, the foundations shall be analyzed to determine if utilities are cast within the foundation. If complete removal is not possible, approval from the Department is required for partial removal.
- All existing CCTV cameras, emergency vehicle preemption systems, overhead signs, and any other existing devices mounted to the existing mast arms shall be replaced with new systems.
- CCTV cameras capable of pan-tilt-zoom control are required at all reconstructed traffic signals. These CCTV cameras shall be connected to a Managed Field Ethernet Switch installed in the traffic signal cabinet and integrated with Orange County's ATMS software. All CCTV cameras must be FDOT APL listed.
- All street name signs shall be LED, internally illuminated, and double sided where applicable.
- The Design-Build Firm shall maintain emergency pre-emption operations at all times.
- All controllers shall be capable of accommodating Leading Pedestrian Intervals (LPIs) and operating 4-Section logic based on pedestrian activities.
- The traffic signals within the Project Limits are part of Orange County's SCOOT system. Contact Hazem El-Assar at (407) 836-7866 to coordinate final loop locations.
- All removed signal equipment shall be turned over to Orange County, except for poles which shall be disposed of by the Design-Build Firm.

- The Design-Build Firm shall notify Orange County Traffic Operations a minimum of two business days prior to beginning any work impacting traffic signals.

- The Design-Build Firm shall provide an alternative means of detection for all lanes approaching an intersection, separating each movement which previously had detection, in the event permanent vehicle detection is disrupted. The type of detector shall be approved by the Engineer prior to installation. Equipment shall only detect the intended movement.

- Controller base and service pads shall be a monolithic concrete pour with a four inch minimum thickness with a top elevation no greater than eight inches above finished grade.

- Controller cabinet doors shall open away from the intersection.

- Manual push-button cords shall be furnished in the controller cabinets

- If a continuous run of signal cable is not possible from the controller cabinet to the signal head, a terminal block shall be used.

- Six feet of signal cable slack shall be wound inside the mast arm upright and supported by the cable clamp such that the terminal block can be removed from the upright to allow for troubleshooting.

- The cable grip shall be of sufficient size to not compromise the insulation of the signal cable.

- Layers of very hard soils may be encountered at the signal sites. Such materials may make shaft excavations and temporary casing installation difficult. The Design-Build Firm shall expect to encounter these types of soils at all shaft locations and shall use specialized equipment and/or procedures as necessary to facilitate shaft excavations and temporary casing installation. When temporary casings are used, the casing tip shall be reinforced, and the casing thickness shall be adequate to prevent casing damage/deformation during installation.

- The Design-Build Firm shall contact District 5 Structures Maintenance Office at (386)740-3463 one month prior to completion of the Project to schedule an inspection of miscellaneous structures including cable signs, cantilever signs, span signs, ITS, DMS, and Traffic signal mast arms.

The Design-Build Firm shall be responsible to coordinate with UAO's for a dedicated power service for each signal installation and any necessary communications connections for signal installations and is responsible for all costs involved with this activity.

The Design-Build Firm shall be responsible for establishing and implementing initial signal timing and phasing.

The Design-Build Firm shall calculate the pedestrian and vehicular clearance intervals using methodologies found in the Traffic Engineering Manual. Any changes to the existing phasing must be approved by FDOT.

All signalized intersections to be reconstructed shall include a new traffic controller cabinet assembly, including uninterruptable power source system. Each new traffic signal controller assembly shall be compatible and interchangeable with the existing traffic signal equipment within the traffic signal system.

Traffic signal and ITS related communications exist along Sand Lake Road. The Design-Build Firm shall be responsible for replacement of any impacted interconnect cable with fiber optic interconnect cable along with terminations and integration into the existing Orange County ATMS. No new butt splices shall be added to existing fiber optic cables. Backbone fiber interconnect cable shall be 72 strand single mode at a minimum, unless the cable is replacing an existing fiber with a larger strand count in which case the replacement cable shall contain an equivalent number of strands. Fiber drop cables to traffic signals shall be 24 strand single mode—all 24 strands shall be terminated in a patch panel in the traffic signal cabinet.

S. Landscape Opportunity Plans:

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

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

The Opportunity Plans shall include the following:

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

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

Landscape construction documents and landscape installation are not included in this contract and shall be provided by others.

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

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

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

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

T. Tolling Infrastructure:

The project includes the construction of one (1) new complete toll site shown in the Toll Siting Technical Memorandum (Appendix N). The Design-Build Firm shall construct the new toll site at the location shown in the Concept Plans and the Toll Siting Technical Memorandum (Appendix N) which represent the location that has been reviewed by and is acceptable to the Department.

Any deviations from the location specified in the Toll Siting Technical Memorandum (Appendix N) requires the submittal of an updated Toll Siting Technical Memorandum with the ATC.

Modifications to the horizontal and/or vertical alignments greater than 0'H/0'V at the toll site requires the submittal of an updated Toll Siting Technical Memorandum with the ATC.

The Design-Build Firm shall furnish and install new tolling infrastructure per the General Tolling Requirements (Appendix K). The General Tolling Requirements(Appendix K) includes toll facility design criteria specific to the toll site. The Design-Build Firm shall refer to and comply with all General Tolling Requirements (Appendix K) design criteria and construction requirements for a complete and fully operational toll site. The General Tolling Requirements (Appendix K) includes requirement for providing full utility connections for power and communication to the toll site.

The gantry and toll site must be designed to accommodate the ultimate and interim typical sections for the corridor.

The table below is a complement to the General Tolling Requirements (Appendix K) and contains infrastructure types and quantities that shall be furnished and installed by the Design-Build Firm.

Infrastructure Type & Quantity	Tolling Point
Gantry Type	Non-Accessible Cantilever
Gantry Quantity	1
Pavement Type	Asphalt
Building Type New	New
Building Quantity	1
E6 Reader Location	Gantry mounted E6 Reader
Building Communication Type	Fiber Backbone
End to End Testing	Yes

VII. Technical Proposal Requirements:

A. General:

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

B. Submittal Requirements:

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

A copy of the written Technical Proposal must also be submitted electronically in PDF format including bookmarks for each section. Bookmarks which provide links to content within the Technical Proposal are allowed. Bookmarks which provide links to information not included within the content of the Technical Proposal shall not be utilized. No macros will be allowed. Minimum font size of ten (10) shall be used. Times New Roman shall be the required font type.

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

Submit 1 Original, four (4) CD's, DVD's or Flash Drives containing the Technical Proposal in PDF format and seven (7) collated, complete sets of hard copies of the Technical Proposal to:

Ms. Michelle Sloan, Professional Services Administrator
Florida Department of Transportation
719 South Woodland Boulevard
DeLand, FL 32720

The minimum information to be included:

Section 1: Project Approach

- Paper size: 8½" x 11". The maximum number of pages shall be fifteen (15) single-sided, typed pages including text, graphics, tables, charts, and

photographs. Double-sided 8½" x 11" sheets will be counted as 2 pages. 11"x17" sheets are prohibited.

- Describe how the proposed design solutions and construction means and methods meet the project needs described in this Request for Proposal. Provide sufficient information to convey a thorough knowledge and understanding of the project and to provide confidence the design and construction can be completed as proposed.
- Provide the term, measurable standards, and remedial work plan for any proposed Value Added features that are not Value Added features included in this RFP (Appendix D-Value Added Bridge Components (DEV475), or for extending the Value Added period of a feature that is included in this RFP. Describe any material requirements that are exceeded.
- Provide a Written Schedule Narrative that describes the Design and Construction phases and illustrates how each phase will be scheduled to meet the Project needs required of this Request for Proposal. Bar or Gantt charts are prohibited.
- Submit a Category 2 Submittal Summary documenting the proposed Category 2 structure elements for each bridge.

Section 2: Plans

- Plan and Profile views of the proposed improvements shall be submitted in roll-plot format. The maximum width of the roll-plots shall be 36". The maximum length of the roll-plot shall be 8'. Inclusion of additional information on the roll-plot, other than depictions of the Plan and Profile views, is allowed provided it clarifies the plan and profile views. However, the Department may determine that such additional information is excessive and may require the Design-Build Firm to revise and resubmit the roll-plots. If this occurs, the Design-Build Firm will have 2 business days to revise and resubmit the roll-plots upon notification by the Department. All other information not included on the roll plots, such as typical sections, special emphasis details, structure plans, etc., shall be provided on 11"x17" sheets.
- If the Design-Build Firm changes the alignments such that the Landscape Opportunity Plans for the I-4 (SR 400) and Sand Lake Road (SR 482) Interchange (Appendix P), need to be modified, the Design-Build Firm shall provide Landscape Opportunity Plan sheets that depict preserved planting locations for a Bold Landscape design for the entire project limits. The Landscape Plan shall show all preserved planting areas to be used for future Bold Landscaping designs. Paper size shall be 11"x17".
- Right of Way Maps and Legal Descriptions (including area in square feet) of any proposed additional Right of Way parcels if applicable and approved

through the ATC process. Provide Technical Proposal Plans in accordance with the requirements of the FDOT Design Manual, except as modified herein.
- Tolls Plans in accordance with the General Tolling Requirements (Appendix K)
- Preliminary Aesthetics Plans. Paper size shall be 11”x17”.
- 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 shall not discuss or reveal elements of the price proposal in the written proposals. A technical score for each Design-Build Firm will be based on the following criteria:

Item	Value
1. Design	35
2. Construction	30
3. Innovation	10
4. Value Added	5
Maximum Score	**80**

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

1. Design (35 points)

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

- Structures design
- Roadway design / and safety
- Drainage design
- Environmental Design
- Tolls Design
- Signal Design
- ITS Design
- Lighting Design
- Design coordination plan minimizing design changes
- Geotechnical investigation plan
- Geotechnical load test program
- Minimizing impacts through design to:
  - Environment
  - Public
  - Adjacent Properties
  - Structures
- Temporary Traffic Control Plan
- Incident Management Plan
- Aesthetics Design

- Utility Coordination and Design
- Design considerations which improve recycling and reuse opportunities

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

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

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

The Design-Build Firm is to address the following in the Technical Proposal: development of design approaches which minimize periodic and routine maintenance. The following elements 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 (30 points)**

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

- Safety
- Structures construction
- Roadway construction
- Drainage construction
- Tolls construction
- Signal construction
- ITS construction
- Lighting construction
- Construction coordination plan minimizing construction changes
- Minimizing impacts through construction to:
  - Environment
  - Public
  - Adjacent Properties
  - Structures
- Implementation of the Environmental design and Erosion/Sediment Control Plan
- Implementation of the Maintenance of Traffic Plan
- Implementation of the Incident Management Plan
- Utility Coordination and Construction
- Implementation of a Maintenance Plan for the Construction Period along Sand Lake Road and Turkey Lake Road providing a higher level of maintenance.

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

The Design-Build Firm is to address the following in the Technical Proposal: ensuring all Environmental Commitments (Appendix L) and ROW Commitments (Appendix W) are honored.

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

3. **Innovation (10 points)**

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

- Minimize or eliminate Utility relocations
- Materials
- Workmanship
- Enhance Design and Construction aspects related to future expansion of the transportation facility
- Minimize impacts to traffic during construction
- Advancement and early completion of the WB Express Lane(s)

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

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

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

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

Value Added Feature	Minimum Value Added Period
Appendix D - Value Added Bridge Components (DEV 475)	5 years

D. Final Selection Formula:

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

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

BPP = Bid Price Proposal

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

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

E. Final Selection Process:

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

F. Stipend Awards:

The Department has elected to pay a stipend to all non-selected Short-Listed Design-Build Firms to offset some of the costs of preparing the Proposals. The non-selected Short-Listed Design-Build Firms meeting the stipend eligibility requirements of the Project Advertisement and complying with the requirements contained in this section will ultimately be compensated. The stipend will only be payable under the terms and conditions of the Design-Build Stipend Agreement and Project Advertisement, copies of which are included with this Request for Proposal. This Request for Proposal does not commit the Department or any other public agency to pay any costs incurred by an individual firm, partnership, or corporation in the submission of Proposals except as set forth in the Design-Build Stipend Agreement. The amount of the stipend will be $440,480.00 per non-selected Short-Listed Design-Build Firm that meets the stipend eligibility requirements contained in the Project Advertisement. The stipend is not intended to compensate any non-selected Short-Listed Design-Build Firm for the total cost of preparing the Technical and Price Proposals. The Department reserves the right, upon payment of stipend, to use any of the concepts or ideas within the Technical Proposals, as the Department deems appropriate.

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

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

VIII. Bid Proposal Requirements.

A. Bid Price Proposal:

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

Ms. Michelle Sloan, Professional Services Administrator
Florida Department of Transportation
719 South Woodland Boulevard
DeLand, FL 32720

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.