OFFICIAL FILE COPY
CLERK OF THE BOARD
OF COUNTY COMMISSIONERS
MIAMI-DADE COUNTY, FLORIDA

Memorandum

MIAMI-DADE COUNTY

Agenda Item No. 8(N)(3)

Date: March 3, 2015

To: Honorable Chairman Jean Monestime
and Members, Board of County Commissioners

From: Carlos A. Gimenez
Mayor

Subject: Resolution Approving the Terms to Execute an Agreement with the State of Florida, Department of Transportation, for the Construction of a Bridge Support Structure to Replace a Miami-Dade Transit Metromover Pier in Support of the State Road 836/ Interstate 395 Project; Accepting the Easements Associated With the Construction and Authorizing the County Mayor to Execute Same

Resolution No. R-226-15

RECOMMENDATION

It is recommended that the Board of County Commissioners (Board) approve the attached resolution authorizing Miami-Dade County (County) to enter into an Agreement on behalf of Miami-Dade Transit (MDT) with the Florida Department of Transportation (FDOT) for the construction of a bridge support structure to replace MDT Pier No. P23968-OB, which supports the Omni Metromover Guideway system, and to remove same, which is in conflict with the State Road 836 (SR 836)/Interstate 395 (I-395) proposed roadway widening project.

It is further recommended that the Board accept the easements associated with the construction and authorize the County Mayor or County Mayor's designee to execute same as specified in the Agreement.

SCOPE

The FDOT project is physically located in Commissioner Bruno A. Barreiro's District 5. However, the impact of this project is countywide.

FISCAL IMPACT/FUNDING SOURCE

There is minimal fiscal impact to the County deriving from the maintenance of the new bridge structure. The estimated annual cost to conduct maintenance for the new pier or bridge structure after the first five (5) years is $1,000.00. The inspection cost for the new structure will be approximately $14,000.00 and will be provided by FDOT through an existing Bridge Inspection Grant.

TRACK RECORD/MONITOR

The County has entered into similar Agreements with FDOT in the past. The person responsible for managing the execution of this Agreement is Froilan Baez, Chief, MDT Right-of-Way, Utilities and Property Management Division.

BACKGROUND

The Florida Department of Transportation District 6 initiated a Project Development and Environment (PD&E) Study in 2004 to determine and document the feasibility of improving the geometric, operational and safety deficiencies of the I-395 corridor (FIN ID 251688-1-52-01). The PD&E study was completed with the approval of the Record of Decision (ROD) from the Federal Highway Administration (FHWA) on July 16, 2010. The SR 836/I-395 project is included in the FDOT Work Program as an active project and involves the rebuilding of the I-395 corridor from its terminus at the west of the I-95/Midtown Interchange (I-95/State Rd 836/I-395) to its corridor terminus at the West Channel Bridges of US 41/MacArthur Causeway.

I-395 is an Interstate Principal Arterial and major east-west connector serving Miami Beach and PortMiami. The project limits will span a distance of approximately 1.2 miles and will improve safety by alleviating existing operational and geometric deficiencies, increase capacity to prevent future traffic congestion and improve evacuation time from Miami Beach to other parts of the County.

The reconstruction and realignment of I-395 requires the removal of the Metromover Pier No. P23968-0B, which supports bridge spans of 152 and 94 feet, respectively. This project will construct a new suspension bridge pier to support the existing Metromover Bridge. In addition, FDOT agrees to preserve the future Miami Beach Corridor right-of-way within the project limits and has committed that no new construction under this Agreement for I-395 will interfere with the path of the Beach Corridor. The future Miami Beach Corridor envelopment is depicted in the attached Exhibit A of the Agreement.

FDOT is currently preparing a Request for Proposal (RFP) for a Design-Build contract. Concept plans and an RFP are scheduled to be completed by April 2015. A copy of the RFP, as referenced in this Agreement, is attached as Exhibit B. Exhibit C describes and outlines the real property interest for the additional easement FDOT has agreed to grant the County for the footprint of the new pier structure.

MDT staff will be required to review the plans and submit comments that are required to be addressed by the successful FDOT Design-Build bidder. Once the project plans are approved, FDOT will issue a Notice-to-Proceed (NTP). Throughout the construction phase, MDT will continue to inspect and maintain the Omni Metromover Guideway system, as most of the pier replacement work will be done during non-revenue hours.

The Agreement will provide FDOT with access to the Omni Metromover Guideway system for the replacement of Metromover Pier No. P23968-0B. MDT supports this project and has worked with FDOT on the development of this Agreement. It is anticipated that FDOT will issue the NTP to its selected contractor by December 17, 2015.

The Metromover was acquired and constructed, in part, with Federal funds, therefore concurrence from the Federal Transit administration was required and has been received.

Alina T. Hudak
Deputy Mayor

MEMORANDUM

(Revised)

TO: Honorable Chairman Jean Monestime
and Members, Board of County Commissioners

DATE: March 3, 2015

FROM: R. A. Cuevas, Jr.
County Attorney

SUBJECT: Agenda Item No. 8(N)(3)

Please note any items checked.

_____ **"3-Day Rule" for committees applicable if raised**

_____ **6 weeks required between first reading and public hearing**

_____ **4 weeks notification to municipal officials required prior to public hearing**

_____ **Decreases revenues or increases expenditures without balancing budget**

_____ **Budget required**

_____ **Statement of fiscal impact required**

_____ **Ordinance creating a new board requires detailed County Mayor's report for public hearing**

_____ **No committee review**

_____ **Applicable legislation requires more than a majority vote (i.e., 2/3's ____, 3/5's ____, unanimous _____) to approve**

_____ **Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required**

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 8(N)(3)
3-3-15

RESOLUTION NO. R-226-15

RESOLUTION APPROVING THE TERMS OF AN AGREEMENT WITH THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, FOR THE CONSTRUCTION OF A BRIDGE SUPPORT STRUCTURE TO REPLACE MIAMI-DADE TRANSIT METROMOVER PIER NO. P23968-OB; ACCEPTING THE EASEMENTS ASSOCIATED WITH CONSTRUCTION; AND AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO EXECUTE SAME

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated herein by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that:

Section 1. This Board approves the terms of an Agreement with the State of Florida, Department of Transportation, in substantially the form attached hereto and made a part hereof, and accepting the easements associated with construction in substantially the form attached to the Agreement as Exhibit C.

Section 2 Pursuant to Resolution R-974-09, this Board directs the County Mayor or the County Mayor's designee to record the easement instrument accepted herein in the Public Records of Miami-Dade County, Florida; and to provide a recorded copy of the instrument to the Clerk of the Board within thirty (30) days of execution of said instrument; and directs the Clerk of the Board to attach and permanently store a recorded copy together with this resolution.

Section 3. This Board further authorizes the County Mayor or the County Mayor's designee to execute said Agreement for and on behalf of Miami-Dade County.

The foregoing resolution was offered by Commissioner **Rebeca Sosa**, who moved its adoption. The motion was seconded by Commissioner **Sally A. Heyman** and upon being put to a vote, the vote was as follows:

Jean Monestime, Chairman			**aye**
Esteban L. Bovo, Jr., Vice Chairman			**absent**
Bruno A. Barreiro	**absent**	Daniella Levine Cava	**aye**
Jose "Pepe" Diaz	**aye**	Audrey M. Edmonson	**aye**
Sally A. Heyman	**aye**	Barbara J. Jordan	**absent**
Dennis C. Moss	**aye**	Rebeca Sosa	**aye**
Sen. Javier D. Souto	**aye**	Xavier L. Suarez	**aye**
Juan C. Zapata	**absent**		

The Chairperson thereupon declared the resolution duly passed and adopted this 3rd day of March, 2015. This resolution shall become effective upon the earlier of (1) 10 days after the date of its adoption unless vetoed by the County Mayor, and if vetoed, shall become effective only upon an override by this Board, or (2) approval by the County Mayor of this Resolution and the filing of this approval with the Clerk of the Board.

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF
COUNTY COMMISSIONERS

HARVEY RUVIN, CLERK

By: ***Christopher Agrippa***
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency.

Bruce Libhaber

AGREEMENT

Between

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

("DEPARTMENT")

and

MIAMI-DADE COUNTY, a political subdivision of the State of Florida

("COUNTY")

For

DESIGN-BUILD CONSTRUCTION OF METROMOVER IMPROVEMENTS

Under the I-395 FINANCIAL PROJECT ID 251688-1-52-01

THIS AGREEMENT is made and entered into as of this _____ day of _____, 201__ by and through THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, an agency of the State of Florida (the "Department"), and MIAMI-DADE COUNTY, a political subdivision of the State of Florida (the "County"), collectively referred to as the "Parties."

RECITALS

A. Upon approval of the Department's Work Program by the State of Florida Legislature, and adoption by the Department Secretary, the Department shall complete the various active projects included in the Department Work Program; and

B. Included in the Department Work Program is Financial Project ID Number 251688-1-52-01 (FIN ID 251688-1-52-01) for the reconstruction, widening and realignment of the I-395 Corridor (the "Project"), from the I-95 Interchange to the MacArthur Causeway Bridge, (the "Project Limits"), in Miami-Dade County, Florida; and

6

C. The work under FIN ID 251688-1-52-01 includes work that impacts that a portion of the Miami-Dade Transit ("MDT") Metromover Bridge (the "Metromover") that crosses I-395 approximately 600 feet to the east of State Road (SR) 5/Biscayne Boulevard; and

D. SR 5/Biscayne Boulevard is a road on the State Highway System and the County, pursuant to Public Purpose Airspace Agreement between the parties dated December 16, 1994, is the recipient of leasehold rights for the Metromover, within said state road. Additionally, the Department shall grant easement rights to the County, in the form attached hereto as Exhibit "C", for transit improvements which may be impacted by the Project; and

E. A Metromover pier (Pier No.P23968-OB), located within a section of the proposed Project Limits, must be removed and replaced with a new bridge support structure which will be required to support the Metromover Guideway System where the existing pier will be removed, (the "Transit Improvements"); and

F. The reconstruction of the I-395 Corridor, including the Transit Improvements, will preserve the envelope for the Beach Corridor Transit project, as that envelope is generally described/depicted in Exhibit "A" attached hereto and made part hereof; and

G. The Parties agree that it is in the best interest of each party for the Department to undertake and to complete all aspects of the Project, which includes the design-build of the Transit Improvements in accordance with the terms of this Agreement; said Transit Improvements will include but not be limited to, the removal of the existing pier and pier cap and replacement of same with a new bridge support structure; and

H. The Parties further agree that it is in the best interest of each party to enter into this Agreement in order to allow the Department to procure services for a Design-Build contract for the Project (the "Contract"), which will include the Transit Improvements, and allow the Department's contractor to access the Metormover in order to complete the Transit Improvements.

TERMS

NOW THEREFORE, in consideration of the premises, the mutual covenants and other valuable considerations contained herein, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. The recitals in this Agreement are true and correct, and incorporated into and made a part hereof.
2. The Parties agree that the Department intends to undertake and complete FIN ID 251688-1-52-01; the Project shall include the reconstruction of the I-395 Corridor, from the I-95 Interchange to the MacArthur Causeway Bridge within the Project Limits which, includes the location area of the Omni Extension Metromover. The Project shall include, but not be limited to, the removal of Metromover Pier No. P23968-OB and pier cap and replacement of the same with a new bridge support structure (the "Transit Improvements"), within the Project Limits, as referenced in the Design-Build Request For Proposal (DBRFP) for FIN ID 251688-1-52-01 attached hereto as Exhibit "B". The Project shall further include all activities associated with, or arising out of the construction of the Transit Improvements. The County shall cooperate with and shall support the Department's work efforts in these regards and shall allow the Department, and its Design-Build Contractor, access to the Metromover and related facilities for purposes of constructing the Transit Improvements. The Project is a Design-Build Project, and while the Department is in the process of preparing initial design plans, which include the proposed alignment, a design-build firm shall be selected to submit final design plans and construct the Transit Improvements in accordance with all applicable federal and state laws and regulations, and in accordance with the Department and MDT design and construction standards as set forth in the Parties' guidelines, standards, and procedures. The Department and the County shall cooperate in the design review process of the Transit Improvements, and after consultation, with the County, the Department shall have final decision authority with respect to the design, the design review process, and construction of Transit Improvements, and the relocation of any utilities that the Department may determine to be required.

3. The Parties acknowledge and agree that the County will review the Project Design Plans for the Transit Improvements ("PDP") and shall submit its comments, if any, via Electronic Reviewer Comments ("ERC".) The Department shall provide the County access to the ERC, and the Department shall use the ERC to submit the Project Design Plans for the County to review. When the Department places the Project Design Plans in the ERC, the Department will designate Comment Due Date and Response Due Date (minimum review time by MDT as indicated in the DBRFP). The County shall submit its comments with regards to the Project Design Plans on or before the Comment Due Date, and the Department shall respond to the County's comments, if any, on or before the Response Due Date. If the County does not submit its comments by the Comment Due Date, the County will be deemed to have approved the Project Design Plans submitted by the Department. The review process for the Project Design Plans will be deemed concluded when the Department has submitted the Final Project Design Plans for the Transit Improvements to the ERC, and the Comment Due Date and Response Due Date for the Final Project Design Plans for the Transit Improvements have passed, and the Department has addressed all of the County's comments that were submitted through the ERC. Once the review process is concluded, the Department will issue a release for construction to the Department's Design-Build Contractor, authorizing the Design-Build Contractor to begin construction of the Transit Improvements in accordance with the Final Project Design Plans for the Transit Improvements submitted through the ERC.
4. The County acknowledges and agrees that, during construction of the Transit Improvements, the Department will only utilize the services of law enforcement officers when required by the Department's Standard Specifications for Road and Bridge Construction, and no additional requirements will be imposed. Use of a MDT spotter shall be used in the event a MDT spotter is required pursuant to the work to be performed at the expense of the Department Design-Build Contractor. Additionally, the Department Design-Build Contractor shall not interfere with Metromover operations during revenue and maintenance hours as addressed in the DBRFP. The County, at the discretion of the MDT Director, may consider an interruption of the Metromover operation during revenue hours only if it is deemed absolutely necessary. In the event of an emergency such as the

Design-Build Contractor should damage the Metromover rendering the system inoperable during the course of construction, and an interruption of the Metromover operations is required during revenue hours, a County bus bridge shall be implemented to transport MDT patrons at the expense of the Department Design-Build Contractor. Any closure cannot extend beyond a time period that will require recertification of the Metromover Guideway System. Any Major Modifications of the DBRFP plans related to the Transit Improvements must be submitted to the County for review. A Major Modification is any modification that materially alters the kind or nature of the work depicted in the permitted plans, or that alters the integrity or maintainability of the Transit Improvements, or related components. The County's review shall be within the reasonable timeframe established in the Project's schedule by the Department in order to avoid delay to the Department's construction contract. In the event that any Major Modifications are required during construction, the Department shall be entitled to proceed with the modifications that are necessary to complete the construction of the Transit Improvements, and shall notify the County of the changes. It is specifically understood and agreed that any such changes during construction shall not delay nor affect the timely construction schedule of the Project, unless a major concern is warranted by both the County and the Department.

5. The County, particularly MDT, agrees to cooperate in the construction and relocation of utilities that are located within the County's easements and/or right-of-way that are within the Project Limits, if the same shall be required. Utility relocations, if any, that may be required for the purpose of the Project, shall be done in accordance with the Department's guidelines, standards, and procedures, and shall be undertaken by the Design-Build Contractor.
6. The County agrees to perpetually maintain the Transit Improvements. To maintain means to perform normal maintenance operations for the preservation of the Transit Improvements, in accordance with the County's specifications and guidelines for the efficient and safe operation of the Transit Improvements, and/or in accordance with any other applicable state or federal guidelines. Notwithstanding the requirements hereof,

maintenance during construction shall be the responsibility of the Department and its Design-Build Contractor, as set forth in Paragraph 9 of this Agreement.

7. The Parties acknowledge and agree that the Transit Improvements and any other improvements and structures related to the Metromover are and will remain under the ownership of the County, and that the Department will not have any ownership interest in Metromover improvements or structures, or the Transit Improvements pursuant to this Agreement .

8. The Department shall require its Design-Build Contractor to maintain at all times during the construction, Contractor's Public Liability Insurance providing for a limit of not less than $1,000,000 for all damages arising out of bodily injuries to, or death of, one person and, subject to that limit for each person, a total limit of $5,000,000 for all damages arising out of bodily injuries to, or death of, two or more persons in any one occurrence; and regular Contractor's Property Damage Liability Insurance providing for a limit of not less than $50,000 for all damages arising out of injury to, or destruction of, property in any one occurrence and, subject to that limit per occurrence, a total or aggregate limit of $100,000 for all damages arising out of injury to, or destruction of, property during the policy period; or such other minimum insurance coverage that may be required by the Department for the construction of the Project, in accordance with the Department's standards and specifications. The Department shall further require its Design-Build Contractor to name the County and the Department as additional insured Parties on the afore-stated policies, and to provide evidence of Workers' Compensation Insurance in accordance with the laws of the State of Florida and in amounts sufficient to secure the benefit of the Florida Workers' Compensation law for all employees. A copy of said insurance policy must be mailed to MDT. In addition to the Design-Build Contractor's Public Liability Insurance, such contractor shall acquire Surety Bonds, as specified in the DBRFP.

9. The Department shall notify the County at least 72 hours before beginning construction of the Transit Improvements. Such notification may be provided verbally or via email, and the notice requirements set forth in Paragraph 25 shall not apply to this paragraph.

The Department agrees that the County, at reasonable times during the construction of the

Transit Improvements, shall continue inspection of the Metromover and have access to the Transit Improvement construction area to determine whether the goods or services required to be provided by the Design-Build Contractor, pursuant to the Design-Build Agreement with the Department, conform to the terms of said Agreement. Upon request by the County, the Department shall coordinate with its Design-Build Contractor to provide access to the County for performance of said inspection.

During the construction work related to the Project, the County shall cooperate with any such work being performed by the Department and the Department's Design-Build Contractors. The County shall not commit nor permit any act which may delay or interfere with the performance of any such work by the Department or the Department's contractors, unless the Department agrees in writing that the County may commit or permit said act.

10. Maintenance during construction, commencing as of the first date of construction, shall be the responsibility of the Department's Design-Build Contractor. After completion of construction, the County shall assume all maintenance responsibilities for the Transit Improvements. Upon completion of construction, the Department shall notify the County at least 72 hours prior to Final Inspection of the Transit Improvements as per DBRFP, and will incorporate County concerns that are within the scope of the contract into the Project's final punch list to be corrected by the Design-Build Contractor. The Final Inspection shall be performed and the Notice of Final Acceptance shall be issued in accordance with the Department's Standard Specifications for Road and Bridge Construction and the Construction Project Administration Manual (CPAM). The Department shall conduct the Final Inspection, finalize the Project punch list, and issue a Notice of Final Acceptance to its Contractor, whether or not the County attends the Final Inspection.

    Upon issuance of the Notice of Final Acceptance for the Transit Improvements to the Design-Build Contractor, the Department shall provide a copy of said notice to the County. As of the date of said Notice of Final Acceptance, the County shall be immediately responsible for the maintenance of the Transit Improvements. The Department, however, shall have the right to assure completion of any punch list by the

Contractor. Notwithstanding the issuance of the afore-stated Notice of Final Acceptance, the County may notify the Department Project Manager of deficiencies in the Transit Improvements that may be covered by the warranty provisions in the contract between the Department and its Design-Build Contractor. The Department shall enforce the warranty if the remedial action is required by the warranty provisions, as determined by the Department.

Upon completion of all work related to construction of the Transit Improvements the Department will be required to submit to the County final As-Built plans for the Transit Improvements and an engineering certification that construction was completed in accordance with the plans. Additionally, the Department shall vacate the Metromover Guideway, and shall remove the Department's and Design-Build Contractor's property, machinery, and equipment therefrom. Furthermore, the Department shall restore those portions of the County easement disturbed by construction activities of the Transit Improvements to the same condition than that which existed immediately prior to commencement of the construction of the same.

11. This Agreement shall become effective as of the date both parties hereto have executed same and shall continue in full force and effect until the Project is completed, as evidenced by the Department's issuance of the Notice of Final Acceptance.

    Prior to commencement of construction, the Department may, in its sole discretion, terminate this Agreement if it determines that it is in the best interest of the public to do so. If the Department elects to terminate this Agreement, the Department shall deliver formal notice of termination to the County, as set forth in Paragraph 25 of this Agreement.

12. In the event that any additional authorization by the County is required to carry out the Project, the County agrees to expeditiously initiate and consummate all actions necessary with respect to any such matters, with time being of the essence.

13. The Parties acknowledge and agree that the Project shall be constructed using federal funds and that all costs incurred must be in conformity with applicable federal and state laws, regulations, and policies and procedures.

14. The Department's performance and obligations under this Agreement are contingent upon an annual appropriation by the Legislature. If the Department's funding for this Project is in multiple fiscal years, funds approval from the Department's Comptroller must be received each fiscal year prior to costs being incurred. Project costs utilizing fiscal year funds are not eligible for reimbursement if incurred prior to funds approval being received.

15. In the event that this Agreement is in excess of $25,000, and the agreement has a term for a period of more than one year, the provisions of Section §339.135(6)(a), Florida Statutes, are hereby incorporated into this Agreement and are as follows:

> The Department, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during any such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The Department shall require a statement from the comptroller of the Department that funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding one (1) year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the Department which are for an amount in excess of $25,000 and which have a term a for a period of more than 1 year.

16. The Department is a state agency, self-insured and subject to the provisions of Section 768.28, Florida Statutes. Nothing in this Agreement shall be deemed or otherwise interpreted as waiving the Department's sovereign immunity protections, or as increasing the limits of liability as set forth in Section 768.28, Florida Statutes.

17. A modification or waiver of any of the provisions of this Agreement shall be effective only if made in writing and executed with the same formality as this Agreement.

18. This Agreement shall be governed by the laws of the State of Florida. Any provision hereof found to be unlawful or unenforceable shall be severable and shall not affect the validity of the remaining portions hereof. Venue for any and all actions arising out of or in any way related to the interpretation, validity, performance or breach of this

Agreement shall lie exclusively in a state court of appropriate jurisdiction in Leon County, Florida.

19. No term or provision of this Agreement shall be interpreted for or against any party because that party's legal counsel drafted the provision.

20. This document incorporates and includes all prior negotiations, correspondence, conversations, agreements, and understandings applicable to the matters contained herein and the Parties agree that there are no commitments, agreements, or understandings concerning the subject matter of this Agreement that are not contained in this document. Accordingly, the Parties agree that no deviation from the terms hereof shall be predicated upon prior representations or agreements, whether oral or written. It is further agreed that no modification, amendment or alteration in the terms or conditions contained herein shall be effective unless set forth in writing in accordance with this section. No modification, amendment or alteration in the terms or conditions contained herein shall be effective unless contained in a written document prepared with the same or similar formality as this Agreement and executed by the Department and the County Board of Commissioners or by the County Mayor or his Designee.

21. The Parties acknowledge that they have sought and received whatever competent advice and counsel as was necessary for them to form a full and complete understanding of all rights and obligations herein and that the preparation of this Agreement has been their joint effort. The language agreed to expresses their mutual intent and the resulting document shall not, solely as a matter of judicial construction, be constructed more severely against one of the Parties from the other.

22. In the event a portion of this Agreement is found to be invalid by the court of competent jurisdiction, the remaining provisions shall continue to be effective unless the Department or the County elect to terminate this Agreement. An election to terminate this Agreement based upon this provision shall be made within seven (7) business days after the finding by the court becomes final.

23. This Agreement may be fully executed in three copies by all parties each of which, bearing original signatures, shall have the force and effect of an original document.

24. In accordance with Executive Order No. 11-02 the Department's Vendor/Contractor(s) shall utilize the U.S. Department of Homeland Security's E-Verify system, in accordance with the terms governing use of the system, to confirm the employment eligibility of;

    i. all persons employed by the Vendor/Contractor during the term of the Contract to perform employment duties within Florida; and

    ii. all persons, including subcontractors, assigned by the Vendor/Contractor to perform work pursuant to the contract with the Department.

25. All notices required pursuant to the terms hereof, shall be in writing and shall be sent by first class United States Mail, facsimile transmission, hand delivery or express mail. Notices shall be deemed to have been received by the end of five (5) business days from the proper sending thereof unless proof of prior actual receipt is provided. Unless otherwise notified in writing, notices shall be sent to the following:

To the County:

Miami-Dade Transit
Attn: Ysela Llort, Director
701 NW 1st Court, 17th Floor
Miami, Florida 33136
Phone: 786-469-5406
Fax: 786-469-5584

To the Department:

Florida Department of Transportation
District Six
Attn: Gus Pego, District Secretary
1000 NW 111th Avenue
Miami, Florida 33172
Phone: 305-470-5197
Fax: 305-470-5610

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates exhibited, by the signatures below.

MIAMI-DADE COUNTY BOARD OF COUNTY COMMISSIONERS

By: _____
Name: Alina T. Hudak
Title: Deputy Mayor

Attest: _____

By: _____
Title: Clerk of the Board

Approved as to form and legal Sufficiency:

By: _____
Bruce Libhaber
Assistant County Attorney

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

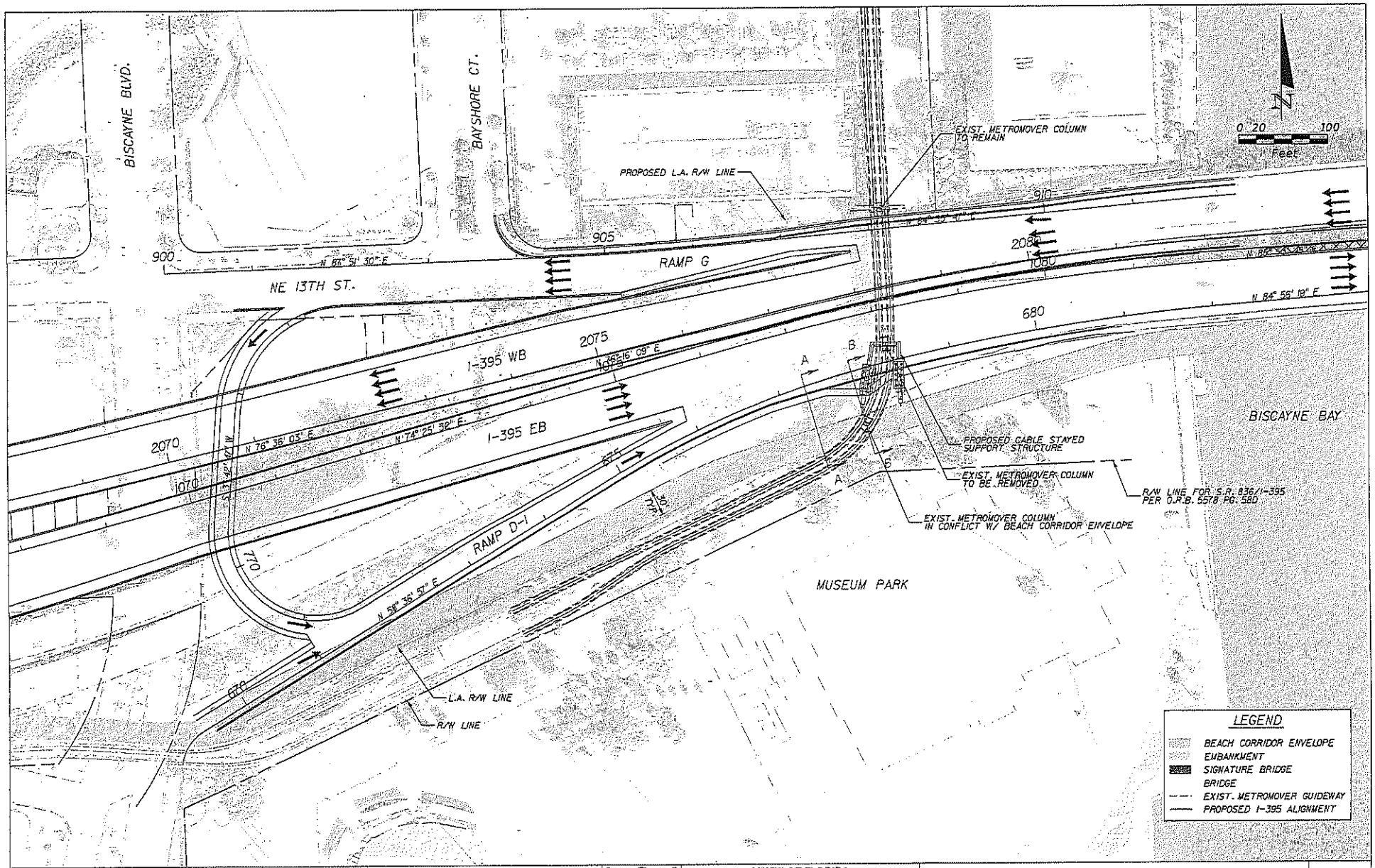
By: _____
Name: Gus Pego
Title: District Secretary

Attest: _____

By: _____
Executive Secretary

Department Legal Review and Form:

By: _____
Alicia Trujillo
District General Counsel



T.Y. LIN INTERNATIONAL
201 ALHAMBRA CIRCLE, SUITE 900
CORAL GABLES, FLORIDA 33134
T 305.567.1688 F 305.567.1771

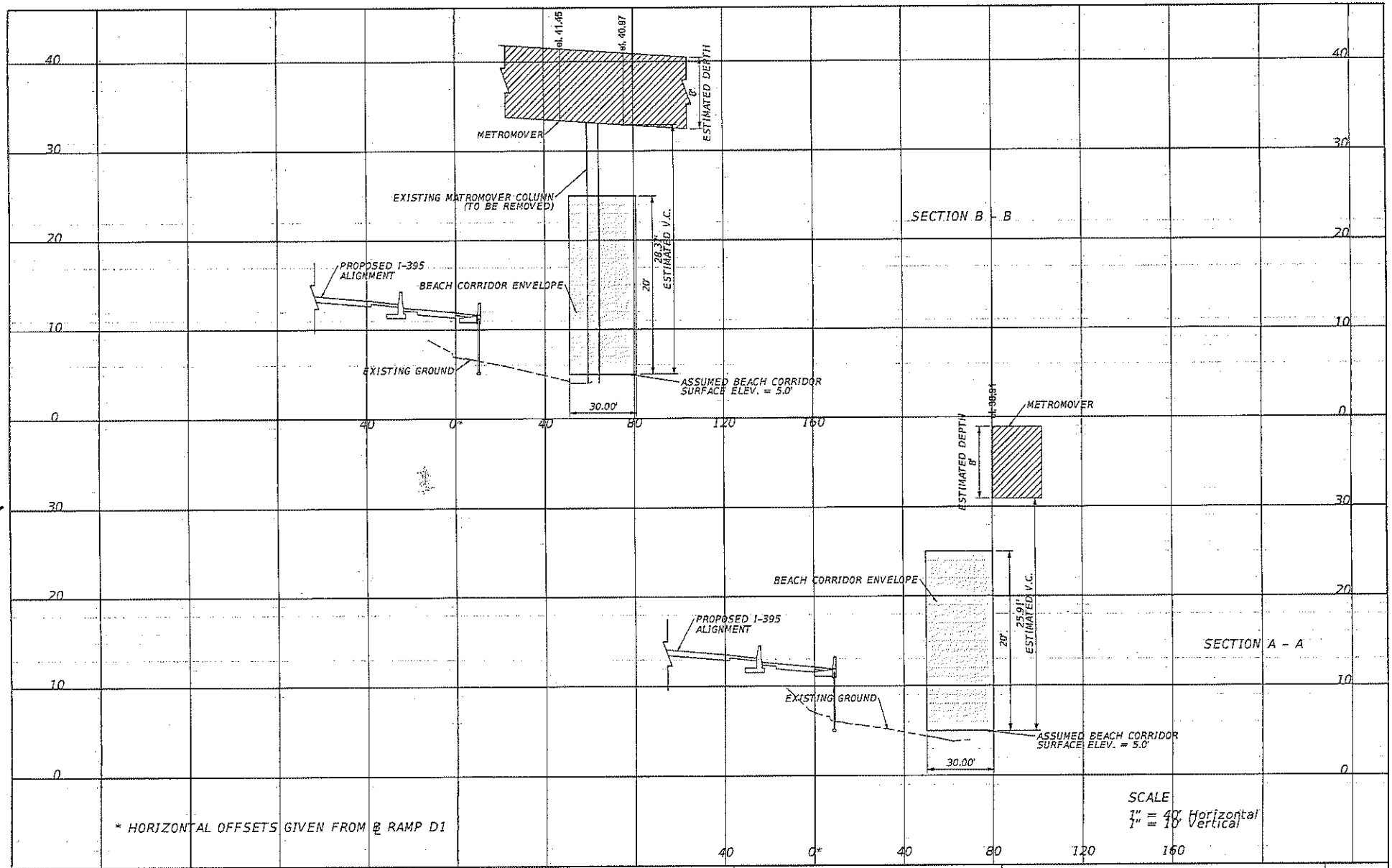
IN ASSOCIATION WITH:
SCC ENGINEERING, INC. / APCTE / CH PEREZ / GEOSOL, INC. / I.F. ROOKS / THE CUNNINGHAM GROUP

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
836	MIAMI-DADE	251688-1-52-01

BEACH CORRIDOR FUTURE CONCEPT (JANUARY 13, 2015) EXHIBIT A

SHEET NO. 1



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-395	MIAMI-DADE	251688-1-32-01

BEACH CORRIDOR FUTURE CONCEPT
(JANUARY 13, 2015)
EXHIBIT A

SHEET NO. 2

jhenry 1/14/2015 3:37:26 PM K:\251688152017\roadway\RDFSRD05-Beach Corridor under Metromover.DGN

EXHIBIT "B" - DRAFT

Note to developer of the RFP: An electronic copy of the RFP, with changes clearly identified, shall be submitted to the State Construction Office for review and approval prior to submittal to Design-Build Firms. All RFP's which govern Projects where Category 1 structures are anticipated shall be reviewed and approved by the District Structures Engineer. All RFP's which govern Projects where Category 2 structures are anticipated shall be reviewed and approved by the State Structures Engineer. All Design-Build Finance RFP's shall be reviewed and approved by the Comptroller's Office. In addition, any major revisions to the RFP, innovative concepts used or RFP's for unique Projects shall be reviewed by Central Office Legal. The Office of General Counsel's Design-Build Legal Team shall review RFP's for all Projects which involve utility relocation. RFP requirements which have been modified in this document since the publishing of version 2013-02a (dated 11/1/2013) are highlighted herein.

To aid in the development of Project specific RFP requirements a series of pre-scoping questions has been developed. The pre-scoping questions cover many common issues that frequently arise on FDOT Projects and can be down loaded from the following website: http://www.dot.state.fl.us/construction/DesignBuild/DBRules/DBRulesMain.shtm

NOTE: When submitting a RFP for review, edits to this boilerplate document shall be clearly identifiable. Deletions shall be stricken through (~~delete~~) and inserted language shall be underlined in color (underline). Submitted RFPs with the changes made as indicated above will help shorten the review time for everyone involved.

Florida Department of Transportation

District 6

DESIGN-BUILD
REQUEST FOR PROPOSAL
For
SR-836/I-395 from West of I-95 to MacArthur Causeway Bridge
Miami-Dade County

Financial Projects Number(s): 251688-1-52-01

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Florida Department of Transportation
District 6

DESIGN-BUILD
REQUEST FOR PROPOSAL
For
SR-836/I-395 from West of I-95 to MacArthur Causeway Bridge
Miami-Dade County

Financial Projects Number(s): 251688-1-52-01
Federal Aid Project Number(s): 2951-499-1
Contract Number:

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ATTACHMENTS

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

A-01: Project Advertisement
A-02: Division I Design-Build Specifications
A-03: Design-Build Utility Agreement (Form number 710-010-19)
A-04: FHWA – 1273 Form
A-05: Bid Blank Form (Form No. 375-020-17)
A-06: Design Change/Construction Advertisement Reevaluation
A-07: Conceptual ERP Permit Application
A-08: Pond Siting Report
A-09: Typical Section Package
A-10: Design Variations and Exceptions
A-11: Geotechnical Services Requirements/Specifications
Contractor Quality Control General Requirements (SP1050813DB)
Structures Foundations (SP4550000DB)
A-12: Value Added Specifications
Section 475, Value Added Bridge Component
Section 725, Value Added Highway Lighting System
A-13: ITS Deployment Requirements
A-14: Landscape Maintenance Agreements
A-15: MDT Adjacent Construction Safety Manual
A-16: Miami Metromover Brickell Extension, Basis for Design (Dec. 1989)
A-17: MDT's System Safety & Security Certification Program Plan (Rev. 5, June 2011)
A-18: FEC Requirements
A-19: Sensitive Sites

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.

Listed below are the reference documents (RD) included on the enclosed CD:

RD-01: Concept Design

- CADD Files
- Roadway and TCP Concept Plans
- Design Documentation
- Synchro Traffic Model/Interchange Modification Report
- Bridge Development Report
- Drainage Permit Source Files
- Stormwater Management Report
- ITS/Toll Master Plan
- Lighting Analysis Report
- Pavement Type Selection Report
- Pavement Design
- Signing Master Plan
- Visual Quality Manual
- Existing Metromover Guideway Plans

RD-02: Environmental

- CSER Update
- Existing Tree Layout
- Final Environmental Impact Statement (FEIS)
- Record of Decision (ROD)
- Roadway Technical Memo (2012)
- Commitment Tracking (Topic No. 700-011-035a)

RD-03: Geotechnical

- Bridge Geotechnical Report
- Traffic Mast Arm Geotechnical Report
- Master Geotechnical Boring Layouts

RD-04: Miscellaneous

- Community Awareness Plan

RD-05: Plans

- MacArthur Causeway Bridge – As-Built Plans (Exempt Documents*)
- MacArthur Causeway Load Rating Report (Exempt Documents*)
- Bridges Load Rating Reports
- Existing Plan
- 251688-3-52-01 Interim As-Built Plans

RD-06: Right of Way / Survey

- Project Control Survey
- Right of Way Certification Memorandum
- Right of Way Maps

RD-07: Utilities

- Advanced Utility Coordination Documentation – Conflict Matrix, Relocation Plans
- Utility Conflict Matrix
- Utility Relocation Master 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 (Design Build Firms) for reconstruction of the SR 836/I-395 from west of I-95 to the MacArthur Causeway Bridge, herein referred to as "Project". This project is federally funded and is a Federal Highway Administration (FHWA) Federal-Aid Oversight construction project.

This project includes the reconstruction of 1.4 miles of I-395 from I-95/I-395 Interchange (Midtown Interchange) to the MacArthur Causeway Bridge, partial widening of the EB MacArthur Causeway Bridge. Within these limits the Project also covers widening of ramps connecting to SR 836 and improvements to the N Miami Ave/NE 2nd Avenue/NE 1st Avenue/Biscayne Boulevard intersection, on and off ramp construction as shown in the Concept Plans. On mainline I-395 three thru lanes in each direction and separate direct connections to and from I-95 NB and SB to/from mainline I-395 will be included.

As part of the I-395 Reconstruction project improvements to the surface streets in the area under I-395 will also be included. The Project includes Intelligent Transportation Systems, and landscape. The Design-Build Firm will be responsible for incident management and emergency response during the construction period.

The reconstruction and realignment of I-395 requires the removal of one Miami-Dade Transit Metromover Pier (*P23968OB).* This Pier supports spans of 152 and 94 feet. The proposed work involves the removal of the existing Pier and the construction of a new cable-supported structure and new pier cap that will support the existing spans. Metromover shall remain operational at all times during the construction, subject to non-revenue hours access coordinated with the Miami-Dade County Transit Department.

Ramp improvements allow direct flow of traffic from I-395 EB and I-95 NB and SB to N Miami Ave; from Biscayne Blvd. to I-395 EB; from NE 1st Ave to I-95 NB and SB; from N Miami Ave to I-395 WB; and from I-395 from I-395 WB to Biscayne Blvd.

The Department has set a Maximum Allowable Contract Time of XXXX calendars days for this project.

The Department desires to expedite construction on this Project.

Note to developer of the RFP: Include the following language in the Introduction section when the project scope requires the Design-Build Firm to develop and provide a Landscape Opportunity Plan. This language is NOT to be modified without prior approval from the State Construction Office.

The Design-Build Firm shall include a Landscape Architect duly authorized to practice Landscape Architecture in the State of Florida consistent with State Statute 481 part II. The Design-Build Firm's Landscape Architect (DBLA) shall review and identify future unencumbered landscape areas for this Project. This Project shall reserve landscape opportunities and implement the FDOT Highway Beautification Policy. Landscape construction will be performed by others and not included with this Project. 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, certified sketches 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 SEIR/NEPA evaluation as appropriate. All costs concerning the acquisition of additional right-of-way will be borne solely by the Design-Build Firm. These costs include, but are not limited to consultant acquisition, appraisal services, court fees, attorney and any expert fees, property cost, etc. The Department will have sole discretion with respect to the entire acquisition process of the additional right-of-way.

If the Design-Build Firm's Technical Proposal requires additional right-of-way, the acquisition of any such right-of-way shall be at no cost to the Department, and all costs associated with securing and making ready for use such right-of-way for the Project shall be borne solely by the Design-Build Firm as a part of

the Design-Build Firm's Lump Sum Price Bid. The Department will not advance any funds for any such right-of-way acquisition and the Design-Build Firm shall bear all risk of delays in the acquisition of the additional property, regardless of cause or source.

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

The Department has prepared a set of Reference Documents, which include Concept Plans and Concept Master Plans. These plans convey an established set of design objectives to which the Design-Build Firm is required to accomplish in this contract. The Department's design objectives include:

- Add capacity to I-395 mainline and improve mobility
- Satisfy and/or be consistent with all the Project commitments as approved by FHWA. (See "Department Commitments" in Section V)
- Signature span bridge over Biscayne Boulevard (See "Structure Plans" in Section VI)
- I-395 and MacArthur Bridge shall include exit/merge inside lanes terminating at Port of Miami Tunnel portals
- Reconnection of NW 2nd Avenue
- Realignment of NW 13th Street between NW Miami Ct and NW 1st Ave
- Surface Street Work
- Implementation of aesthetics designed and constructed in accordance with project Visual Quality Manual and referenced plans (See "Reference Documents - RD-01 Concept Design")

The mainline will consist of fifteen concept bridges. Replacement connector ramps and ramp widening at

the Midtown Interchange consist of six bridges; I-395 mainline consists of four replacement bridges; two major connector ramps run parallel to the mainline bridges; two new ramp bridges at N Miami Avenue and the widening work for the MacArthur Causeway Bridges, The following bridge structures shall be provided:

	Description
Bridge 1	EN Connector
Bridge 2	ES Connector
Bridge 3	SE Connector
Bridge 4	WB Connector
Bridge 5	I-395 WB
Bridge 6	I-395 EB
Bridge 7	EB Connector
Bridge 8	I-395 WB (Main Span)
Bridge 9	I-395 EB (Main Span)
Bridge 10	Ramp F
Bridge 11	Ramp E
Bridge 12	NW 17th St Overpass Widening
Bridge 13	SR 836 WB Widening
Bridge 14	SR 836 EB Widening
Bridge 15	Macarthur Causeway Widening

See the bridge concept drawings (Reference Documents - RD-01) for proposed span configuration and layout.

Ramp connections to and from I-95 and I-395 mainline shall be provided as follows:

NE 1st Avenue to northbound and southbound I-95
NE 1st Avenue to westbound I-395
N Miami Avenue to westbound I-395
N Miami Avenue from eastbound I-395
N Miami Avenue from northbound and southbound I-95
Biscayne Boulevard to eastbound I-395
Biscayne Boulevard from westbound I-395

The MDT Metromover bridge pier No. *(P23968OB)* is in conflict with proposed concept. The pier shall be removed to allow for additional through lane on I-395. The work will involve removing an existing pier that is the last of a 3-span continuous steel girder unit and construction of a new cable-supported structure and pier cap to support the existing spans. The work shall be done without interrupting Metromover operations. A formal Safety Certification, of the Metromover, is required.

Other structures anticipated for this project include demolition of the existing mainline, traffic control, temporary and permanent retaining walls. Miscellaneous structures include bridge mounted signs, cantilever sign structures, span sign structures, CCTV poles, signal structures and drainage structures.

The Visual Quality Manual (VQM) was developed to satisfy the projects commitments and in conjunction with details the Project Advisory Group. The project was divided into three distinct zones for

the urban landscape design efforts. Zone 1 includes the Overtown Area from NW 3rd Avenue to just west of FEC Railway. Zone 2 is bounded by NE 1st Avenue and Biscayne Boulevard. Zone 3 is the Overtown to Omni Area from east of FEC Railway to NE 1st Avenue. The VQM provides prescriptive requirements the Design Build Firm shall adhere to. These elements include streetscape, lighting, and drainage. The drainage ponds have been incorporated into this context sensitive solutions and shall not be modified.

The surface street improvements vary by street but generally involve milling and resurfacing to extend the pavement life and restore any damage due to construction and equipment, addressing ADA issues including curb ramps and sidewalks and signal work to replace signals impacted by the I-395 construction. With the exception of Biscayne Blvd. (US-1), which is maintained by the FDOT, the streets are all owned and maintained by local agencies, either Miami-Dade County or the City of Miami. Below is a listing of all surface streets to have work done as part of this project and a description of the work proposed, in addition to the type of work listed all streets will correct ADA deficiencies including curb ramps.

Other major work elements include drainage, traffic signals, signing and pavement markings, lighting and Intelligent Transportation System (ITS).

For this Project, the Department considers the following requirements of the Project that are not to be changed by the Design-Build Firms:

- Design Speeds
- Typical Sections, i.e. lane width, shoulder width and number of lanes
- Design Exceptions
- Project Commitments
- Signature Bridge Concept/Alternative

Any changes to the requirements of the RFP by a Design-Build Firm must be approved by the Department through the Alternative Technical Concept (ATC) Proposal process, as described herein, prior to the information cut-off dates.

Project Requirements

- Emergency Management Responsibilities. Any advance preparation, repairs, replacement, etc., required as a result of natural disaster, catastrophic or emergency response event will be considered part of the Design-Build contract responsibilities. Additional compensation for emergency management activities during a Governor's declared state of emergency will be at the sole direction of the District Construction Engineer and will be subject to participation by FHWA under the Emergency Relief (ER) program or Federal Emergency Management Agency (FEMA) under its disaster reimbursement procedures. Reimbursement for eligible emergency response work will be handled with a separate emergency contract. Otherwise, the Design-Build Firm will not receive any additional compensation. The Department authorizes the Design-Build Firm to pursue damage claims of cost incurred in response to non-natural disasters against the individual or entity which cause the damages, or their insurers. Emergency Management Responsibilities will commence 30 days after NTP and will continue until Final Acceptance.

The Design-Build Firm should implement into their design and construction the Incident Management Masterplan provided in "Reference Document RD-XX".

Note to developer of the RFP: Include the following language in the Description of Work section when the project scope requires the Design-Build Firm to develop and provide a Landscape Opportunity Plan. This language is NOT to be modified without prior approval from the State Construction Office.

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 Index 544. 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 I invasive exotics as defined by the Florida Exotic Pest Plant Council (www.fleppc.org) and as identified in the Landscape Opportunity Plan.

A. Design-Build Responsibility

The Design-Build Firm shall be responsible for survey, geotechnical investigation, design, acquisition of all permits not acquired by the Department, preparation of any and all information required to modify permits acquired by the Department if necessary, maintenance of traffic, incident management, demolition, and construction, as well as any other responsibilities outlined in this document until Final acceptance. The Design-Build Firm shall coordinate all utility relocations and any associated utility relocation efforts. The Design-Build Firm shall be responsible for any additional construction easements necessary for construction and all fees associated with the acquisition of said easements.

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 compliance with the PD&E Studies (FEIS/ROD and Reevaluation) as well as implementing and adhering to all Department Commitments as outlined in the RFP. (See "Reference Document RD-02").
The Design-Build Firm is responsible for coordinating and providing to the District Intermodal System Development Office any engineering information for any project which may trigger a Design Change Reevaluation of the approved FEIS and prior Reevaluations. The Design-Build Firm will not be compensated for any additional costs or time associated with Reevaluation(s) resulting from proposed design changes. Any design presented by the Design-Build Firm, to the Department, that proposes to create design changes or alterations to any of the concepts in the approved PD&E Study will require a reevaluation. These changes include, but are not limited to, changed to changes in pond and mitigation sites, land use changes, environmental changes, vertical clearance changes, and design changes (Including changes in typical section). All environmental studies for Reevaluation purposes are to be conducted by the Department. Project design information shall be provided by the Design-Build Firm to support the Reevaluation of the proposed changes. Design-Build Firm shall provide all engineering information to the FDOT District Intermodal Systems Development Systems Office, Environmental Management Unit so that a Reevaluation can be submitted by the FDOT to the FHWA for approval.

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

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

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

It is the responsibility of the Design-Build Firm to obtain written clarification regarding guidelines versus requirements. This written request for clarification shall be submitted prior to the question cutoff date, and the clarification shall be provided to all Design-Build Firms.

The Design-Build Firm shall prepare complete construction plans and specifications, signed and sealed by a professional engineer licensed in the State of Florida, all in accordance with the requirements of the design-build contract documents. The Design-Build Firm shall be responsible for all work necessary and incidental for the completion of said items for this project unless otherwise noted herein. The Design-Build Firm shall be responsible for designing and construction this project in coordination with all on-going and planned construction projects that may impact the project.

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. In summary, whether implicitly or explicitly stated, the Design-Build Firm shall comply with all directives and statements noted within this RFP, unless otherwise indicated to be the responsibility of others.

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 if changes in the project's design will require a Reevaluation. If necessary, the Department will coordinate with the appropriate agencies during the preparation of a Reevaluation and submit to FHWA for approval. For additional information, refer to the RFP

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.

Note to developer of the RFP: ***The Public Meeting of the Selection Committee should occur a minimum of two Department working days after the public opening of the Technical Scores and Price Proposals. The Schedule of Events shown below should be modified to reflect the Schedule shown in the Project Advertisement. All Utility Agency/Owners that the Department contemplates an adjustment, protection, or relocation is possible are to be invited to the mandatory Pre-proposal meeting. Following the Pre-proposal meeting, the District Utility Engineer is responsible for coordinating and facilitating meetings between each UA/O and that the Department contemplates an adjustment, protection, or relocation is possible each Design-Build firm. Unless otherwise approved by Central Office, the maximum number of days from Project Advertisement to Anticipated Contract Execution date shall not exceed 204 calendar days (excluding Department observed Holidays).***

Date	Event
	Advertisement
	Expanded Letters of Interest for Phase I of the procurement process due in District Office by 5:00 pm local time
	Proposal Evaluators submit Expanded Letter of Interest Scores to Contracting Unit xx:xx am/pm local time
	Contracting Unit provides Expanded Letter of Interest scores and Proposal Evaluators comments to Selection Committee xx:xx am/pm local time
	Public Meeting of Selection Committee to review and confirm Expanded Letter of Interest scores xx:xx am/pm local time at District Six Headquarters, 1000 NW 111 Ave, Miami, 33172
	Notification to Responsive Design-Build Firms of the Expanded Letter of Interest scores xx:xx am/pm local time
	Deadline for all responsive Design-Build firms to affirmatively declare intent to continue to Phase II of the procurement process 5:00 pm local time
	Shortlist Posting xx:xx am/pm local time
	Final RFP provided to Design-Build firms providing Affirmative Declaration of Intent to continue to Phase II of the procurement process
	Deadline for submission of written questions prior to pre-proposal meeting
	Mandatory Pre-proposal meeting at xx:xx am/pm local time in <location with address>. All Utility Agency/Owners that the Department contemplates an adjustment, protection, or relocation is possible are to be invited to the mandatory Pre-Proposal meeting.
	Utility Pre-Proposal Meeting facilitated by the District Utility Engineer at xx:xx am/pm local time in ***<location with address>***.
	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 1
	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
	One-on-One Alternative Technical Concept Discussion Meeting No. 1. 90 Minutes will be allotted for this Meeting. ***Note to the developer of the RFP: Assign entire day for One-on-One ATC meeting No. 1 if fewer***

	than 6 Design-Build Firms are Shortlisted. Assign multiple days or date ranges for One-on-One ATC meeting No. 1 if 6 or more Design-Build Firms are Shortlisted.
	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 2
	Deadline for Design-Build Firm to submit preliminary list of One-on-One Alternative Technical Concepts prior to Alternative Technical Concept Discussion Meeting No. 2
	One-on-One Alternative Technical Concept Discussion Meeting No. 2. 90 Minutes will be allotted for this Meeting. ***Note to the developer of the RFP: Assign entire day for One-on-One ATC meeting No. 2 if fewer than 6 Design-Build Firms are Shortlisted. Assign multiple days or date ranges for One-on-One ATC meeting No. 2 if 6 or more Design-Build Firms are Shortlisted.***
	Deadline for submittal of Alternative Technical Concept Proposals 5:00 pm local time.
	Final deadline for submission of requests for Design Exceptions or Design Variations
	District Design Engineer completes review of ATCs and notifies Design-Build Firms.
	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.
	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.
	Technical Proposals due in District Office by 5:00 p.m. local time at District Six Headquarters, 1000 NW 111 Ave, Miami, 33172
	Deadline for Design-Build for to "opt out" of Technical Proposal Page Turn meeting.
	Technical Proposal Page Turn Meeting. Times will be assigned during the Pre-Proposal Meeting. 30 Minutes will be allotted for this Meeting.
	Question and Answer Session. Times will be assigned during the pre-proposal meeting. One hour will be allotted for questions and responses.
	Deadline for submittal of Written Clarification letter following Question and Answer Session 5:00 pm local time
	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.
	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.
	Price Proposals due in District Office by 5:00 pm local time. at District Six Headquarters, 1000 NW 111 Ave, Miami, 33172. ***<at least one week after Q&A session>***
	Public announcing of Technical Scores and opening of Price Proposals at xx:xx am/pm local time in ***<location with address>***
	Public Meeting of Selection Committee to determine intended Award at xx am/pm at District Six Headquarters, 1000 NW 111 Ave, Miami, 33172

	Note to the developer of the RFP: The following event is applicable to Design-Build Finance Projects: Final Letter of Commitment or Credit/Statement of No Change or updated Design-Build Firm Commitment Letter due in the District Office by xx:xx am/pm (no later than 48 hours before the posting of the Department's intended decision to award) or in the event that a Notice of Protest of the Department's posted Intent to Award is filed with the Department, within two (2) business days following the Department's notice to the impacted Proposers of the Department's final agency action as to such protest.
	Posting of the Department's intended decision to Award
	Anticipated Award Date
	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.

Proposers shall also submit evidence of past experience in the design and construction of similar work to the MDT Metromover system with live public transportation system modifications without closing the system down for construction.

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 Expanded 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.

If the Financial Proposal requires debt financing as a source of funds or guarantee, and the Proposer is unable to secure a Final Letter of Commitment or statement indicating no change, the Department may, upon determining in its sole and absolute discretion that the Proposer had at all material times during the procurement acted in good faith and undertaken all reasonable due diligence otherwise necessary to obtain such debt financing, permit the Proposer to withdraw its Price Proposal without forfeiture of the Proposer's Price Proposal guaranty. Prior to any such consideration by the Department as to potential waiver of a bid guaranty, the Proposer must make a written request to withdraw its Price Proposal and for return of its Price Proposal guarantee and therein fully explain how the Proposer has during the procurement acted in good faith and undertaken all reasonable due diligence in attempting to secure a Final Letter of Commitment or statement indicating no change. The Proposer must submit its request and full explanation within fourteen (14) days after the Department's posting of its intended award to the Proposer. The Department will notify the Proposer in writing of its decision, which decision will be final and not subject to administrative or judicial review. Upon the Department's determination that the Proposer is permitted to withdraw its Price Proposal, the Department will also release the Proposer's Price Proposal guaranty to the Proposer where the Department has also determined that the Proposer has complied with the conditions precedent stated herein.

D. Pre-Proposal Meeting

Attendance at the pre-proposal meeting is mandatory. Any affirmatively declared proposer failing to attend will be deemed non-responsive and automatically disqualified 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, in the Department's opinion, official additions, deletions, or clarifications of the Request for Proposal, the Design and Construction Criteria, or any other document, the Department will issue a written addendum to this Request for Proposals as the Department determines is appropriate. No oral representations or discussions, which take place at the pre-proposal meeting, will be binding on the Department. FHWA will be invited on oversight Projects, in order to discuss the Project in detail and to clarify any concerns. Proposers shall direct all questions to the Departments Question and Answer website: https://www3b.dot.state.fl.us/BidQuestionsAndAnswers/Proposal.aspx/SearchProposal

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

E. Technical Proposal Page-Turn Meeting

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

occurs, per the Schedule of Events section of this RFP. The Department will terminate the page-turn meeting promptly at the end of the allotted time. The Department will audiotape record or videotape all or part of the page-turn meeting. All audiotape recordings or videotape recordings will become part of the Contract Documents. The page-turn meeting will not constitute discussions or negotiations. The Design-Build Firm will not be permitted to ask questions of the Technical Review Committee during the page-turn meeting. An unmodified aerial or map of the project limits provided by the Design-Build Firm is acceptable for reference during the page-turn meeting. The unmodified aerial or map may not be left with the Department upon conclusion of the page turn meeting. Use of other visual aids, electronic presentations, handouts, etc., during the page turn meeting is expressly prohibited. Upon conclusion of the thirty (30) minutes, the Technical Review Committee is allowed five (5) minutes to ask questions pertaining to information highlighted by Design-Build Firm. Participation in the page-turn meeting by the Design-Build Firm shall be limited to eight (8) representatives from the Design-Build Firm. Design-Build Firms desiring to opt out of the page-turn meeting may do so by submitting a request to the Department.

F. Question and Answer Session

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

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

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

G. Protest Rights

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

notice of protest if filed. The person filing the Protest must send the notice of intent and the formal written protest to:

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

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

H. Non-Responsive Proposals

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

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

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

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

I. Waiver of Irregularities

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

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

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

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

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

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

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

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

J. Modification or Withdrawal of Technical Proposal

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

K. Department's Responsibilities

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

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

L. Design-Build Contract-Method of Compensation and Funding

The Department will enter into a Lump Sum Contract with the successful Design-Build Firm. In accordance with Section V. – Project Requirements and Provisions For Work, R. – Schedule of Values, the Design-Build Firm will submit a Schedule of Values to the Department for review and approval. No invoices shall be submitted prior to Department approval of the Schedule of Values. The total of the Schedule of Values will be the Lump Sum Contract Amount.

The terms and conditions of this Contract are fixed price and fixed time. The Design-Build Firm's submitted Price Proposal (time and cost) is to be a Lump Sum bid/Price Proposal for completing the

scope of work detailed in the Request for Proposal. Funds are contingent upon annual appropriation. This Contract is subject to Section 334.30, Florida Statutes. Further, while not a statutory requirement, the Department will ensure that the payments contemplated hereunder shall be included in the Department's tentative work program developed pursuant to Section 339.135, Florida Statutes, and the long-range transportation plan for the applicable metropolitan planning organization developed under Section 339.175, Florida Statutes, and also ensure that payments for this Project extending beyond one fiscal year are prioritized ahead of new capacity Projects in the development and updating of the tentative work program.

The cash available for reimbursement will be contingent upon annual appropriation; however, subject to annual appropriation, the Department agrees to fund this Contract in accordance with the Cash Availability Schedule(s) set forth below *(one per each 11-digit financial Project)*:

Fiscal Year July 1 – June 30	*(insert MONTH)* 1	*(insert MONTH)* 1	*(insert MONTH)* 1	*(insert MONTH)* 1	Total
2014/2015					
2015/2016					
2016/2017					
2017/2018					
2018/2019					
2019/2020					
2020/2021					
2021/2022					
Total					

The Cash Availability Schedule for this Project shall not include the Initial Contingency Pay Item Amount as listed on the Design-Build Bid Proposal Form (form number 700-010-65). Therefore, while the Price Proposal and Total Contract amounts include the Initial Contingency Pay Item Amount, the Cash Availability Schedule total amount will not equal the Price Proposal and Total Contract amounts. The Initial Contingency Pay Item Amount of $_____ ***(Note to developer of the RFP: Insert Initial Contingency Pay Item Amount)*** is available as work is authorized and completed.

Reimbursement shall be made to the Design-Build Firm by warrant mailed to the Project Specific Escrow Account using a unique vendor number sequence. The Design-Build Firm shall complete form number 700-011-16 Request for Project Specific Escrow Account and submit it to the Department's Comptroller at 605 Suwannee Street MS 24, Tallahassee, FL. 32399-0424 to set up the unique vendor number sequence. This Project Specific Escrow Account payment process shall be irrevocable unless mutual written request to the Department (using form number 700-011-17 Request for Direct Payment to Firm's Primary Vendor) is made by the Design-Build Firm, its Surety(ies) and its Lender(s)/Financier(s), and thereafter approved by the Department. The Design-Build Firm may, with the express written consent of the Surety(ies) and the Lender(s)/Financier(s), sell, assign or pledge any monies paid into the Project Specific Escrow Account by the Department in favor of third parties and including but not limited to the Design-Build Firm's Surety(ies) and Lender(s)/Financier(s); however, any such sale, assignment or pledge must only attach to payments made by the Department after such funds have been paid by warrant mailed to the Project Specific Escrow Account, and no sale, assignment or pledge of any receivable from the Department is authorized nor will be permitted by the Department.

NOTE: THE CASH AVAILABLITY SCHEDULE(S) (MAXIMUM ALLOWED TO BE INVOICED) IS BASED ON THE FUNDING AS ORIGINALLY PROGRAMMED. IN THE EVENT THAT THE BID/PRICE PROPOSAL IS LOWER THAN THE TOTAL AMOUNT OF FUNDS AVAILABLE FOR PAYMENT, THE ABOVE APPROPRIATE CASH AVAILABILITY SCHEDULE(S) WILL BE MODIFIED WITH THE LAST AVAILABLE FUNDS BEING REDUCED.

Invoicing the Department:

1. Each month, on a predetermined schedule of monthly cut-off dates, the Department shall determine the Design-Build Firm's monthly progress and certify the value of Contract work that the Design-Build Firm has completed.

   The amount established by each approved and certified monthly progress estimate of the Department shall not be subject to set-off, deduction, reduction, or withholding for any reason by the Department, including but not limited to defective work, liquidated damages, default, termination, latent defects, or warranty claims. Rather, any set-off, deduction, reduction or withholding of payment shall be applied only to subsequent monthly progress estimates or the final estimate, as such may not yet be certified by the Department. The amount established by the approved and certified final estimate of the Department shall not be subject to set-off, deduction, reduction, or withholding for any reason by the Department, including but not limited to defective work, liquidated damages, default, termination, latent defects, or warranty claims.

2. Each month, the Department's monthly estimate shall include:

   a. The total value of Contract work to-date

   b. The total value of any adjustments

3. The Design-Build Firm may invoice the Department monthly for actual work completed and the delivery of certain materials as authorized by this Contract and per the monthly progress estimate, up to the amount established and remaining available for the then-current quarter in the applicable Cash Availability Schedule (Fiscal Year is July to June). The monthly invoice will be reduced by the amount the cumulative payments and current invoice are in excess of the then-current quarter's Cash Availability Schedule funds plus any prior quarter's cash not previously paid. Any such reduction should be billed by the Design-Build Firm on the next monthly invoice, or as otherwise outlined above.

4. Section 337.145 of the Florida Statutes, providing for offsetting payments, is not applicable to this Contract.

5. Nothing contained in this provision constitutes a waiver or release of the Design-Build Firm's responsibility to properly perform all of its obligations under this Contract.

6. Once the Project is complete and has been final accepted by the Department, the Design-Build Firm may begin or continue invoicing on a quarterly basis (at the beginning of the quarter) an amount equal to the applicable Cash Availability Schedule plus any prior quarters' cash not previously paid.

Extra Work Costs and Delay Costs:

The Department shall compensate the Design-Build Firm for amounts due for Extra Work Costs or Delay Costs through either (a) monthly progress payments invoiced as the Extra Work is completed or Delay Costs incurred and also acknowledged by the Department, (b) as periodic payments pursuant to a separate Cash Availability Schedule for such Extra Work Costs or Delay Costs, or (c) a combination of the above, in each instance as may be determined in the Department's sole discretion. For this Contract, it is the Department's desire to look first to funding any such Extra Work Costs or Delay Costs compensation obligations through monthly progress payments invoiced as the Extra Work is completed or Delay Costs incurred and also acknowledged by the Department. If the Department chooses to pay such Extra Work Costs or Delay Costs pursuant to a separate Cash Availability Schedule, the reasonable and actual cost of financing incurred by the Design-Build Firm due to such delayed payment shall be compensated for by the Department in addition to the compensation for such Extra Work Costs or Delay Costs as otherwise provided pursuant to the Contract.

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

1. On the due date for Price Proposals and Financial Proposals as shown in the Schedule of Events in Section II of this RFP, each Design-Build Firm will deliver to the Department one (1) hard copy and two (2) digital copies of its Financial Proposal, including the Project Financial Plan in Microsoft Excel. The Financial Proposal is required so the Department can be assured that the Design-Build Firm has sufficient financial resources to construct the Project within the allotted Contract Time, based on the Cash Availability Schedule set forth in the "Method of Compensation and Funding" in Section III.L. of this RFP.

2. The minimum required documents the Design-Build Firm must submit to the Department as part of the Design-Build Firm's Financial Proposal shall include, but may not be limited to, the following:

a. Project Financial Plan, including at a minimum:
   i. A narrative describing all financial elements to finance the Project as proposed.
   ii. Provision for total projected costs to be equal to or greater than the Price Proposal amount.
   iii. Project Sources and Uses of Funds. A statement sufficient to serve as a cash flow needs analysis for the Project.

b. Financial Statements of members of the Design-Build Firm or any partners of the joint venture that make-up the Design-Build Firm that will be responsible for the repayment of financial support related to the Project or directly provides financial support related to the Project. Lenders that are not members of the Design-Build Firm or partners of the joint venture that make up the Design-Build Firm are not required to provide financial statements. Financial Statements shall include:
   i. For the most recent two (2) fiscal years in which audited Financial Statements are available, audited Financial Statements prepared in accordance with U.S. Generally Accepted Accounting Principles. Required Financial Statements shall include:
      1. Opinion Letter (Auditor's Report);
      2. Balance Sheet;
      3. Income Statement;
      4. Statement of Retained Earnings or Changes in Stockholders Equity;
      5. Statement of Cash Flows; and
      6. Notes to Financial Statements (Footnotes)

ii. If audited Financial Statements are unavailable for the most recently completed fiscal year, unaudited Financial Statements, prepared in accordance with U.S. Generally Accepted Accounting Principles, shall be provided for such fiscal year. An affirmative statement shall be provided indicating that the Financial Statements for the most recently completed fiscal year are still being audited. These unaudited Financial Statements shall be certified as true, correct and complete by the Chief Financial Officer. Requirements for unaudited Financial Statements are the same as for audited Financial Statements, except an Opinion Letter (Auditor's Report) is not required.

iii. If the fiscal year end of the most current annual audited or unaudited Financial Statements is more than four (4) months prior to the date of the submission of the Financial Proposal, then Interim Financial Statements through the most recently completed quarter shall be submitted. Interim Financial Statements do not have to be submitted for a quarter if the completion of that quarter is within thirty (30) days prior to the submission of the Financial Proposal. Interim Financial Statements shall be prepared in accordance with U.S. Generally Accepted Accounting Principles. Interim Financial Statements may be audited or unaudited. Unaudited Interim Financial Statements shall be certified as true, correct and complete by the Chief Financial Officer. Requirements for unaudited Financial Statements are the same as for audited Financial Statements, except an Opinion Letter (Auditor's Report) is not required.

iv. If Financial Statements are prepared in accordance with principles other than U.S. Generally Accepted Accounting Principles, a letter from a Certified Public Accountant must be included addressing in detail the areas of the Financial Statements that would be impacted by a conversion to U.S. Generally Accepted Accounting Principles and the financial impact thereof.

c. Preliminary Letter(s) of Commitment and/or a Demonstration of Line(s) of Credit shall be submitted, if the Financial Proposal requires debt financing as a source of funds or guarantee.

i. Each Letter(s) of Commitment from a Lender submitted with the Financial Proposal shall contain, at a minimum:

a) An interest in providing financial support for the Project;
b) Indication that the Lender has reviewed the financial elements associated with the Project;
c) The amount the Lender intends to lend; and
d) Any conditions the Letter of Commitment is subject to.

ii. Demonstration of Line(s) of Credit from Lenders submitted with the Financial Proposal shall contain, at a minimum:

a) An interest in providing financial support for the Project;
b) Indication that the Lender has reviewed the financial elements associated with the Project;
c) The amount of the Line of Credit;
d) The outstanding balance on the Line of Credit, if any;
e) Any conditions the Line of Credit is subject to that may impede the Design-Build Firm's ability to use the Line of Credit;
f) Whether the Line of Credit will only be used for the Project or if the Line of Credit is used to finance working capital; and
g) The expiration of the Line of Credit and any renewal clauses.

The Letter(s) of Commitment and/or Demonstration of Line(s) of Credit should meet the required amount identified in the Project Financial Plan.

d. Attestation by the Chief Financial Officer as to accuracy and completeness of all financial information provided.
e. Ownership and Organizational structure of all entities involved in the Project, including financial relationships with other entities included or involved in the delivery of this Project.
f. An affidavit from a bonding company that certifies the Design-Build Firm has the financial means and capacity to bond 100% payment and performance for the face amount of $XXX,XXX,XXX for the Project.
g. Any and all financial warranties, bonds, sureties, certifications and other commitments for the financial security of the Project, as may be appropriate.

3. The Design-Build Firm may not submit a Project Financial Plan that includes a Conduit Tax Exempt Bond Solution as part of its Financial Proposal for this Project. The Department may deem any Financial Proposal as non-responsive should it include a Conduit Tax Exempt Bond solution.

4. The Department's review of the Financial Proposal shall neither create, nor modify, nor activate any legal rights or obligations of the Department. The Department's evaluation of a Financial Proposal is solely for the benefit of the Department and not for the benefit of the Design-Build Firm, any entity related thereto, the public or any member thereof, nor create any third party rights. A claim for damages may not be maintained against the Department based on or arising out of the Department's review of the Financial Proposal. The Department's evaluation of each Financial Proposal will be on a pass/fail basis. Analysis of the Design-Build Firm's Financial Proposal by the Department will include, but not be limited to, the following:

a. Review of the Design-Build Firm's Project Financial Plan to determine if the Plan includes all financial elements to finance the Project as proposed;
b. Review and determination if the Design-Build Firm's Project Financial Plan demonstrates the Design-Build Firm's ability to meet the cash flow needs of the Project consistent with the Department's Cash Availability Schedule;
c. Review of the Financial Statements and Interim Financial Statements;
d. Review of the Lender Letter(s) of Commitment or Demonstration of Line(s) of Credit to determine if it meets the financing needs established in the Project Financial Plan;
e. Review of the attestation by the Design-Build Firm's Chief Financial Officer as to accuracy and completeness of all financial information provided;
f. Review of the financial relationships and responsibilities of Ownership and Organizational Structure of all of the entities involved;
g. Review of bonding company certification of Design-Build Firm's capacity for $XXX,XXX,XXX payment and performance bond; and
h. Review of any and all financial warranties, bonds, sureties, certifications and other commitments for the financial security of the Project, as may be appropriate.

The Department reserves the right to request any additional information or pursue other actions required to meet its obligation to complete the financial due diligence.

5. No later than fifteen (15) days following the Department's posting of Intent to Award, or, in the event that a Notice of Protest of the Department's posted Intent to Award is filed with the Department, within two (2) business days following the Department's notice to the impacted Proposers of the Department's final agency action as to such protest, the Lowest Adjusted Score Design-Build Firm shall submit:

a. Final Letter(s)of Commitment, each of which shall contain at a minimum:

i. A statement from the Lender stating that the Lender is providing financial support for the Project;
ii. The amount the Lender intends to lend; and
iii. Any conditions the Final Letter of Commitment is subject to.

b. Final Demonstration of Line(s) of Credit, which shall contain at a minimum:
i. The amount of the Line of Credit;
ii. The outstanding balance on the Line of Credit, if any;
iii. Any conditions the Line of Credit is subject to that may impede the ability to use the Line of Credit;
iv. Whether the Line of Credit will only be used for the Project or if the Line of Credit is used to finance working capital;
v. The expiration of the Line of Credit and any renewal clauses; and
vi. Statement indicating there have been no changes with the letters submitted with the Financial Proposal.

IV. Disadvantaged Business Enterprise (DBE) Program.

A. DBE Availability Goal Percentage:

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

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

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

B. DBE Supportive Services Providers:

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

C. Bidders Opportunity List:

The Federal DBE Program requires States to maintain a database of all Firms that are participating, or attempting to participate, on DOT-assisted contracts. The list must include all Firms that bid on prime

contracts or bid or quote subcontracts on DOT-assisted Projects, including both DBE's and Non-DBE's.

A Bid Opportunity List should be submitted through the Equal Opportunity Compliance system which is available at the Equal Opportunity Office Website. This information should be returned to the Equal Opportunity Office within 3 days of submission.

V. Project Requirements and Provisions for Work.

A. Governing Regulations:

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

1. Florida Department of Transportation Roadway Plans Preparation Manuals (PPM)
   http://www.dot.state.fl.us/rddesign/PPMManual/PPM.shtm

2. Florida Department of Transportation Design Standards
   http://www.dot.state.fl.us/rddesign/DesignStandards/Standards.shtm

3. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications
   http://www.dot.state.fl.us/specificationsoffice/Default.shtm

4. Florida Department of Transportation Surveying Procedure
   http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/550030101.pdf

5. Florida Department of Transportation EFB User Handbook (Electronic Field Book)
   http://www.dot.state.fl.us/surveyingandmapping/doc_pubs.shtm

6. Florida Department of Transportation Drainage Manual
   http://www.dot.state.fl.us/rddesign/Drainage/ManualsandHandbooks.shtm

7. Florida Department of Transportation Bridge Hydraulics Handbook
   http://www.dot.state.fl.us/rddesign/Hydraulics/files/BridgeHydraulicsHB.pdf

8. Florida Department of Transportation Storm Drain Handbook
   http://www.dot.state.fl.us/rddesign/hydraulics/files/StormDrainHB.pdf

9. Florida Department of Transportation Optional Pipe Material Handbook
   http://www.dot.state.fl.us/rddesign/Hydraulics/files/Opt-Pipe-HB.pdf

10. Florida Department of Transportation Open Channel Handbook

http://www.dot.state.fl.us/rddesign/Hydraulics/files/Opt-Pipe-HB.pdf

11. Florida Department of Transportation Stormwater Management Facility Handbook
http://www.dot.state.fl.us/rddesign/Hydraulics/files/StrmWtrMgmtFacHB.pdf

12. Florida Department of Transportation Culvert Design Handbook
http://www.dot.state.fl.us/rddesign/Hydraulics/files/CulvertHB.pdf

13. Florida Department of Transportation Temporary Drainage Design Handbook
http://www.dot.state.fl.us/rddesign/hydraulics/files/TemporaryDrainageHB.pdf

14. Florida Department of Transportation Soils and Foundations Handbook
http://www.dot.state.fl.us/structures/Manuals/SFH.pdf

15. Florida Department of Transportation Structures Manual
http://www.dot.state.fl.us/structures/DocsandPubs.shtm

16. Florida Department of Transportation Current Structures Design Bulletins
http://www.dot.state.fl.us/structures/Memos/currentbulletins.shtm

17. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Manual
http://www.dot.state.fl.us/ecso/downloads/publications/Manual/default.shtm

18. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Production Criteria Handbook
http://www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandBook/

19. Florida Department of Transportation Production Criteria Handbook CADD Structures Standards
http://www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandBook/

20. Instructions for Design Standards
http://www.dot.state.fl.us/structures/IDS/IDSportal.pdf

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

22. 2009 MUTCD with Revision Numbers 1 and 2 incorporated, dated May 2012
http://mutcd.fhwa.dot.gov/

23. Safe Mobility For Life Program Policy Statement
http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/000750001.pdf

24. Traffic Engineering and Operations Safe Mobility for Life Program
http://www.dot.state.fl.us/trafficoperations/Operations/SafetyisGolden.shtm

25. Florida Department of Transportation American with Disabilities Act (ADA) Compliance – Facilities Access for Persons with Disabilities Procedure
http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/625020015.pdf

26. Florida Department of Transportation Florida Sampling and Testing Methods
http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/publications/fstm/disclaimer.shtm

27. Florida Department of Transportation Flexible Pavement Coring and Evaluation Procedure
http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/publicatio

ns/materialsmanual/documents/v1-section32-clean.pdf

28. Florida Department of Transportation Design Bulletins and Update Memos
http://www.dot.state.fl.us/rddesign/Bulletin/Default.shtm

29. Florida Department of Transportation Utility Accommodation Manual
http://www.dot.state.fl.us/specificationsoffice/utilities/UAM.shtm

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

31. Florida Department of Transportation Flexible Pavement Design Manual
http://www.dot.state.fl.us/rddesign/PM/publicationS.shtm

32. Florida Department of Transportation Rigid Pavement Design Manual
http://www.dot.state.fl.us/rddesign/PM/publicationS.shtm

33. Florida Department of Transportation Pavement Type Selection Manual
http://www.dot.state.fl.us/rddesign/PM/publicationS.shtm

34. Florida Department of Transportation Right of Way Manual
http://www.dot.state.fl.us/rightofway/Documents.shtm

35. Florida Department of Transportation Traffic Engineering Manual
http://www.dot.state.fl.us/TrafficOperations//Operations/Studies/TEM/TEM.shtm

36. Florida Department of Transportation Intelligent Transportation System Guide Book
http://www.dot.state.fl.us/TrafficOperations/Doc_Library/Doc_Library.shtm

37. 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

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

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

40. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways
http://www.dot.state.fl.us/rddesign/FloridaGreenbook/FGB.shtm

41. Florida Department of Transportation Project Development and Environment Manual, Parts 1 and 2
http://www.dot.state.fl.us/emo/pubs/pdeman/pdeman1.shtm

42. Florida Department of Transportation Driveway Information Guide
http://www.dot.state.fl.us/planning/systems/programs/sm/accman/pdfs/driveway2008.pdf

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

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

45. Florida Department of Transportation Electronic Review Comments (ERC)

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, use of new products, new uses for established products, etc. Innovative concepts must take into consideration the additional time which may be required for reviews and approvals. An Alternative Technical Concept (ATC) is considered an innovative aspect.

1. Alternative Technical Concept (ATC) Proposals

The ATC process allows innovation, flexibility, time and cost savings on the design and construction of Design-Build Projects still meeting Department Commitments listed in the RFP, . Any deviation from the RFP that the Design-Build Firms seeks to obtain approval to utilize prior to Technical Proposal submission is, by definition, an ATC and therefore must be submitted to the Department for consideration through the ATC process. Any proposed material or technology not addressed by the RFP is considered an ATC and therefore must be submitted to the Department for consideration through the ATC process. 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 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:

- Modifications to approved Exceptions/Variations.
- Modifications to elements of the Approved Typical Section package listed previous in Section I Description of Work
- Minimum distance from Adrienne Arsht Center (See "Department Commitments" in Section V)
- Minimum separation of 44' between the eastbound and westbound I-395 measured along centerline of NE 2nd Avenue

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.

- Signature Bridge Design

- Alternate Concepts to Metromover Modification than those depicted in the Concept Plans and identified as requirements of the RFP

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. 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.

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 submitted prior to the deadline shown in the Schedule of Events of this RFP.

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

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

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 (both during and after 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;

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) *Handback: Any changes in Handback Requirements associated with the ATC;

l) *Project Revenue: A preliminary analysis of potential impacts on Project Revenue;

m) *Payments: A preliminary analysis of potential impacts on the Upfront Concession Payment and Annual Lease Payment

* These submittal requirements will be needed for Public Private Partnership (PPP) Projects only.

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 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 or Design Variations 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) or Design Variation(s). Such a change will be approved by FHWA, as applicable. Prior to approving ATC's which would result in the issuance of an Addendum as a result of a Design Exception and/or Design Variation, 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.

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.

The Project file will clearly document all communications with any Design-Build Firm.

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

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

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

C. Geotechnical Services:

1. General Conditions:

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

D. Department Commitments:

The Design-Build Firm will be responsible for adhering to the project commitments as identified in the PD&E, EIS/ROD and any Reevaluations, included throughout this RFP, and as listed below:

SR-836/I-395 from West of I-95 to MacArthur Causeway Bridge				
Commitment (#) and Description	Responsibility			Status
	FDOT	D-B Firm	Shared	
Traffic and Transportation A minimum of 45' separation between the eastbound and westbound I-395 along NE 1st Avenue must be maintained.		X		The Design-Build Firm will not reduce the separation distance.
Geometry A minimum of 225 feet column span length will be provided.		X		Span lengths that do not meet those shown in the conceptual drawings will not be considered.
Geometry		X		The conceptual drawings

The roadway vertical clearance along I-395 should have a minimum of 19 feet in the area west of the FEC Railway and a minimum of 25 feet east of the FEC Railway.				meet these requirements. Clearances that do not meet the lesser of those shown in the conceptual drawings or commitments will not be considered.
Traffic and Transportation Locate new entrance and exit ramps for I-395 to the downtown area at N Miami Avenue.		X		To be implemented.
Traffic and Transportation Adequate pedestrian and bicycle connectivity shall be maintained during all phases of construction in order to maximize safety and minimize delays and disruptions. The construction sequencing plan will also address pedestrian safety, especially in the context of the large student population of the project.		X		To be implemented
Geometry A minimum of 200' horizontal clearance will be provided between the Adrienne Arsht Center and the I-395 westbound bridges.		X		To be implemented.
Geometry Due to the provision of higher structures, the potential to reconnect NW 2nd Avenue and NE Miami Court under the proposed I-395 facility in order to reestablish and facilitate local street linkage in Overtown will be further explored.		X		To be implemented. Reconnect NW 2nd Avenue under the proposed I-395 facility to re-establish and facilitate local street linkage in the Overtown area. To be implemented.
Traffic and Transportation Provide a signature bridge design. (The Department commits to providing a 'signature' bridge design).		X		To be implemented.
Landscape The Department will provide aesthetics enhancements (e.g., landscaping) in order to help maximize the total integration of the project with the adjacent community.		X		The District has developed a Visual Quality Manual and landscape plan for integration of the community.
Miscellaneous Minimize the Limited Access Fence underneath the proposed structure. (The Department will review the need to provide a Limited Access fence underneath the proposed structure)	X			The FDOT will coordinate with the D-B Firm on placement of any Limited Access Fence required.

Noise To minimize the adverse effects on air and noise quality from construction activities, the contractor will adhere to air quality and noise provisions of the FDOT Standard Specifications for Road and Bridge Construction, latest edition, as well as appropriate Best Management Practices.		X		To be implemented.
Traffic and Transportation Maintain and enhance system continuity between SR 836/I-95 facility on the west and the MacArthur Causeway on the east.		X		To be implemented.
Traffic and Transportation Maintain hurricane evacuation capacity from Miami Beach, the Bay Islands and the adjacent bay front area during the construction phase		X		To be implemented.
The contractor shall dispose of all oil, chemicals, fuel, etc., in an acceptable manner according to local, state, and Federal regulations and shall not dump these contaminants on the ground or in sinkholes, canals, or borrow lakes. Appropriate Best Management Practices will be used during the construction phase for erosion control and water quality in order to obtain Chapter 62-25, F.A.C. compliance. In addition, the contractor will adhere to the FDOT Standard Specifications for Road and Bridge Construction, latest edition.		X		To be implemented.
A re-evaluation of contamination concerns will be conducted prior to right-of-way acquisition, if necessary, and/or during the design phase if deemed necessary by the Contamination Impact Coordinator.		x		
Stormwater management features to mitigate for water quality impacts will be incorporated.		x		

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 secured a Conceptual ERP that the Design-Build Firm shall be responsible for modifying the issued permits as necessary to accurately depict the final design. The Design-Build Firm

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

All applicable data shall be prepared in accordance with Chapter 373 and 403, Florida Statutes, Chapters 40 and 62, F.A.C.; Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, 23 CFR 771, 23 CFR 636, and parts 114 and 115, Title 33, Code of Federal Regulations. In addition to these Federal and State permitting requirements, any dredge and fill permitting required by local agencies shall be prepared in accordance with their specific regulations. Preparation of all documentation related to the acquisition of all applicable permits will be the responsibility of the Design-Build Firm. Preparation of complete permit packages will be the responsibility of the Design-Build Firm. The Design-Build Firm is responsible for the accuracy of all information included in permit application packages. As the 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 of any and all correspondence with any of the environmental permitting agencies shall be sent to the District Environmental Management 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 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.

No wetland mitigation is required in the issued permits, which are based on the Concept Plans, If any permit applications completed by the Design-Build Firm propose to increase the amount of wetland impact that requires mitigation, the Design-Build Firm shall be responsible for providing to the Department an update on the amount and type of wetland impacts as soon as the impacts are anticipated (including temporary impacts and/or any anticipated impacts due to construction staging or construction methods). Any mitigation required will be the sole responsibility of the Design-Build Firm. The mitigation costs of any additional impacts proposed by the Design-Build Firm shall be the responsibility of the Design-Build Firm. The selection of appropriate mitigation will be the responsibility of the Design-Build Firm
The Design-Build Firm shall be solely responsible for all costs associated with these permitting activities and shall include all necessary permitting activities in their schedule.

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:

The Department will conduct the required contract negotiations and plans review coordination. Railroad/Transit coordination is anticipated for work over the Florida East Coast Railway and on the Miami-Dade Transit (MDT) Metrorail System

The District Six Office Rail Contact can be reached by phone at 305-470-5333, or by fax at 305-470-5179. The Design-Build Firm shall be responsible for making all necessary arrangements prior to any encroachments into the FEC Railway or MDT right-of-ways. Design-Build Firm shall be responsible for obtaining and complying with the requirements of each railway entity for construction near or within the railways right-of-ways.

Design-Build schedule should take into consideration any review time required by FEC Railway and MDT. The schedule should also take into account coordination with MDT regarding modification to the Metromover.

The Design-Build Firm shall provide insurance requirements in accordance with Division I.

1. **Florida East Coast (FEC) Railway**

All required Railroad Reimbursement Agreements will be between Florida East Coast (FEC) Railway and FDOT District Six (the Department). Copies of the approved Agreements will be made available to the Design-Build Firm. The Design-Build Firm must comply with the terms f these agreements. It is the Department's policy to pay for the railroad flagging services via an agreement that contains specific language. However, if the Design-Build Firm requests flagging services and the services are not used, it will be the Design-Build Firm's responsibility to reimburse the Department for the unused flagging service days. In addition, the flagging cost is limited to a total of 200 standard days (8 hours non-weekend/no nights). The cost and coordination of any additional flagging in excess of 200 standard days will be the responsibility of the Design-Build Firm through a separate agreement between the Design-Build Firm and FEC Railway.

The Design-Build Firm shall furnish the Certificate(s) of Insurance to:

Florida East Coast Railway, LLC
Attn: Joseph (Leslie) Schonder, Public Projects Engineer
Engineering Department
7150 Philips Highway
Jacksonville, Florida 32256
904-279-3196 (Office) / 904-256-0426 (Fax)

2. **Miami-Dade Transit (MDT)**

The Design-Build Firm must obtain written authorization or a permit from Miami-Dade Transit granting access and authorization to perform work on or adjacent to the Transit facility. The Design-Build Firm is

also requires to establish a Reimbursement Agreement directly with Miami-Dade Transit (MDT) for any cost that may arise from working adjacent to the Transit facility. Copies of the approved authorizations and agreements must be made available to the Department. All communications with MDT shall be handled through the designated MDT Coordinator.

The Design-Build Firm shall furnish Certificate(s) of Insurance to:

Miami-Dade Transit
Attn: Carol Wilson, MDT Coordinator
Miami-Dade County Transit Right-of-Way & Utility Division
MDT-Overtown Transit Village
701 NW 1st Court, 1700 Floor
Miami, FL 33136

G. Survey:

The Design-Build Firm shall perform all surveying and mapping services necessary to complete the Project. Survey services must also comply with all pertinent Florida Statutes and applicable rules in the Florida Administrative Code. 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 Procedure, Topic Nos. 550-030-101; Right-of-Way Mapping Procedure, Topic No. 550-030-015; Aerial Surveying Standards for Transportation Projects Procedure, Topic No. 550-020-002. This work must comply with the Minimum Technical Standards for Professional Surveyors and Mappers, Chapter 5J-17, F.A.C., pursuant to Section 472.027, F.S. This survey also must comply with Chapter 177, F.S.

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.

The Design-Build Firm shall fully document and take every precaution during construction to protect the existing Metromover system, existing roadway infrastructure, including existing signs, sign structures, signal heads, signal structures, lighting, utilities, stormwater facilities and other items that are not to be replaced as part of this Project. Care shall be taken not to damage any portion of the MDT Metromover that is not being reconstructed. If such items are damaged by the Design-Build Firm during the construction period, the damage will be replaced at the Design-Build Firm's expense.

A Structural Condition Survey of the Metromover in the vicinity of the proposed work, is required to be performed by the Design-Build Firm prior to beginning of any construction work. The survey will inspect the Metromover components (i.e. guideway, columns, caps, bearings and girders), record the condition and establish the baseline elevations, for the monitoring of the structure, for potential

settlements.

I. Submittals:

1. Component Submittals:

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

The Design-Build Firm may divide the project into separate areas and submit components for each area; however, sufficient information on adjoining areas must be provided to allow for a complete review. Submittals for bridges are limited to foundation, substructure, and superstructure. For bridges over navigable waterways, submittals are limited to foundation, approach substructure, approach superstructure, main unit substructure, and main unit superstructure. Further dividing the foundation, substructure, or superstructure into Pier 2, Abutment 1, Span 4, etc will not be accepted.

2. Phase Submittals:

The Design-Build Firm shall provide the documents for each phase submittal listed below to the Department's Project Manager. 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". The review period commences upon the Department's receipt of the valid submittal or re-submittal and terminates upon the transmittal of the submittal back to the Design-Build Firm. The Department's review is not meant to be a complete and detailed review.

Design documentation submitted to the Department with each submittal must consist of design calculations and other supporting documentation developed during the development of the plans. The design calculations submitted shall adequately address the complete design of all elements. These calculations shall be neatly and logically presented on 8 ½" x 11" paper size (where possible) and all sheets shall be numbered. Text files and spreadsheets shall be in Microsoft Word and Excel formats, respectively.

The final design calculations shall be signed and sealed by a Florida Registered Professional Engineer. A cover sheet indexing the calculations shall be included and the Engineer shall sign and seal that sheet. All computer programs and parameters used in the design calculations shall include sufficient backup information to facilitate the review task.

a. Prerequisites to 90% plans submittals:

- Requirement Traceability Verification Matrix (RTVM)
- ITS Master Plan
- System Engineering Master Plan (SEMP)

b. 90% Phase Submittal

Five (5) hardcopy sets of 11" X 17" roadway plans and five (5) CDs containing both CADD and PDF of the following:

- Typical Section Package (signed/sealed by Design-Build EOR)
- Design Exceptions/Variations
- Pavement Design Package
- Signalization Plans
- Signing and Pavement Marking Plans
- TCP
- Lighting Plans
- Landscape Plans
    - Landscape Relocation Plan
    - Updated Tree Inventory Plan

Five (5) hardcopy sets of 11" X 17" structure plans

- MSE and bulkhead walls
- ITS plans
- Utility Relocation Plan
- Signed and sealed geotechnical report
- Signed and sealed geotechnical report
- Settlement and Vibration Monitoring Plan (SVMP) for Department acceptance and update throughout the construction period
- Signed and sealed Bridge Hydraulic Report
- Roadway Design documentation
- Drainage Design Documentation
- Lighting Design Documentation
- Structures Design Documentation
- Technical Special Provisions
- Independent Peer reviewer's comments and comment responses and Cover Letter
- Quality Assurance/Quality Control Certification Statement
- Landscape Opportunity Plans
- Bridge Load Rating Calculations, including MDT Metromover
- Completed Bridge Load Rating Summary Detail Sheet
- Load Rating Summary Form
- Independent Peer reviewer's comments and comment responses
- Five (5) CD's containing the above information in .pdf format

c. Final Submittal

Five (5) hardcopy sets of signed and sealed 11" X 17" plans and five (5) CDs containing both CADD and PDF of the following:

- Electronic signed and sealed set of plans (at a minimum, list per 90% Plans)
- Original list of Schedule of Values
- Schedule of Values for each component
- Final signed and sealed design documentation

- Settlement and Vibration Monitoring Plan (SVMP)
- Landscape Opportunity Plans
- Final documentation
- Signed and sealed copy of the Bridge Load Rating Summary Detail Sheet
- 1 Signed and sealed copy of the Load Rating Summary Form
- Signed and sealed copy of Construction Specifications Package or Supplemental Specifications Package and Technical Special Provisions.
- 2 sets of electronic copies of Technical Special Provisions on CD
- Independent Peer Reviewer's signed and sealed cover letter that all comments have been addressed and resolved.

3. Requirements to Begin Construction:

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

As-Built Set:

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

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

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

The Department shall certify the As-Built Plans per Chapter 5.12 of the Construction Project Administration Manual (TOPIC No. 700-000-000).

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

- 1 set of 11" X 17" signed and sealed plans
- 12 sets of 11 "X 17" copies of the signed and sealed plans
- ___ copy of Landscape Opportunity Plans

- 1 signed and sealed copy of the Bridge Load Rating based on as-built conditions
- 12 sets of final documentation (if different from final component submittal)
- 2 (two) Final Project CD's

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.

- Permit applications and subsequent Request for Additional Information (RAI) correspondence for Department Review
- Approved Permits Package
- Pavement Design Package
- Typical Section Package
- Design Variation Package
- Stormwater Management Report

5. Railroad/Transit Coordination:

Six sets of certain plan sheets, specifications, and documents are required for review by both railroad and MDT. The sets are to be mailed to the District Rail Administrator for distribution to FEC Railway and MDT. The Design-Build Firm's is required to coordinate with FEC Railway and MDT to identify specific documentation required, by such agencies, for approval of construction activities of the Design-Build Firm's proposed design. The required sheets are:

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

Some of the required documents include, but are not limited to:

- Quality Management Plan (QMP)
- Construction Safety Plan
- Construction Schedule with Sequencing

- **Safety Certification**

Formal Safety Certification of the Project is required. Safety Certification is the process of verifying that Operating System elements comply with a formal list of safety requirements. The Design-Build Firm shall adhere to the safety certification process outlined in MDT's System Safety and Security Certification Program Plan, Revision 5, June 2011. Each safety and security certification plan is project specific and the Design-Build Firm will develop the plan for this project and provide it to MDT for review and approval by the 60% design submittal.

The project System Safety and Security Certification Plan will fulfill the requirements to comply with Federal Transportation Administration (FTA) State Safety Oversight Rule (49 CFR Part

659) and Florida Department of Transportation (FDOT) State Rule 14-15.017. In supporting the safety certification process, the Design-Build Firm shall carry out a detailed accounting of all the correspondence and documentation to verify that all safety related requirements, activities, tests, inspections and action items have been completed and satisfied and shall document these results in a Safety Report which shall be submitted to MDT Engineering, Planning and Development Office for its review and acceptance 30 calendar days prior to the Design-Build Firm's written application for Substantial Completion.

The Design-Build Firm performing the safety and security certification shall perform a number of tasks to verify and document the level of safety to be certified. These tasks are identified below. Other subtasks may be identified in the design or construction phase, as needed by the project schedule or activities.

1. Identify safety requirements, current design assumptions and documents developed by the Design-Build Firm, and other relevant requirements from Local, State and Federal sources as they may impact the level of safety provided in the current Metromover system.

2. Verify the incorporation of safety and security requirements in the final design documents: identify & resolve all open items.

3. Verify design by attestation (letter), inspection or conduct of subsystem/integrated test procedures.

4. Verify operating and maintenance rules and/or procedures by review and pre-revenue tests.

5. Verify final safety open item close-out and/or identification of alternate measures ("workarounds") to satisfy safety requirements.

6. Develop a final safety and security certification report.

7. Prepare final certification documents; signed and sealed by a current and active professional engineer registered in the State of Florida.

General Procedures for Adjacent and Transit Right-of-Way Construction Activity

The Design-Build Firm contemplating any construction activity adjacent to or on an MDT facility, structure or property, including any excavation, maintenance, restoration, demolition, or use of MDT real property, should provide, for review, three (3) copies of their drawings and three (3) copies of their calculations, showing the relationship between their project and the MDT facilities.
Sufficient drawings and details should be submitted to facilitate MDT's review of the effects that the proposed project may or may not have on the MDT facilities. A MDT review requires internal circulation of the construction drawings to concerned Divisions. Minimum review time for MDT is thirty (30) days. Drawings normally required for review, but are not limited to, are:

- Site Plan
- Demolition Plans

- Maintenance of Traffic Plans
- Staging Plans
- Drainage Area Maps and Drainage Calculations
- Sections showing foundations and MDT Structures
- Structural drawings (provide relative sections showing MDT)
- Column load tables
- Pertinent drawings detailing an impact on MDT facilities
- A copy of the geotechnical report

If uncertainty exists on the possible impacts a project may have on the MDT facilities, and before making a formal application for a review of a construction project adjacent to the MDT System, the developer or his agent may contact the **Chief, Right-of-Way and Utilities Division at (786) 469-5244.**

Sheeting and shoring drawings should be accompanied by calculations and shall be signed and sealed by a Professional Engineer licensed in the State of Florida. The drawings and calculations should contain comments, details, notes, and instructions describing the proposed sequence of construction. In the case that the actual guideway structure is being shored, professional attestation (in writing) of the Metromover system to be safe, to continue normal operations, is required.

When the design of foundations and site work of the project has progressed to the point considered complete and ready for review, the drawings and calculations, as applicable, should be sent to:

Miami-Dade Transit
Chief
Right-of-Way and Utilities
Miami-Dade Transit
MDT-Overtown Transit Village
701 N.W. 1ST Court, Suite 1500
Miami, FL 33136

A period of thirty (30) working days should be allowed for review of the drawings and calculations. Fifteen (15) working days should be allowed for each successive review as required.

The Design-Build Firm is required to address any construction impact on Pedestrian movements to the Museum Park Metromover Station. This can be addressed by the Design-Build Firm as part of the Maintenance of Traffic Plans

The Design-Build Firm is required to reimburse MDT for MDT's cost of providing escorts, spotters and support services for adjacent construction where access is required into the operating Metrorail/Metromover system; and/or the system is impacted. The Design-Build Firm shall also reimburse MDT for all associated costs of the bus "bridge" for all Metromover loops (Brickell, Downtown, and Omni) to maintain normal service if the system is deemed unsafe to operate due to this project. As part of the review procedure, and before any work may proceed, the Design-Build Firm will be required to sign a letter accepting this obligation.

The applicant must receive written approval for the design of a given project by the MDT Assistant Director of the Engineering, Planning and Development Office or designee, or MDT

Fire/Life Safety Technical Committee Chairperson (as applicable), prior to the start of construction.

Project Documents shall be reviewed by the appropriate MDT Divisions for possible impact on MDT facilities and operations, including all elements associated with the construction of the project and any temporary protection/shoring system needed to preserve the system's safety and integrity.

Each "Part" of the project's design shall be reviewed and accepted by all pertinent MDT Divisions.

- **Limitations:**

MDT Metromover Closures:

Closures of the Metromover will be required for any construction activities where personnel and/or equipment come within 10 feet of the guideway superstructure or as deemed by MDT. Closure of Metromover for construction access will be limited to non-operational service hours as determined by MDT. Metromover restrictive hours (non-revenue) should be from 1:00 AM to 4:00 AM. All closures shall be coordinated with MDT for holiday, special events and maintenance operations. System closures require extensive early coordination and planning between the requestor and MDT. MDT reserves the right to deny system closure requests based on operational needs.

A late opening on a Sunday morning, subject to operational service beginning no later than 10 am, may be considered at the discretion of MDT. A bus "bridge" shall be required for any closure interrupting operational service hours. All proposed extended closure opportunities shall be presented as an ATC. Extended closures shall not be allowed except those specifically approved through the ATC process. All cost associated with MDT closures are the responsibility of the Design Build Firm.

- **MDT Settlement Monitoring & Action Plan:**

A Settlement Monitoring & Action Plan (SMAP) must be submitted to MDT and approved prior to any construction activities. The minimum requirements to be included in the SMAP are as follows:

- An inspection of the Metromover components (i.e. guideway, pier cap, bearings and girders) prior to construction. The inspection procedure, approach, and findings shall be fully documented in report format, including photos clearly identifying location, date, observation, etc..
- A complete and detailed monitoring procedure, including but not limited to the type of equipment, monitoring marks on guideway components, tabulation of readings, frequency of readings, reporting, analysis of readings, actions to be taken, etc. This SMAP is required to evaluate the settlement and cumulative movement/rotation/translation of the pier and impacts to Metromover components. As a minimum, readings shall be taken immediately prior to guideway turnover to MDT each evening. Continuous monitoring shall be performed during critical operations where movement of the guideway could potentially occur. Construction

operations shall be halted immediately, if the readings show a deviation value greater than acceptable by MDT.

- The SMAP must be is approved by MDT before any construction activity begins in the area. Once the SMAP is approved, the design-build firm will set up all proposed survey points in the field, a set of initial survey readings will be taken, signed and sealed data of initial readings will be submitted to MDT for review and approval and final approval of initial reading by MDT shall take place before starting any construction activities without exception. This set of readings will be the baseline of future reference for new readings. Surveying nails, screws, or any penetrations to the structures will not be allowed. Contractor is to use durable, environmentally friendly target glued to the elements; set up to be approved by MDT prior to commencing any work.
- Each reading must establish which phase of construction has been completed when the reading was made and the reading must indicated clearly date taken..
- The SMAP must include the process to address corrective action by the developer in case the readings show a deviation value greater than acceptable by MDT. All costs incurred in addressing corrective actions will be borne by the Design-Build Firm. The SMAP must include a mitigation plan in the form of a Plan of Action.
- Closure of the Metromover will only be allowed during no-revenue hours of 1:00 AM to 4:00 AM. No additional closures to the system will be allowed. In the event that interruption of service exceeds four continuous hours of service, the Design-Build Firm must notify MDT immediately. A bus bridge will be provided to shuttle passengers between affected Metromover stations. The cost of the Bus Bridge will be the Design-Build Firm's sole responsibility.

- **MDT Change Review Board Requirement:**

The Design-Build Firm is responsible to submit the design plans, as required, to the MDT Change Review Board (CRB) for review and comments. The CRB process will authorize, control, implement and record changes to the as-built and safety certified configuration of Metromover facilities.

J. Contract Duration:

Note to developer of the RFP: ***Select one of the paragraphs below for this Section and provide the number of calendar days for the Project.***

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

or

The Design-Build Firm shall establish the Contract Duration for the subject Project. In no event shall the Contract Duration exceed _____ calendar days. The Proposed Contract Duration shall be submitted with the Bid Price Proposal.

K. Project Schedule:

Note to developer of the RFP: The timeframes shown below for Department review of all submittals of

the D-B firm shall not be modified without prior approval of the State Construction Office.

The Design-Build Firm shall submit a Schedule, in accordance with Subarticle 8-3.2 (Design-Build Division I Specifications). The Design-Build Firm's Schedule shall allow for up to fifteen (15) calendar days (excluding weekends and Department observed Holidays) review time for the Department's review of all submittals with the exception of Category 2 structures submittals. The review of Category 2 structures submittals requires Central Office involvement and the Schedule shall allow for up to twenty (20) calendar days (excluding weekends and Department observed Holidays) for these reviews.

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

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

Note to developer of the RFP: ***This section should include a list of all Special Events per Section 8-6.4 of the Design-Build Division I specifications that are to be shown as non-working days in the Project Schedule per 8-3.2.3 of the D-B Division I specifications and have been identified to have a direct impact to traffic within the Project limits. Coordinate with the District Construction Office for the Special Events occurring within the Contract Time period that will impact the traveling public within the Project area.***

<<List the Special Events>>

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

- Anticipated Award Date
- Pre-Design Utility Meeting
- Pre-Construction Meeting(s)
- Design Durations
- Design Submittals
- Shop Drawing Submittals
- Design Survey
- Submittal Reviews by the Department and FHWA
- Design Review by FDOT and MDT/ Acceptance Milestones
- Materials Quality Tracking
- Geotechnical Investigation
- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Embankment/Excavation
- Environmental Permit Acquisition
- Foundation Design
- Foundation Construction
- Detailed Pier Construction Sequencing
- MDT Metromover closures within operational service hours
- MDT Pier Cap Replacement and Removal of Existing Pier
- Substructure Design
- Substructure Construction

- Superstructure Design
- Superstructure Construction
- Walls Design
- Walls Construction
- Roadway Design
- Roadway Construction
- Signing and Pavement Marking Design
- Signing and Pavement Marking Construction
- Signalization and Intelligent Transportation System Design
- Signalization and Intelligent Transportation System Construction
- Lighting Design
- Lighting Construction
- Maintenance of Traffic Design
- Landscape Opportunity Plans
- Landscape Design
- Landscape Construction
- 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
- ITS Burn-In Period
- Final Completion Date for All Work
- Final Signed and Sealed As-Built Plans

L. Key Personnel/Staffing:

The Design-Build Firm's work shall be performed and directed by key personnel identified in the expanded letter of interest and/or technical proposal by the Design-Build Firm. Any changes in the indicated personnel shall be subject to review and approval by the Department's Project Manager. The Design-Build Firm shall have available a professional staff that meets the minimum training and experience set forth in Florida Statute Chapter 455.

M. Meetings and Progress Reporting:

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

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

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

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

The Design-Build Firm shall meet with the Department's Project Manager at least thirty (30) calendar days before beginning system integration activities. The purpose of these meetings shall be to verify the Design-Build Firm's ITS 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.

N. Public Involvement:

1. **General:**

Public involvement is an important aspect of the Project. Public involvement includes communicating to all interested persons, groups, and government organizations information regarding the development of the Project. A Public Involvement Consultant (PIC) will be hired by the Department to carry out an exhaustive Public Involvement Campaign and a marketing effort. The Design-Build Firm will continue to be part of the Public Involvement effort but on a limited basis as described below.

2. **Community Awareness:**

The Design-Build Firm will review and comment on a Community Awareness Program provided by the PIC for the Project.

3. **Public Meetings:**

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

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

groups, minority groups and individuals)

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

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

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

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

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

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

5. **Public Involvement Data:**

The Design-Build Firm is responsible for the following:

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

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

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

O. Quality Management Plan (QMP):

1. **Design:**

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

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

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

No fabrication, casting, or construction will occur until all related design review and shop drawing review comments are resolved.

2. **Construction:**

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

The sampling, testing and reporting of all materials used shall be in compliance with the Sampling, Testing and Reporting Guide (STRG) provided by the Department. The Design-Build Firm will use the Department's database(s) to allow audits of materials used to assure compliance with the STRG. The Department has listed the most commonly used materials and details in the Department's database. When materials being used are not in the Department's database list, the Design-Build Firm shall use appropriate material details from the STRG to report sampling and testing. Refer to the "Access Instruction for LIMS" for more information on how to gain access to the Department's databases: http://www.dot.state.fl.us/statematerialsoffice/quality/programs/qualitycontrol/contractor.shtm

Prepare and submit to the Engineer a Job Guide Schedule (JGS) using the Laboratory Information Management System (LIMS) in accordance with Section 105 of Standard Specifications.

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

P. FHWA Project Management Plan (PMP)

In accordance with FHWA Major Project Guidelines, the Department is required to prepare an initial Project Management Plan (PMP) for the Project. The PMP defines the roles, responsibilities and

procedures for project implementation. Refer to Reference Document RD-18 for the SR 826/ I-75 Express Lanes Project Management Plan Update. The PMP will need to be updated by the Design-Build Firm subsequent to the execution of the contract and prior to initiating construction activities.

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 Special Provision 109.

S. Schedule of Values:

The Schedule of Values approved by the Department will be the basis for determining each monthly progress estimate and the final estimate. The quantities will be compared with the Project schedule to determine the percentage earned. The percentage shall be that portion of the work completed as compared to the total work contracted. The Design-Build Firm shall assign the Schedule of Values to the activities in the CPM schedule. The assignment of values to scheduled activities must be approved by the Department prior to the first monthly progress estimate and prior to any invoicing by the Design-Build Firm pursuant to the Cash Availability Schedule for the Project. The monthly progress estimates cut-off date will be the first Sunday of the month.

Prompt Payment Law:

Participants providing goods and services to the Department should be aware of the following time frames. The Department has five (5) working days from the date the monthly progress estimate is created to inspect and approve the goods and services. The Department has twenty (20) days to deliver a request for payment (voucher) to the Department of Financial Services. The twenty (20) days are measured from the latter of the date the invoice is received or the goods or services are received, inspected and approved.

Invoices will be reduced for amounts invoiced and earned but in excess of the amounts available per the Cash Availability Schedules as outlined in Sections III. L.

If a payment is not available within forty (40) days of the Department's receipt of an invoice payable pursuant to the Cash Availability Schedule for the Project, a separate interest penalty at a rate as established pursuant to **Section 55.03(1), F.S.**, will be due and payable, in addition to the payable invoice amount, to the Design-Build Firm. Interest penalties of less than one (1) dollar will not be enforced unless the Design-Build Firm requests payment. Invoices that have to be returned to a Design-Build Firm because of Design-Build Firm preparation errors will result in a delay in payment. The invoice payment requirements do not start until a properly completed invoice pursuant to the Cash Availability Schedule is provided to the Department.

A Vendor Ombudsman has been established within the Department of Financial Services. The duties of this individual include acting as an advocate for contractors/vendors who may be experiencing problems in obtaining timely payment(s) from a state agency. The Vendor Ombudsman may be contacted at

(850)413-5516 or by calling the Department of Financial Services Division of Consumer Services, 1-877-693-5236.

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 of Transportation policies and procedures. Seed Files, Cell Libraries, User Commands, MDL Applications and related programs developed for roadway design and drafting are available for the MicroStation V8 format in the FDOT CADD Software Suite. However, it is the responsibility of the Design-Build Firm to obtain and utilize current Department releases of all CADD applications.

The Design-Build Firm's role and responsibilities are defined in the Department's CADD Manual. The Design-Build Firm will be required to submit final documents and files which shall include complete CADD design and coordinate geometry files in Intergraph / Micro station format, as described in the above referenced document.

The archived submittal shall also include either a TIMS database file, CADD Index file (generated from RDMENU) or documentation that shall contain the Project history, file descriptions of all (and only) Project files, reference file cross references, and plotting criteria a (e.g. batch, level symbology, view attributes, and display requirements). A printed directory of the archived submittal shall be included.

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.

X. Adjoining Construction Projects:

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

Y. Issue Escalation:

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

The escalation process begins with the Construction 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, 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.

The Department shall be the authority having jurisdiction regarding issues of structural integrity.

FHWA will have full oversight of this Project during both design and construction.

B. Vibration and Settlement Monitoring:

The Department has identified vibration sensitive sites along the Project corridor. Refer to Attachment A-19. The Design-Build Firm shall be responsible for the identification of and coordination with vibration sensitive sites impacted by the Work for the duration of the construction period.

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

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

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

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

C. Geotechnical Services:

Driven Pile Foundations for Bridges and Major Structures

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

Bridge No.	Description	Minimum No. of Tests & Locations
1	EN Connector	1 test between Station 208+00 to 210+00
2	ES Connector	1 test between Station 917+00 to 920+00
3	SE Connector	1 test between Station 109+00 to 111+00
4	WB Connector	1 test between Station 4035+00 to 4040+00
5	I-395 WB	1 test between Station 2040+00 to 2045+00
6	I-395 EB	1 test between Station 1045+00 to 1050+00
7	EB Connector	1 test between Station 3050+00 to 3055+00
8	I-395 WB (Main Span)	1 test in the near vicinity of West Pier
9	I-395 EB (Main Spain)	1 test in the near vicinity of East Pier
14	SR 836 Widening	1 test between Station 1018+00 to 1020+0

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.
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 Osterberg Cell Load Test or Statnamic Load Test. For Osterberg Cell Load Tests use the same loading and unloading intervals, as well as the same loading times specified for the Modified Quick Test. Comply with the instrumentation requirements of 455-2.4. Before the resistance factors for static/statnamic load testing may be used for drilled shafts 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:

Bridge No.	Description	Minimum No. of Tests & Locations
1	EN Connector	1 test between Station 208+00 to 210+00
2	ES Connector	1 test between Station 917+00 to 920+00
3	SE Connector	1 test between Station 109+00 to 111+00
4	WB Connector	1 test between Station 4035+00 to 4040+00
5	I-395 WB	1 test between Station 2040+00 to 2045+00
6	I-395 EB	1 test between Station 1045+00 to 1050+00
7	EB Connector	1 test between Station 3050+00 to 3055+00
8	I-395 WB (Main Span)	1 test in the near vicinity of West Pier
9	I-395 EB (Main Spain)	1 test in the near vicinity of East Pier
14	SR 836 Widening	1 test between Station 1018+00 to 1020+0

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. ***Note to developer of the RFP: Coordinate with District Geotechnical Engineer to determine whether this frequency needs to be increased due to site variability.***
3. Determining the locations of the load test shafts and the types of tests that will be performed.
4. Performing pilot borings for test holes (also known as test shafts or method shafts) and load test shafts and providing the results to the Department at least one (1) working day before beginning construction of these shafts.
5. Preparing and submitting a Drilled Shaft Installation Plan for the Department's acceptance.
6. Constructing the method shaft (test hole) and load test shafts successfully and conducting integrity tests on these shafts.
7. Providing all personnel and equipment to perform a load test program on the load test shafts.
8. Determining the production shaft lengths.
9. Documenting and providing a report that includes all load test shaft data, analysis, and recommendations to the Department.
10. Constructing all drilled shafts to the required tip elevation and socket requirement in accordance with the specifications.
11. Inspecting and documenting the construction of all drilled shafts in accordance with the specifications.

12. Performing Cross-Hole Sonic Logging (CSL) or Thermal Integrity tests on all nonredundant drilled shafts supporting bridges. For redundant drilled shaft bridge foundations and drilled shafts for miscellaneous structures, perform CSL or Thermal Integrity testing on any shaft suspected of containing defects.
13. Repairing all detected defects and conducting post repair integrity testing using 3D tomographic imaging and gamma-gamma density logging.
14. Submitting Foundation Certification Packages in accordance with the specifications.
15. Providing safe access, and cooperating with the Department in verification of the drilled shafts, both during construction and after submittal of the certification package.

Spread Footings Foundations

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

1. Evaluating geotechnical conditions and designing the spread footing.
2. Constructing the spread footing to the required footing elevation, at the required soil or rock material, and at the required compaction levels, in accordance with the specifications.
3. 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 a 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.

D. Utility Coordination:

- **General**

The Department shall determine eligibility and be the approval authority for any claims for utility reimbursable work. The Design-Build Firm's Utility Coordinator will be responsible for the initial review of any such claims before forwarding them to the Department. Any approved UAP reimbursement claims will be paid directly by the Department.

The Design-Build Firm understand and agrees that UAO documentation provided with the Department's Concept Plans are specifically approved for that design and any change proposed by the Design-Build Firm is subject to agreement and revision of the submitted documentation by the Department and the UAO. The Design-Build Firm will be responsible to the UAO for any increased costs resulting from any change that the Design-Build Firm makes to the Department's Concept Plans, unless the change is

requested by the UAO. If the change is requested by the UAO, any additional cost to be charged to the UAO by the Design-Build Firm relating to the change shall be agreed to prior to acceptance of the change.

The Design-Build Firm shall make every attempt to design around existing utilities and minimize impacts. Any potential utility conflict shall be physically exposed and verified both vertically and horizontally prior to any excavation. Plans shall be provided to the Department showing existing and proposed utility locations and their relationship to the proposed construction.

- **Utility Adjustment Work**

The Design-Build Firm is responsible to resolve all utility conflict locations with each of the utility companies. Utility adjustment work shall occur during the FDOT project construction contract and is contingent upon the final design presented by the Design-Build Firm to the Department and the UAO for acceptance. Preliminary Utility Work Schedules (UWS) provided under "Reference Document RD-XX" shall serve as a guide for the Design-Build Firm in developing their construction schedule. The UWS prepare and presented by the estimated time required by the UAO to perform relocations impacted by the design as shown in the Concept Plans. It therefore becomes the Design-Build Firm's liability for all construction delays due to utility conflicts and the Design-Build Firm's responsibility for any damage done to existing utilities. This includes all relocations and protection during construction. The Design-Build Firm shall ensure the utility adjustment work is properly permitted by the Department and complies with the FDOT Utility Accommodation Manual.

E. Water Main and Sanitary Sewer Main Relocation

The Design-Build Firm shall provide existing conditions investigations, engineering, design, preparation of technical specifications, permitting, construction, testing and commissioning services, and customer contact for the relocation of an existing 20-inch water main, and an existing 20-inch sanitary sewer main. The design and construction services rendered by the Design-Build Firm shall result in a complete, functional, and operable pipe line relocation project. The scope of services shall include, but is not limited to, the following Project elements:

a. Coordinate the design and installation of the new 20-inch water main in NW 13th Street, NW Miami Court, NW/NE 14th street; the new 20-inch sanitary sewer main in NW 13th Street.
b. Approximately 900 feet of 20-inch D.I.P. water main, approximately 550 feet of 20-inch D.I.P. sanitary sewer main along the route described above, including following items;
   - Tap an existing 20-inch water main in NW 13 Street just east of NW 1st Avenue;
   - Tap an existing 20-inch water main in NE 14 Street and N Miami Avenue.
   - Design and install four (4) sanitary manholes.

b. The Design-Build Team shall design and construct the tapping and connection, and commissioning the new 20-inch water main without any interruption of service to the existing Miami-Dade Water and Sewer Department (MDWASD) customers.
c. The Design-Build Team shall design and construct the cut-in connection of sanitary manholes and 20-inch sanitary main without any interruption of service to the existing Miami-Dade Water and Sewer Department (MDWASD) customers.
d. Installation of all required fittings and valves, manholes/vaults, ancillary piping, tapping, utility relocation, temporary bypass, and tie-in connections to facilitate

successful construction and commissioning.

e. Cut, plug and place existing 20-inch water main and 20-inch and 8-inch sanitary sewer mains out of service. Removal and/or abandoning of existing manholes.
f. Cleaning, disinfecting and testing of the water main, acquiring necessary approval from permit agencies and placing water main into services.
g. Cleaning and testing of new sanitary sewer main, acquiring necessary approval from permit agencies and placing sewer main into services.
h. Restoration of all areas disturbed by construction activities to conditions equal or better to those before the commencement of work activities.

The standard and specifications of MDWASD can be accessed through link below:

http://www.miamidade.gov/water/design-construction-standards.asp

The scope of services shall include all professional services, all labor, supervision, quality control, project controls, safety programs, materials, tools, equipment, services, methods and procedures necessary or convenient for the Contractor to fulfill all duties and obligations, which can be reasonably assumed as necessary to fulfill the intent of the project scope and to provide a complete, fully functional and satisfactory Project.

3. Reference Documents:

The information provided to the Design-Build Firm as reference documents (RD-07) represents the outcome of prior utility coordination efforts to identify utilities within the Project limits and anticipated utility conflicts. These include an Existing Utility Relocation Plan (DGN Format), Conceptual Utility List of Potential Conflicts, and Utility Markup Plans from impacted Utility Agencies/Owners (UAO). The Utility Conflict Matrix is based on preliminary design provided in the Concept Plans. The Design-Build Firm shall be responsible to assess the accuracy/completeness of the available data from the provided Conflict Matrix, Utility Relocation Schedules. The Design-Build Firm is responsible for updating the Utility Conflict Matrix based on actual construction documentation, activities and field conditions.

4. Utility Coordination Personnel

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

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

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

1. Ensuring that all utility coordination and activities are conducted in accordance

with the requirements of the Contract Documents.

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

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

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

UA/O	Utility Relocation Type Eligible for Reimbursement (Y/N	Cost Estimate	Lump Sum Bid
FPL Transmission	Y	$700,000	XXX
FPL Distribution	XXX	XXX	XXX
TECO People Gas – South Florida	N	XXX	XXX
AT&T (Formerly Bellsouth)	N		
FPL Fibernet	N		
Comcast Cable	N		
Level 3 Communications	N		
Miami Dade Water & Sewer	N		

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

UAO	Utility Type/ Facility Type	Contact Person	Phone Number	E-Mail
Comcast	Cable	Leonard Maxwell-	(954) 447-8405	leonard_maxwell-newbold@cable.comcast.com

		Newbold		
FP&L Distribution	Electric	Karen Lund	(305) 442-5290	karen.lund@fpl.com
FP&L (Transmission/Substation)	Electric	George Beck	(561) 904-3604	George.Beck@fpl.com
FDOT -District 6	ITS	Sergio Bravo	(305) 499-2482	sergio.bravo@dot.state.fl.us
MDX	ITS	Ramon Borges	(305) 265-5477	rborges@eacconsult.com
Florida Gas Transmission Company	Gas	Joseph Sanchez	(407) 838-7171	joseph.e.sanchez@sug.com
Teco People Gas-South Florida	Gas	Alex Roche	(954) 453-0811	aroche@tecoenergy.com
AT&T Distribution	Telephone/ Communications	Steven B. Massie	(305) 222-8745	sm4788@att.com
Fiberlight, LLC.	Telephone/ Communications	Troy Gaeta	(954) 422-5618	troy.gaeta@fiberlight.com
FP&L Fibernet	Telephone/ Communications	Danny Haskett	(305) 552-2931	danny.haskett@fpl.com
Hotwire Communications	Telephone/ Communications	Phil Gallub	(954) 628-7022	pgallub@hotwirecommunication.com
Level 3 (Including Global Crossing Telecommunications)	Telephone/ Communications	David J. Morris	(954) 217-6754	David.Morris@Level3.com
Miami-Dade Enterprise Technology Services	Telephone/ Communications	Frank L. Dopico	(305) 275-7813	Frank.Dopico@miamidade.gov
Qwest Communications	Telephone/ Communications	Mike Fitzgerald	(813) 630-2605	mike.fitzgerald@qwest.com
Sprint (Nextel)	Telephone/ Communications	Mark D. Caldwell Jon Baker	(321)287-9942 (352) 409-5095	mark.d.caldwell@sprint.com hummbling@mpinet.net
Verizon (MCI)	Telephone/ Communications	John McNeil	(863) 965-6438	john.mcneil@verizon.com
XO Communications	Telephone/ Communications	Anthony Kowaleski	(305) 356-3160	anthony.kowaleski@xo.com
MDCPWD-Signal	Traffic Signal	Aurelio del Valle	(305) 592-8925	aurelio2@miamidade.gov
MDWSD	Water and Sewer	Patrick Chong	(786) 268-5255	pchon@miamidade.gov

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 and the Department will not pay the Utility Agency/Owner (UA/O) or the Design-Build Firm for the utility relocation work regardless of the UA/O's eligibility for reimbursement.

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

DEVIATION FROM THE CONCEPTUAL UTILITY RELOCATION PLAN: If the Design-Build Firm chooses to deviate from the conceptual plans and the scope of the impact to a utility depicted in Appendix XX, 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 Appendix XX. 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 Appendix XX. 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 Appendix XX. 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 Appendix XX, or be liable for any time delays caused by a change in scope of the impact to a utility from that depicted in Appendix XX.

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

5. **Location of Existing Utilities:**

Locations of such utilities, along with other utilities that may exist but whose locations are not clear, shall be verified by the Design-Build Firm with the utility companies or agencies prior to start of construction. Although the Concept Plans depict utility locations, actual locations are uncertain. The Design-Build Firm is required to verify all locations, in accordance with Florida Statute. The Design-Build Firm shall call Sunshine State One-Call of Florida, Inc. at 1-800-432-4770 and coordinate with each UAO prior to any and all work impacting utilities

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, Traffic Control Plans, Environmental Permits and other necessary documents.

The Concept Plans in "Reference Document RD-01" have been developed to illustrate the anticipated impact and work required for this project. The Design-Build Firm may make use of the design in the

Concept Plan as a starting point for the design. However, the Design-Build Firm is not limited to only the work indentified in the Concept Plans but must stay within the constraints of the Project Commitments.

The Department will require continuous coordination during the design analysis and final plans development. During key points of the design analysis and final plans development, the Design-Build firm will be required to present key design components (line and grade concepts, component plans, design reports, calculations, etc.)

As part of the I -395 Reconstruction project improvements to the surface streets in the area under I-395 will also be included. The improvements vary by street but generally involve milling and resurfacing to extend the pavement life and restore any damage due to construction and equipment, addressing ADA issues including curb ramps and sidewalks and signal work to replace signals impacted by the I-395 construction. With the exception of Biscayne Blvd. (US-1), which is maintained by the FDOT, the streets are all owned and maintained by local agencies, either Miami-Dade County or the City of Miami. Below is a listing of all surface streets to have work done as part of this project and a description of the work proposed, in addition to the type of work listed all streets will correct ADA deficiencies including curb ramps.

- NW 14 Street – Milling and Resurfacing from NW 3rd Avenue to NW 1st Court (0.20 miles)
- NW 14 Terrace – Milling and Resurfacing from NW 3rd Ave to WN 2nd Avenue (0.08 Miles)
- NW 3rd Avenue – Milling and Resurfacing from south of NW 14th Street to NW 15th St. (0.12 miles)
- NW 2 Court– Milling and Resurfacing from North of NW 13th Street to NW 14th Street (0.09 miles)
- NW 2nd Avenue– Reconstruction to reconnect existing roadway on north and south side of I-395 from North of NW 13th street to NW 14th Terrace (0.17 miles)
- NW 1st Place– Milling and Resurfacing from NW 13th Street to NW 14th Street (0.17 miles)
- NW 1st Court– Milling and Resurfacing from south of NW 13th Street to NW 14th Street (0.12 miles)
- NW 1st Avenue (West) – Milling and Resurfacing from north NW 12th Street to NW 14th Street (0.15 miles)
- NW 1st Ave (East) – Reconstruction from NW Miami Ct to NW 13th St.
- NW Miami Ct – Permanent closure to allow for access ramps at N Miami Avenue
- N Miami Ave – Milling and resurfacing from North of NE 11th Terrace to NW 1st Avenue (0.13 miles)
- NE 1st Avenue – Milling, Resurfacing and Widening from North of NE 11th Street to North of NE 13th Street (0.13 miles)
- NE 13th Street – Milling, Resurfacing and Widening from N Miami Ave to NE 2nd Street (0.22 miles)
- NW 13th Street – Reconstruction to modify alignment from NW 1st Ave to N Miami Ave
- NE 11th Terrace – New construction and Milling and Resurfacing from N Miami Ave to NE 2nd Avenue (0.22 miles)
- Biscayne Boulevard– Intersection modifications at NW 11th Ter.; Milling and resurfacing

from north of NE 11th Terrace to South of NE 13th Street (0.11 miles)

- **Design Analysis:**

For the improvements of this project, the Design-Build Firm has been provided with approved signed and sealed Typical Section Package, Design Variations/Design Exceptions, and to which the Concept Plans are based in. If the final design requires a modification, revision, or addition to these packages, then the Design-Build Firm shall develop and submit their own signed and sealed copies of the applicable documents for review and concurrence by the Department and FHWA, on this Federal Aid Oversights Projects. Although a Preliminary Pavement Design Package has also been provided, the Design-Build Firm shall develop and submit their own signed and sealed copy of the Final Pavement Design Package for review and concurrence by the Department and FHWA, if applicable, for this Federal Aid Oversights Projects.

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

The Design-Build Firm shall not propose to reduce any of the following criteria as set forth by the Typical Section Package and roadway plans provided in the RFP:

- Design Speed
- Number of general purpose lanes/auxiliary lanes
- Lane widths
- Shoulder width

The Design-Build Firm must comply with the minimum design speed for each of the mainline and connector ramps listed in the Typical Section Package. Any refinement to the geometrics of the facility by the Design-Build Firm shall not result in a reduction of the design speed of any roadway.

The Design-Build's signed and sealed Typical Section Package, Pavement Design Package, Design Exceptions/Design Variations shall be in accordance with the Department PPM and shall include the following:

1. **Roadway Design:**

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

2. **Typical Section Package:**

   - Transmittal letter
   - Location Map
   - Roadway Typical Section(s)
     1. Pavement Description (Includes milling depth)

2. Minimum lane, shoulder, median widths
3. Slopes requirements
4. Barriers
5. Right of Way

- Data Sheet
- Design Speed

3. **Pavement Design Package:**

- Pavement Design
  1. Minimum design period
  2. Minimum ESAL's
  3. Minimum design reliability factors
  4. Resilient modulus for existing and proposed widening (show assumptions)
  5. Roadbed resilient modulus
  6. Minimum structural asphalt thickness
  7. Cross slope
  8. Identify the need for modified binder
  9. Pavement coring and evaluation
  10. Identify if ARMI layer is required
  11. Minimum milling depth

4. **Drainage Analysis:**

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

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

The objective is to obtain approved Environmental Resource Permit (ERP) from the South Florida Water Management District (SFWMD) by meeting water quality and attenuation design criteria. The Design-Build Firm shall provide flood protection in accordance with FDOT criteria. The Department has secured a Conceptual ERP that the Design-Build Firm shall modify as the final design is developed.

The proposed drainage system consists of catch basins, bridge scuppers, and storm drains of various diameters collection runoff from the I-395 highway and its adjacent local roads and parcels. The conceptual design to collect the runoff consists of wells and pumps located under the highway designed.

(as shown in the Drainage Report provided under "Reference Document").

Perform design and generate construction plans documenting 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. The Design-Build Firm shall provide the Department's Drainage section a PDF of drainage report(s), and all related electronic drainage files.

The Design-Build Firm must coordinate with the District Landscape Architect to comply with Project's Conceptual Landscape Plans and Visual Quality Manual. The Design-Build Firm shall identify and preserve future landscape opportunities within the right-of-way.

5. Design Exceptions/Variations

The design exceptions and variations approved or conceptually accepted for this project are provided in attachment A-10. The Design-Build Firm shall use these documents for acceptable minimum criteria only in the site specific locations identified in the exceptions and variations. The Design-Build Firms is required to submit and obtain approval of all new variations and exceptions for the project, including modifications, if necessary, on the ones previously approved by the Department. The design exceptions and variations do not set project-wide acceptable minimum criteria. Any additional design variations or modifications to the existing package resulting from the Design-Build Firm's proposed design shall be presented as an Alternative Technical Concept (ATC) during the Technical Proposal phase. No additional design exceptions and variations other than those conceptually agreed to during the ATC shall be allowed. The Design-Build Firm shall be fully responsible for obtaining all other design variations and exceptions approvals for any deviation from Department or AASHTO criteria. The Design-Build Firm is encouraged to eliminate as many identified design variations / exceptions during refinement of geometry.

F. Railroad/Transit Accommodations

As described in the Concept Plans, there are five new bridges over the FEC Railway tracks. The MDT Metromover Bridge will require modification where it crosses I-395.

FEC Railway and MDT properties disturbed during construction, other than the approved modification to the Metromover Bridge, shall be fully restored to the original graded and elevation, all at the cost of the Design-Build Firm. The Design-Build Firm shall make all reasonable attempts to avoid impact to any utilities which are found in the FEC Railway or MDT corridors, especially those found to be in close proximity to proposed construction activities, except for the approved modifications to the Metromover Bridge where it crosses the Project.

1. Florida East Coast (FEC) Railway

For design and construction of the bridges over FEC Railway tracks, the Design-Build Firm shall adhere to the FEC Railway Criteria and any additional requirements found in the agreement established between FDOT and FEC Railway. The minimum vertical clearance within the FEC Railway full right-of-way shall be 23'-6". No appurtenances shall encroach into this vertical clearance.

2. Miami-Dade Transit

Design and reconstruction of the Metromover Bridge that crosses over I-395 approximately 600 feet to the east of the signature span is required. Concept Plans have been developed and are included in RD-01. The Metromover Bridge has an existing pier located within the eastbound corridor. The Design-Build Firm will develop plans to support the existing span without reduction in vertical clearance. The final design will not reduce the rideability of the existing facility be increasing deflection and vibrations. The Design-Build Firm will secure approval from MDT prior to start of work. The Design-Builder, as part of the final design and sequence of construction, must consider a stability testing period for the retrofit work prior to the removal of the existing pier.

For design and construction on the MDT facility or adjacent to it, the Design-Build Firm shall adhere to the latest addition of the MDT Adjacent Construction Safety Manual, the edition available at the time of this RFP, dated November 2011, is provided as attachment A-16. Any work occurring over or adjacent to the Transit facility shall be coordinated with MDT prior to construction activities in this area as the work may require involvement from MDT personnel. The 30-ft MDT safety zone may or may not fall within MDT right-of-way but must be adhered to in either case. Close and continuous coordination with MDT is required when near or within MDT right-of-way.
The Design-Build Firm shall coordinate all improvements associated with the Metromover pier removal with the planned Beach Corridor project. The Design-Build firm shall be responsible to ensure that any improvements within MDT's right-of-way do not preclude the future construction of the Beach Corridor envelope within this area.

G. Geometric:

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

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

The Design-Build Firm will be allowed to refine the horizontal and vertical alignments depicted

in the Concept Plans due to existing field conditions or proposed design elements but shall adhere to the minimum requirements in the commitments, design speeds, general locations of ingress/egress, number of lanes, number of direct connectors and CD roads.

The Design-Build Firm shall adhere to the number of lanes and configurations for all roadways, auxiliary lanes, acceleration and deceleration lanes, and ramps as depicted in the Concept Plans. No reduction in the number of ingress and egress points shall be permitted.

The sequence of ramp entrances and exits, and associated merge and diverge movements as depicted in the Concept Plans shall be maintained. The Design-Build Firm shall follow the AASHTO recommended minimum ramp terminal spacing for entrance and exit conditions regardless of the side of the roadway that the succession of ramp connections occur.

Design Speed

A design speed of 60 mph shall be used for I-395 Mainline 45 mph for the Eastbound and Westbound Connector. Minimum design speeds for individual ramps local streets are shown in the Typical Section Package contained in Attachment I and shall not be changed by the Design-Build Firm.

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

I. Aesthetics:

1. General

The Design-Build Firm shall conduct all work necessary to meet the requirements for visual quality management, including: providing a Visual Quality Manager and Visual Quality Graphic Support Team, developing and implementing a Visual Quality Management Plan and Visual Quality Plans, coordinating

with a appropriate agencies, and maintaining a process that produces a design that is consistent with the Record of Decisions.

2. Administrative Requirements

a. Staff

1. Approval

FDOT retains the right to approve or reject members of the Design-Build Firm's staff, in positions defined below, prior to their participation on the Project. Such Approval will be based on the qualification requirements set forth in this Section.

2. Replacement

The Design-Build Firm shall notify FDOT in writing of any proposed changes to Approved staff and shall include a detailed resume summarizing the items set forth below. No defined Project staff shall be replaced without the prior written Approval of FDOT. The changes will only be approved if the replacement staff member(s) are equally qualified or more qualified than the original member(s).

3. Visual Quality Manager

1) Qualifications

- Shall have at least ten years of recent relevant experience on projects similar in scope and complexity to the Project
- Shall be an architect with no less than ten years of recent relevant experience in leading the visual quality aspects of bridge architecture and landscape architecture design in major transportation projects
- Shall be certified by the Department (or similar training program sanctioned by AASHTO, FHWA, or another state DOT) as having completed a minimum of eight Professional Development Hours in Context Sensitive Solutions/Design or proof of equitable experience in transportation projects where Context Sensitive Solutions principles were implemented
- Shall have a minimum of ten years of recent experience in conducting a visual quality public planning process, producing a visual quality manual, and providing technical assistance in implementing visual quality requirements during design and construction
- Does not need to be co-located full-time, but at a minimum shall be at the co-located facility for periodic over-the-shoulder review meetings, design coordination meetings, and comment resolution meetings

2) Responsibilities

The Visual Quality Manager shall:

Propose the basic format and methodology of the Visual Quality Management Plan (VQMP) for Approval by FDOT

Develop and implement the VQMP and amend it as required in conjunction with FDOT

Ensure adherence to the Design-Build Firm's visual quality plans in design and construction of the Project

Graphically present and resolve visual quality issues of Project components (e.g., sculptural form, shape, texture, color, proportion, magnitude, scale) with FDOT, the Visual Quality Advisory Team, and other members of the Design-Build Firm's team

Direct and oversee any proposed amendments to the Design-Build Firm's visual quality plans, including the preparation of drawings (plan views, elevations, and sections), computer generated renderings, and 3D and 4D full-color computer generated visualizations to depict proposed refinements or modifications to the Design-Build Firm's visual quality plans

3) Authority

The Visual Quality Manager shall have the authority to request approval from FDOT to deviate from the Record of Recommendations and Decisions. The Visual Quality Manager shall be the only Design-Build Firm representative to have this authority. Review of requested deviations by FDOT may take up to 60 Days to complete.

The Visual Quality Manager shall be the only Design-Build Firm representative with the authority to perform independent design evaluations and construction review to assess compliance with the requirements of the Visual Quality Management Plan.

iv. Project Bridge Architectural Designer

The Design-Build Firm's team shall include an individual who possesses the following qualifications:

A minimum of 10 years of experience as a bridge architectural designer.

Experience as lead architectural designer, having collaborated with bridge engineers on at least three major bridge projects of comparable scale, prominence, and complexity.

Three project examples that convey proficiency in bridge architectural design.

Experience working with large and diverse stakeholder groups, including state departments of transportation, elected officials, and community organizations.

Client reference from each project example including: name, title, project role, address, phone number, and email address.

v. Project Architectural Lighting Designer

The Design-Build Firm's team shall include an architectural lighting designer with the following qualifications:

Professional member of the International Association of Lighting Designers.

Completion of architectural lighting on at least three major built bridges and at least two other projects in design or under construction.

Experience working with large and diverse stakeholder groups, including state departments of transportation, elected officials, and community organizations.

vi. Visual Quality Graphic Support Team

The Design-Build Firm's team shall include staff with experience in a variety of graphic methods and software programs. Each of these individuals shall have at least five years of experience providing drawings (e.g., plans, elevations and sections), manually drawn renderings, and 3D and

4D full-color computer generated visualizations to depict conceptual and detailed design solutions to visual quality elements.

a. Visual Quality Management Process

i. Visual Quality Advisory Team

The Project Advisory Group (PAG), to be assembled by FDOT, will consist of the following:

FDOT representative(s)
City of Miami Urban Planning Department
Non FDOT and City of Miami representative(s)
Bridge Architect and Aesthetics representative
Department Bridge Engineer representative(s)
Department Construction representative(s)
Local agency staff, as appropriate
Others as deemed necessary by FDOT

ii. Context Sensitive Solutions

The Design-Build Firm shall conduct visual quality management work consistent with FDOT's approach to Context Sensitive Solutions as an approach to plan, design and construct a transportation system in a rich and dense urban environment as well as the Transportation Research Board (AFF10) subcommittee for Aesthetics sourcebook for Context Sensitive Solutions. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, craftsmanship and long term performance goals. Context Sensitive Solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders.

The holistic design of the corridor must conform and fit the existing and future conditions of the site context. Very few, if any projects in North America, have such divergent neighborhoods, dominant sight lines and the ability to wave neighborhoods back together as this Project does. The Context Sensitive Design must consider the spaces above the main line as well as at the streetscape level equally. The design must consider the pier shape and location, vertical clearances, sightlines, lighting, streetscape and urban design with the intent to promote the future development in the area as described in the City of Miami Master Plan, the CDAs Master plans.

The streetscape will be designed to promote development to restore and enhance the urban fabric as well as grass roots activities such as community gardens, public art and similar urban activities.

iii. Visual Quality Management Plan

1) Content

The Design-Build Firm shall propose the basic format and methodology of the Visual Quality Management Plan (VQMP) for Approval, and then produce a draft VQMP in accordance with the requirements of this Section. The VQMP shall:

Establish the methods for coordinating and interacting with the Project Advisory Group.

Set forth the methods for defining, developing, and detailing solutions for enhancing existing visual quality.

Develop a schedule for visual quality-related items and anticipated number of meetings, including Project benchmarks and deliverables to be presented and discussed with the PAG.

Define the involvement of the Visual Quality Manager and the PAG in identifying areas or elements of the proposed bridge, roadway, and surroundings that present opportunities or concerns regarding visual quality.

Define the responsibilities and authority of the Visual Quality Manager and the Project Advisory Group in overseeing and reviewing overall bridge designs, design details, mock-ups, samples, and other submittals.

Define the process by which the Visual Quality Manager will coordinate the input from the Project Advisory Group with other members of the Design-Build Firm's design and construction team.

Define the process of producing and disseminating the Record of Recommendations and Decisions throughout the Project.

2) Format and Dissemination

After Port Approval of the draft VQMP, the Design-Build Firm shall prepare an Approved VQMP, with covers possessing the words "Approved Visual Quality Management Plan," the name of the Design-Build Firm, the name of the Project, and the date of Approval. Each copy of the plan shall be in a three-ring binder with waterproof cover. The contents shall be on 8-1/2- x 11-inch bond paper. If 11- by 17-in exhibits are required, they shall be punched and bi-folded to 8-1/2 x 11-in size, portrait orientation.

At the same time, the Design-Build Firm shall prepare CDs containing PDF copies of the Visual Quality Management Plan. Each CD shall be in a hard plastic, re-sealable case. The CD label, printed with the words "Approved Visual Quality Management Plan," the name of the Project, and the date of Port Approval, shall be readable through the case.

iv. Record of Recommendations and Decisions

The Design-Build Firm shall compile and maintain a Record of Recommendations and Decisions, documenting actions of the Project Advisory Group and the Visual Quality Manager. This document shall be updated throughout the Project as revisions or additions occur and shall guide the Design-Build Firm throughout the design and construction of the Project with regard to visual quality and Context Sensitive Solutions issues.

5. At a minimum, the Record of Recommendations and Decisions shall contain visual quality recommendations, decisions made, dates of decisions, participating parties, and supporting information for the decisions.
6. The record shall be revised after each meeting that results in changes in visual quality design elements, including materials, appearance, extent, and installation.
7. The Design-Build Firm shall provide 40 binders with dividers for the purpose of storing copies all Record of Recommendations documents and materials.

8. The Design-Build Firm shall distribute the initial version and all updates of the Record of Recommendations and Decisions to the Visual Quality Advisory Team, FDOT, and other members of the Design-Build Firm's design and construction team no later than 15 Days after every Advisory Team meeting.

b. Meetings

i. General

FDOT and the Design-Build Firm shall meet at the request of either party to discuss and resolve matters relating to visual quality. The requesting party shall provide the other with no less than five Days prior notice of such meetings. The Design-Build Firm shall prepare and distribute meeting minutes within 5 Days after meeting.

ii. Visual Quality Management Kick-off Meeting

The Design-Build Firm shall take an inventory of all the existing visual quality elements and issues in the corridor, including plantings. The Design-Build Firm shall schedule and facilitate a visual quality management kick-off meeting to present to FDOT and the PAG their inventory of visual quality elements and issues, a layout of in-place and proposed visual quality elements within the Project area, and conceptual drawings and visualizations of all visual elements.

The meeting shall also be used to determine the permanent Visual Quality needs of the Project, Port preferences, and appropriateness of proposed elements.

iii. Visual Quality Management Progress Meetings

The Design-Build Firm shall schedule and attend monthly progress meetings to update, present, and discuss design progress drawings with the Department.

3. Design Requirements

a. Visual Quality Elements

The following qualities shall be inherent in the design of the Project:

- Minimum apex of the structure above street level is 245'
- Minimum cable supported length main span length is 550'
- Main span deck must be constant depth
- Two fully independent structural systems that look like one form in final phase
- No twin structures (For example, no twin basket handle arches)
- Identify pier locations
- Visual consistency between main line box girder and main span girder
- Visual consistency between main line box girder and connector ramps box girder

- Main line and connector ramp piers must have the same form
- Main line and connector ramp piers must be designed to have deep relief for shadows and visual interest
- Retaining walls must have deep relief for shadows, limited amounts of consistent surface area to reduce graffiti and create visual interest
- Refer to graphic (Fig. QQ) of allowable foundation locations

- Requirements for street scape elements

    - Zone A
    - Zone 1
    - Zone 2
    - Zone 3

Visual Quality Intentions for the Design:

- The main span is intended to be a world-class, iconic structure and serve as a City of Miami landmark.
- All bridges are integrated and all elements complement the overall appearance of the main span structure.
- Bridges possess an elegant simplicity in which the engineered lines and proportions are the primary design elements.
- The design elements exhibit fluid lines in the overall presentation of the bridges.
- New bridges are integrated into the existing setting to match current and future massing of the surrounding buildings.

- Bridge designs account for the many and varied vantage points from which the bridges are viewed and their various speeds.
- Motorists, bicyclists, and pedestrians feel safe and secure.
- The approach span architectural elements complement the main span architecture and exhibit well-resolved transitions between bridges, including different depths and types of superstructures and road-width transition points.
- Touchdown points of approach bridges blend into the adjacent landscape, with wall heights minimized.
- The designs account for the appearance of the new bridges during both day and night. Architectural lighting of main spans are integrated with roadway and pathway lighting that meets required light levels and is integrated with the overall design vision.
- Bicycle and pedestrian facilities are safe, attractive, and visually integrated into the main-span bridge and approach structures.
- Aeronautical lights are selected and placed as required without detracting from the overall architectural vision of the main span design.
- Sign structures and maintenance facilities are integrated well into the overall architectural vision.

- Utility and drainage systems minimize adverse visual impact and are well integrated into the bridge architecture. Drainage downspouts (when required) are internally integrated into towers and piers.
- If mechanically stabilized earth (MSE) retaining wall systems are included, the shape, pattern, and texture of the face relates to the overall architectural vision of the Project.

i. Roadway Facilities

This section applies to all roadway facilities constructed as part of the Project, including mainline, ramps, turn lanes, shoulders, and other facilities that convey vehicular traffic.

ii. Bicycle and Pedestrian Facilities

This section applies to all facilities constructed as part of the Project that will convey bicycle and pedestrian traffic, including trails, walks, and crossings, regardless of jurisdictional ownership. The Design-Build Firm shall design the horizontal alignment, vertical alignment, and cross-section of bicycle and pedestrian facilities, including ramps that connect trails and walks to crossings, to provide visual cues to bicyclists, pedestrians, and motorists and enhance bicycle and pedestrian safety by reinforcing the behavioral expectations of all users.

iii. Grading

This section applies to any disturbance of the existing landform or other modification; including any excavation (cutting) or embankment (filling) that alters the elevation of the existing landform.

The Design-Build Firm shall design and construct grading so as to establish visual continuity between the topography of the highway corridor and the topography of the adjacent landscape.

iv. Retaining and Abutment Walls

Retaining structures shall be designed as part of a cohesive architectural vision and be complementary to the proposed bridge architecture. Retaining and abutment walls at bridge touch-down points shall be designed to blend into the existing landscape and not create inhabitable space or blind corners. The surface of the retaining structures shall be designed with deep relief and limited surface for graffiti.

v. Slope Protection

On any slopes that will receive sufficient sunlight and water to support plants, employ vegetative slope protection methods. On other slopes, employ materials, textures, patterns, and colors that will complement adjacent elements and contribute to the overall aesthetic effect of the Project.

vi. Culverts

This section shall apply to all structures that traverse beneath a roadway, trail, driveway, or similar facility to convey something that would impede traffic if allowed to cross the road, trail, or driveway at grade.

The Design-Build Firm shall establish visual continuity between the design of culverts and their context. In particular, the Design-Build Firm shall design and build culverts and associated erosion control elements to minimize their visibility from the roadway.

vii. Traffic Barriers

Traffic barriers shall be part of a comprehensive architectural vision.

viii. Lighting

The Design-Build Firm shall prepare and submit an Architectural Lighting Plan for the main span to FDOT and the Project Advisory Group at least 35 Days before beginning the final design of these features. For all other lighting matters see Section 16.

ix. Color and Surface Palettes

The Design-Build Firm shall consider color as an essential Project design element, integral to the design of other visual quality elements, including; all bridge components, retaining walls, traffic barriers, fencing, etc. The Design-Build Firm shall submit color and surface finish palettes and actual color and surface samples, to FDOT and the Project Advisory Group at least 60 Days before beginning the construction of features to which they apply.

x. Signing

This section applies to all signs installed on Right of Way as part of the Project and maintained by the Department or other governmental agency, including regulatory, advisory, directional, service, logo, and attraction signs. In addition to requirements in Section 16, the Design-Build Firm shall use uniform sign panel heights when sign placement requires that more than one sign panel is located on a signing structure.

xi. Fencing

The use of fencing shall be avoided in zones 1-3 and will be allowable to keep areas from becoming an inhabitable location of create unsafe blind areas. If fencing is permitted it shall conform to the comprehensive architectural vision.

xii. Utilities

This section applies to all above-ground Utilities, regardless of ownership, visible to neighbors or travelers, including Utility poles, overhead wires, and cabinets; to components of underground Utilities that are visible above ground, such as access covers, stormwater grates, and pump houses; and where below-ground Utilities will affect the visual quality of the corridor by compromising visual quality, prohibiting the installation of vegetation, or by adversely affecting existing vegetation.

The Design-Build Firm shall design and place Utilities so that the experience of neighbors and travelers is visually harmonious, orderly, and coherent.

The Design-Build Firm shall:

Coordinate the location of Utility cabinets with other design elements to the satisfaction of the Visual Quality Team

Paint Utility cabinets to complement other structures within the Project area or to blend with the natural surroundings

Place Utilities so as to not preclude the placement of trees, shrubs, groundcovers, or other visual quality elements in the public Right of Way

b. Visual Quality Graphics

i. Plans, Elevations, Cross-Sections, Details, and Renderings

The following visual quality plans shall be included in the Intermediate and Final Design submittals and in RFC Documents: elevation view, plan view, cross section, and details for each bridge, wall structure, and other visual quality element listed below. Drawings shall be appropriately labeled and dimensioned and include supporting narratives or descriptions. Exhibits or drawings developed for other disciplines (e.g., structures) can be used to meet requirements for required visual quality plans.

If no significant design changes affecting a visual quality element have occurred between submittal stages, there is no need to submit updated plans. FDOT and the Visual Quality Manager shall determine whether updated plans are required.

1) All Bridges

Substructures – For each substructure type, provide drawings showing the footing footprint, number of columns, column shape and orientation, details of architectural shapes, tapers and finishes, approximate dimensions, whether the substructure is solid or hollow, approximate minimum wall thickness, and any unique details.

Superstructures

- Provide drawings showing the cross section of each superstructure including locations and dimensions of lanes, barriers, shoulders, path(s), railings, fences, primary structural elements, light fixtures, deck joints, and conduit locations.
- Provide drawings showing the elevation and cross-section of primary structural elements for each superstructure including the deck, floor beams, edge girders, segmental girders, stringers, stay cables and bearings. These can be included in other views, such as the

overall bridge cross-section or elevation, as long as the scale allows configuration of elements to be understood.

2) Main span

Tower

- Provide drawings showing the tower configuration and details, including height, shape, tapers, approximate dimensions, cross sections, orientation, and architectural details.
- If using multiple shafts to make up towers, provide drawings indicating size, shape, and location.

Stay Cables – Provide drawings showing anchor locations, details of anchorages, guide pipes, and cable arrangement, including number and spacing.

3) Retaining Walls

Provide drawings for earth retaining, support, and special-purpose walls. Include elevation and plan views showing the extent of the Work, conceptual details for connections, transitions, and architectural surface treatments.

4) Embankment Grading

Provide plan, elevations, and section drawings for embankments and their relationship to retaining walls. Include elevation and plan views showing the extent of the Work.

5) Lighting

Provide plans, sections, elevations, details, and renderings of architectural lighting for the main span, inclusive of towers, cables, deck, under-structure, and piers.

6) Grading

Provide plans or renderings as needed to convey the visual quality design approach related to grading within the construction limits.

7) Slope Protection

Provide plans, sections, and/or renderings as needed to convey the visual quality design approach for slope protection.

ii. Visualizations and Animations

1) 3-D Computer-Generated Visualizations

The Design-Build Firm shall provide visualizations that accurately depict color palette, textures and materials. These shall include the following:

Daytime visualizations of the main cable-stayed structure from the perspective of a driver and of a distant observer and from the water channel below

Nighttime visualizations showing architectural lighting concepts for the main span

Visualizations shall be submitted in the following formats:

- Uncompressed TIFF (minimum of 40 MB)
- Compressed JPEG files of all graphics and photos for use in PowerPoint

- Prints – 3 each (12 inches by 15 inches or 11 inches by 14 inches at 150 DPI) on photo-quality paper
- Mounted posters – 3 each (20 inches by 30 inches minimum at 150 DPI) on photo-quality paper
- PDF files of all graphics

2) 3-D and 4-D Computer-Generated Animations

The Design-Build Firm shall provide a full-color computer-generated 3-D ("fly-through") animation for the purpose of showing the Design Build Team's design and response to the visual quality requirements. The animation must show the major parts of the project in both day and night conditions. The intention of the 3D animation is to demonstrate the Design Build team's approach to aesthetics. The 3D shall show the major parts of the project from a pedestrian level and speed, from vehicle travelers at the street level, travelers on the main line, from aerial perspectives and any other key viewpoints or speeds the Design Build Team deems important to demonstrate the full design context.

The purpose of the 4D animation is to demonstrate a thorough understanding of the demolition, project phasing and MOT. The 4D will show all phases of the project as built in 20 day periods throughout the entire construction period. The 4D shall be set in the current built environment context. The conclusion of the 4D animation is intended to show the Design Build Team's understanding of the complexity of the phases and MOT. 4D must include time.

The 3D and 4D can be two separate files or a combined file

Minimum standards for animation:

- Frame rate = 30 fps
- Resolution = 1280 x 720 screen resolution
- Sound = 1,536 kbps
- Length = Duration of the frames/phasing should be displayed long enough for the viewer to understand the significant demolition/construction activity of the period. The overall play length shall be sufficient to demonstrate the team's approach.

Files shall be submitted in high-definition Windows Media Video (WMV) encoded with 5 megabits per second (mbps) bitrate, CD or data DVD.

iii. Model

The selected Design-Build Firm shall provide a portable physical model of the entire project and detailed models of each zone 30 days after NTP and update it as major design refinements are made. The model shall be constructed of durable materials that are sufficiently lightweight and modular to easily transport. The model shall depict the bridge, and the first three piers of the east and west approach bridges, water, and landform, at a scale between 1:360 and 1:480.

4. Construction Requirements

a. Visual Quality Mock-ups and Samples

The Design-Build Firm shall provide mock-ups and/or samples for the items described in this Section 15.4. Mock-ups and/or samples Approved by FDOT shall become the reference standard(s). The reference standard(s) shall be maintained undisturbed until Final Acceptance of the Project.

i. Retaining Structures

The Design-Build Firm shall construct an 8-foot by 8-foot mock-up for each type of retaining wall surface depicting surface relief, texture, finish, and color.

ii. Lighting Mockups

Provide a sample of each lighting fixture type not already an FDOT standard. Organize a mockup of these fixtures for review by the ASC, the Project Engineer, the Lighting Designer and/or Electrical Engineer.

For the aesthetic lighting, organize a review of the fixture aiming after the fixtures have been installed, commissioned and aimed. PAG and the Lighting Designer and/or Electrical Engineer will review the installed fixtures and provide comments and recommend adjustments as necessary.

ii. Lighting Control Content

The initial control system programming content shall include a minimum of 12 dynamic looks and 12 static looks. The ASC and the Lighting Designer and/or Electrical Engineer will develop a narrative for the content to be programmed and scheduled. The user interface will allow the user to schedule new looks, override the existing scheduling and revert back to original programming. A Lighting Control Systems Integrator will coordinate the commissioning, content programming, initial scheduling, user interface design and end user training for the aesthetic lighting control system.

5. Deliverables

Unless otherwise indicated, all deliverables shall be submitted in both electronic format and hardcopy format. Acceptable electronic formats include Microsoft Word, Microsoft Excel, or Adobe Acrobat (PDF) files, unless otherwise indicated. At a minimum, the Design-Build Firm shall submit the following to FDOT:

Deliverable	For Approval or Acceptance	Number of Copies		Submittal Schedule	Reference Section
		Hardcopy	Electronic		
Visual Quality Management Plan Draft	Approval	10 individually bound full-color copies	PDF	Within 30 Days following NTP	
Approved Visual Quality Management Plan	Acceptance	40 individually bound full-color copies	Five CDs with PDF of VQMP	Revised and re-submitted within 10 Working Days of FDOT Approval of Draft	

Deliverable	For Approval or Acceptance	Number of Copies		Submittal Schedule	Reference Section
		Hardcopy	Electronic		
Visual Quality Plans: plans, elevations, cross sections, details, and renderings	Approval	40 full-color punched copies for binders	PDF	Distribute at Visual Quality Advisory Meetings and include in Record of Recommendations	
Visual Quality Plans: 3-D Visualizations	Approval	40 full-color punched copies for binders, Three copies each of photos Three copies each of posters	Five CDs with TIF, JPEG, and PDF files	Distribute at Visual Quality Advisory Meetings and include in Record of Recommendations	
Visual Quality Plans: 4-D Animations	Approval	NA	Five CDs or data DVDs with HD WMV files	Distribute at Visual Quality Advisory Meetings and include in Record of Recommendations	
Portable scale model of bridge	Acceptance	NA	NA	Within 90 Days of NTP1	
Record of Recommendations and Decisions	Acceptance	40 punched and bound copies	PDF	15 Days maximum after each PAG meeting	15.2.3.4
Architectural Lighting Plan – Main span	Approval	40 copies	PDF	35 Days prior to beginning Final Design of this feature	15.3.1.8
Color and surface palettes, including samples (3 in. x 5 in. min.)	Approval	Samples – 3 sets	PDF	60 Days prior to construction of features	15.3.1.9
Visual Quality mock-ups and samples	Approval	Mock-ups – 1each Samples – 1each	PDF	Minimum 15 Days prior to construction	15.4.1

J. Structure Plans:

The requirements of this section shall apply to the design and construction of all

permanent and temporary structures. Plans shall be accurate, legible, and complete in design, drawn to appropriate scale and furnished in reproducible form on material acceptable to the Department.

The Design-Build Firm shall undertake all necessary inspections and perform necessary structural analysis, evaluations and designs for the structural aspects of the project in accordance with applicable engineering design standards, guidelines and procedures.

1. **Definitions:**

a. I-395 Aesthetic Agreements – Aesthetic Agreements included in Attachment XX.
b. I-395 Aesthetic Requirements – the aesthetic requirements included in Attachment XX including all local agency I-395 Aesthetic Agreements, Miami-Dade County Aesthetic Requirements, etc.
c. Signature Bridge Elements – the structural, aesthetic components and feature lighting components that make up the Wishbone Arch Bridge (Option A) and the Lotus Cable-stayed Bridge (Option E).
d. Non-Signature Bridge Elements – all bridges and bridge elements within the scope of the project excluding the Signature Bridge Elements.
e. Exterior Box – The outer two box girders in a bridge typical section of three or more box girders; and all box girders in a bridge typical section of one or two box girders.

2. **Bridge Design Analysis:**

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

b. The Design-Build Firm shall insure that the final geotechnical and hydraulic recommendations and reports required for bridge design are submitted with the 90% bridge plans.

c. All Structures shall meet the "Level Three" Aesthetic Criteria per Plan Preparation Manual, Volume 1 Section 26.9.4; except EN, ES, SE Connectors. The environmental classification of the bridges shall be per FDOT Structures Design Guidelines Section 1.3.

d. The Design-Build Firm shall "Load Rate" all bridges in accordance with the Department Procedure 850-010-035 and the Structures Manual. The Bridge Load Rating Calculations, the Completed Bridge Load Rating Summary Detail Sheet, and the Load Rating Summary Form shall be submitted to the Department for review with the 90% superstructure submittal. The final Bridge Load Rating Summary Sheet and Load Rating Summary Form shall be submitted to the Department for review with the Final superstructure submittal. A final, signed and sealed Bridge Load Rating, updated for as-built conditions, shall be submitted

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

e. The Design-Build Firm shall evaluate scour on all bridges over water using the procedures described in HEC 18.

f. Any erection, demolition, and any proposed sheeting and/or shoring plans that may potentially impact the railroad must be submitted to and approved by the railroad. This applies to areas adjacent to, within and over railroad rights of ways.

g. The Engineer of Record for bridges shall analyze the effects of the construction related loads on the permanent structure. These effects include but are not limited to: construction equipment loads, change in segment length, change in construction sequence, etc. The Engineer of Record shall review all specialty engineer submittals (camber curves, falsework systems, etc.) to ensure compliance with the contract plan requirements and intent.

3. **Criteria**

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

a. All plans and designs are to be prepared in accordance with the Governing Regulations of Section V. A.

b. Bridge Widening: In general, match the existing as per the Department Structures Manual.

c. Critical Temporary Retaining Walls: Whenever the construction of a component requires excavation that may endanger the public or an existing structure that is in use the Design-Build Firm must protect the existing facility and the public. If a critical temporary retaining wall is, therefore, required during the construction stage only, it may be removed and reused after completion of the work. Such systems as steel sheet pilings, soldier beams and lagging or other similar systems are commonly used. In such cases, the Design-Build Firm is responsible for designing detailing the wall in the set of contract plans. These plans must be signed and sealed by the Structural Engineer in responsible charge of the wall design.

d. The new bridge structures including the widened bridges shall be classified as "typical" bridges in accordance with AASHTO LRFD Section 1.3.5 based on its operational importance and shall have a design service life of minimum 75 years. The Design-Build Firm shall submit to the Department final signed and sealed design documentation prepared

during the development of the plans, signed and sealed by a Professional Engineer licensed in the State of Florida.

e. For bridges over navigable waterways, establish the required pier strengths using the MathCad program furnished by the Department if no specific pier strength is listed in the Design and Criteria Package. The MathCad program furnished by the Department allows for the proposed bridge geometry to be input by the Engineer. Other parameters such as water traffic, waterway characteristics, etc. may not be changed. This assures that all Design-Build Firms are designing on the same assumptions other than the specific bridge layout that each is proposing.

4. General Design Requirements

a. Approach Structures

1. General

a. All structures shall be new unless otherwise specified.
b. The approach structures shall adopt the commitments established in the Project ROD, specifically:
   i. The roadway vertical clearance along I-395 shall have a minimum of 19 feet in the area west of the FEC Railway rail corridor and a minimum of 25 feet east of the FEC Railway rail corridor;
   ii. A minimum of 225 feet column span length shall be to provided to the west of NW 3rd Ave; exceptions shall be limited to Unit end spans at Cast-in-place Gore Areas, Unite end spans at Cast-in-place transition units as indicated in the concept design plans, Unit end spans at abutments and Ramps B, C, E and F; in no case shall the span be less than 150 feet.
   iii. Adhere to the commitments in the Section V, Part D Department Commitments of this RFP.

2. Substructure

a. The substructure type and form shall remain constant over the entire length of the bridge. Pier aesthetics shall be identical for all the piers east of NW 3rd Ave and shall respect I-395 Aesthetic Requirements. The pier head width shall match the box girder soffit width at the majority of pier locations, similar to Figure 5-8 of the project BDR. Any proposed variation to these requirements shall be submitted for approval through the ATC process.
b. Any proposed variation of pier locations from what is shown in the Concept Plans shall be -submitted for approval through the ATC process.
c. For all the bridge replacement structures, the foundations shall be

prestressed concrete driven piles with an integral pile cap.

d. No straddle bents shall be used, except at Ramp B and Ramp C gore areas and where WB connector splits in to EN and ES connectors. In order to accommodate a re-alignment of NW 13th St, a straddle bent may be used at the WB connector at Ramp F gore to span over NW 13th ST.
e. The use of hammerheads shall be limited to the west of NW 3rd Ave.
f. The substructure consists of single-column type piers. Pile bent type piers are not allowed.
g. Every effort shall be made to align the columns of the connectors, ramps and main line. Refer to "I-395 Aesthetics Requirements"

3. Superstructure

a. The superstructure type and material shall remain the same over each bridge, as follows:
   i. EN & ES Connectors - Steel Plate / Box Girder
   ii. SE Connector - Steel Plate Girder
   iii. WB , EB Connectors - Steel/Concrete Box Girders
   iv. I-395 EB and I-395 WB ('Mainline') - Steel/Concrete Box Girders
   v. Ramps B, C, E and F - Steel/Concrete Box Girders
   vi. SR 836 WB & EB Widening - Steel Plate/FIB Girder
   vii. NW 17th St Overpass Widening – FIB (modified) / AASHTO Girder (modified)
   viii. Macarthur Causeway EB Widening – FIB (modified) / AASHTO Girder

b. The bridge cross section across the corridor is highly variable due to the confluence of interchange ramps, connectors, on/off ramps, and gore areas. To accommodate the variety of sections, CIP or Precast Concrete Box Girder units may be comprised of single boxes, or twin box girders that are made continuous through the use of a longitudinal closure pour.
c. The number of box girders to be used is limited as follows: single box for connectors and ramps and maximum of two boxes for the I-395 EB/WB except at the gore areas where the connectors merge in to the I-395 EB/WB a maximum of 3 boxes may be used only for the span adjacent to the merge.
d. Should concrete box girders be used, gore Areas may be either CIP or Precast Concrete Box Girders.
e. The connector ramps to I-95 may be built-up steel girders.
f. Constant-depth and variable depth girders are acceptable.
g. Box girder web slopes shall be maintained at 1H:2.5V except for the transition span which occurs between the approach structures and the signature bridge superstructure. A smooth transition shall be maintained between the approach viaduct superstructure and the superstructure of the signature span.

h. Superstructure expansion joints shall occur only at substructure support locations.
i. Dapped girders shall not be allowed.
j. Girder depth on each side of the expansion joints, located to the east of NW 3rd Ave shall have the same depth.
k. Aesthetic treatment in the form of a continuous concrete slab projected beyond the barrier shall be maintained on the exterior girders of the corridor.
l. Horizontal offsets of the fascia web of the Exterior Box, as defined in Section J.1.e, are not allowed. This shall be applicable to the box girders located to the east of NW 3rd Ave, with the exception being the girder termination at the gore as indicated in the concept design plans.

b. Signature Bridge Structure

The Design-Build Firm shall design and construct the main span structure as an arch bridge or a cable-stayed bridge in accordance with the criteria established in this specification. The Design-Builder shall design and construct the signature bridge for a service life of no less than 75 years, meeting the goals of ease of inspection, maintenance, durability and aesthetically pleasing.

The signature bridge is defined as the continuous structure spanning Biscayne Boulevard and its vicinity, linking the approach structures with the embankments east of Biscayne Boulevard, from expansion joint to expansion joint. The signature structures shall adopt the commitments established in the Project ROD. The following requirements shall apply to the signature bridge structure in addition to the specific requirements described for the Wishbone Arch Bridge and the Lotus Cable-Stayed Bridge.

1. General
   a. All structures shall be new unless otherwise specified.
   b. Adhere to the commitments in the "Aesthetics" section of this RFP.
   c. All signature bridge components shall be part of the structural system that carries bridge Dead Load (DL) and Live Load (LL); no non-structural bridge components will be accepted.

2. Substructure
   a. Pier aesthetics shall be identical to the approach structures. Any proposed variation to these requirements shall be submitted for approval through the ATC process.
   b. Footing locations for the signature bridge main support elements (arch or tower) shall be as shown in the Concept Plans.
   c. Any proposed variation of pier and footing locations from what is shown in the Concept Plans shall be submitted for approval through the ATC process.
   d. No straddle bents or hammerhead piers shall be used.
   e. Pile bent type piers are not allowed.

3. Superstructure

a. A smooth transition shall be maintained between the approach viaduct superstructure and the superstructure of the signature span.
b. Superstructure expansion joints shall occur only at substructure support locations.
c. Dapped girders shall not be allowed.
d. Girder depth on each side of the expansion joints shall be same.
e. Horizontal offsets of the fascia web of the Exterior Box, as defined in Section J.1.e, are not allowed.

The signature bridge configurations consider two principle structural alternatives:

- Wishbone Arch Bridge;
- Lotus Cable-stayed Bridge.
- The DB Teams may submit a design of their own option meeting the structural and aesthetic requirements stated in the contract documents.

4. Wishbone Arch Bridge (Option A)

The arch bridge shall be designed to carry both westbound (WB) and eastbound (EB) roadways. The wishbone arch bridge alternative shall consist of two steel arches originating between the I-395 roadways on the west side of Biscayne Boulevard and landing on either side (north and south) of the I-395 mainline roadways to the east. Each of the arches shall independently support the I395 WB and I395 EB roadways with uniformly spaced suspender cables at the deck level. The Wishbone Arch design shall conform to the following parameters:

a. The top of each arch shall be at EL 252.0 ft. The arch may be divided into multiple segments with constant radius in order to achieve the aesthetic shape set forth during the concept design. Both arch ribs are planar and plumb. The rib cross-section shall meet the aesthetic guidelines described herein, and offer an optimal aerodynamic behavior.
b. Each arch rib shall carry two planes of suspenders, which shall be inclined both transversely and longitudinally. The suspenders shall anchor into the steel arch above, and shall be connected to suspender brackets mounted onto edge girders at the deck level.
c. The arch ribs share one common foundation at the west end of the span, between the WB and EB roadways. The base of the rib sections shall be anchored into concrete pedestals.
d. The foundations of the arch, piers and the abutment may consist of 30 inch precast prestressed driven piles. The piles for the arch may be battered to help resist the thrust produced due to arch action. The battered piles shall have a slope not exceeding 1(horizontal) in 4 (vertical).
e. The bridge deck may be widened in order to clear the

suspenders from the traffic envelope.

f. The superstructure shall consist of twin steel tub girders with a composite concrete deck. Transverse diaphragms, floor beams, bracing, etc., shall be detailed so as to satisfy the criteria set herein.
g. The length of the wishbone arch bridge (west expansion joint to abutment) shall not be less than 650ft and the suspended length (clear distance measured between the first and last suspender along center line of the deck) shall not be less than 500ft.
h. The arch ribs and superstructure girders shall be detailed with inspection and maintenance hatches, walkways, elevators etc. per FDOT requirements.
i. The aesthetic requirements for the arch bridge set forth in "I-395 Aesthetic Requirements" shall be adhered to.

5. Lotus Cable-stayed Bridge (Option B)

The 'Lotus' alternative shall consist of a single aesthetic tower located as shown in the concept design drawings. The tower geometry shall be as shown in the concept design drawings any changes in the geometry shall be submitted and approved via the ATC process. The finishes and the cladding shall be per I-395 Aesthetic Requirements. The tower may consist of precast concrete segments.

The cable stay system shall consist of 4 planes of stays supporting the westbound (WB) and eastbound (EB) roadways.

The Lotus Cable-stayed design shall conform to the following parameters:

a. The foundations of the tower legs, piers and the abutment may consist of 30 inch precast prestressed driven piles. The piles for some tower legs may be battered to help resist the thrust produced due leg configuration.
b. The bridge deck may be widened in order to clear the suspenders from the traffic envelope.
c. The superstructure shall consist of twin steel tub girders with a composite concrete deck. Transverse diaphragms, floor beams, bracing, etc., shall be detailed so as to satisfy the criteria set herein.
d. The length of the lotus cable-stayed bridge (west expansion joint to abutment) shall not be less than 650ft and the suspended length (clear distance measured between the first and last stay along the center line of the deck) shall not be less than 500ft.
e. The tower legs and the superstructure girders shall be detailed with inspection and maintenance hatches, walkways, elevators

etc. per FDOT requirements.

f. The aesthetic requirements for the cable-stayed bridge set forth in "I-395 Aesthetic Requirements" shall be adhered to.

c. Bridge Widening Structure

Bridge Widening at MacArthur Causeway Bridge, SR 836 and NW 17th St. Match the existing as per the Department Structures Manual unless otherwise noted. The following shall be adhered to:

1. The span configuration (i.e. simple span or continuous span) shall match the existing superstructure articulation.
2. All widened spans with FIB may utilize precast girder type to match the existing bridge girder.
3. For the widened portion, the slab thickness shall match existing; however, the minimum slab thickness shall not be less than eight inches. An overlay built-up for cross slope correction of the roadway surface is required for MacArthur Causeway widening.
4. Field welding is only allowed on the installation of shear connectors.
5. Class V coating shall be applied to the widened bridge to match the coatings on the existing bridge.

d. MetroMover Bridge Reconstruction

All plans and designs are to be prepared in accordance with AASHTO LRFD Bridge Design Specifications, FDOT Standard Specifications, Miami Metromover Brickell Extension, Basis for Design, December 1989, FDOT Structures Manual, FDOT Plans Preparation Manual, FDOT Standard Drawings, Supplemental Specifications, Special Provisions, FDOT Temporary Design Bulletins, and the Florida Building Code 2010.

The Design-Build Firm shall be in compliance with the current MDT Safety Certification Program Plan and the MDT Adjacent Construction Safety Manual. A Safety Certification will be required with the proposed modifications to the MDT Metromover System.

The existing minimum vertical clearance of Pier P239680B shall be maintained. The new column shall be rectangular, or square, with corner filets that match the radius of the adjacent existing Metromover columns.

Only deep foundations will be approved for the pier replacement.

The Design-Build Firm shall submit to the FDOT final design documentation, prepared during the development of the plans, signed and sealed by a Professional Engineer licensed in the State of Florida.

The Design-Build Firm shall ensure that the final geotechnical report required for design are submitted with the 60% structures plans.

The Engineer of Record for structures shall analyze the effects of the construction related loads on the existing and permanent structure. These effects include but are not limited to: construction equipment loads, jacking loads, construction sequence, structure demolition, etc. The Engineer of Record shall

review all specialty engineer submittals (falseworks systems, etc.) to ensure compliance with the contract plan requirements and intent.

A Class 5 Surface Finish shall be applied to all exposed surfaces of the pier, except top of cap. A non-sacrificial anti-graffiti coating shall also be applied to the pier column to a height of 10 feet.

Proper disposal of the existing structure components shall be the responsibility of the Design-Build Firm.

All existing utilities uncovered during construction must be adequately supported so as not to cause any damage to the utilities. Services to adjacent properties must be maintained. Utilities which interfere with the proposed footing shall be encased or sleeved through the footing, where possible. Utilities which cannot be encased or sleeved shall be relocated.

Proposed piers for Metromover shall be properly protected from damage vehicular damage by installing proper protection. A study indicating possible vehicle impact, maximum speed limit in the area, calculations and recommendations for the protection system are to be submitted to MDT for review and approval prior to installation. Since this is a safety component, it is expected to be installed and fully functional concurrent with column base construction.

Girder deflections shall exceed the limits specified in the design criteria. The design shall ensure that the girder movements at bearings and clearance gaps do not exceed available capacity.

The Design-Build firm shall provide primary and secondary protection systems to capture construction related materials and equipment and to allow the Metromover system to operate

Continuous grounding for the guideway's lightning protection and stray current grounding systems shall be maintained. The proposed bridge shall be properly grounded and shall have a lightning protection system that is independent of the guideway's electrical systems.

The Design-Build Firm shall continuously monitor and survey the elevations and deflections of the existing Metromover aerial guideway affected by the proposed construction and shall ensure that these deflections are within acceptable limits approved by MDT. Any temporary supports, shoring, and/or construction activities affecting the aerial guideway during construction shall not adversely affect operational requirements of the Metromover system. This includes, but not limited to, stress limits, deflection limits, and rider comport. The Metromover system and equipment are extremely sensitive; therefore, the final position of all components of the Metromover aerial guideway, after construction, shall be at the same position as before construction. A detailed Jacking Plan shall be developed by the Design-Build Firm and submitted for approval with the 60% Plans submittal.

A portion of the existing bent is to be demolished as part of the scope of work for this project. See Section I.15.c "Demolition" for requirements during demolition.

The Design-Build Firm must provide training to the MDT inspection staff and must provide inspection manuals (hard copies and electronic formats). The Design-Build Firm shall be the conduit the initial bridge inspection for the Metromover span.

e. Retaining Walls

1. Partial height walls such as toe walls or perched walls as defined in FDOT Structural Design Guidelines 3.12.B are not be allowed.
2. For color, and texture and architectural features for retaining walls, see I-395 Aesthetic Requirements.
3. Wall/fill heights shall not exceed xx ft.

4. Bridge Design Security

5. Components

a. Barriers/Railing

The Department's standard 32" F-shape traffic railing barrier shall be used.

b. Bridge Decks

Stay-in-place metal deck forms are permitted for the interior beam bays of the following bridge structures:

i. EN & ES Connectors - Steel Plate / Box Girder
ii. SE Connector - Steel Plate Girder
iii. WB , EB Connectors - Steel/Concrete Box Girders

Stay-in-place metal deck forms shall not be permitted for the deck cantilevers outside the exterior beams.

c. Bearings

Design and location of bearings shall provide for maintenance, accessibility, and future replacement. Jacking points with sufficient capacity (full dead load and live load) to allow the superstructure to be lifted for bearing replacement under live load shall be provided. The plans shall include the location of the jacking points and the jacking loads. The bearing replacement procedures including but not limited to future jacking locations and forces shall be defined in the Inspection and Maintenance Manual.

d. Expansion Joints

All expansion joints must be located at the pier per FDOT requirements. Appropriate durable, water-tight expansion joints shall be chosen to meet the movements and loads for the approach and signature bridge layouts. Provide for future replacement of the expansion joints and show replacement sequence on the Design Documents and As-Built plans.

At a minimum the steel for expansion joints shall be hot-dipped galvanized per ASTM A123.

e. Foundations

The Design-Build Firm shall calculate settlements for the different founding conditions along the bridges.

Settlements likely to occur during construction shall be calculated separately from long term settlements. Particular attention shall be given to the differential settlements likely to occur between piers with piled shaft foundations to rock and piers supported by soil. The effects of settlements, differential settlements, and down-drag shall be fully accounted for in the design and construction.

See "Geotechnical Services" Section VI.B. for foundation type requirements.

f. Drainage

Bridge drainage system must be concealed within the substructure and superstructure.

g. Utilities

All utilities shall be hidden from view.

h. Lighting

The lighting shall be in accordance with Section VI.O, "Lighting Plans". All the lighting conduits shall be hidden from view.

i. Lightning Protection

Lightning protection for the Signature Bridge Elements and other elements as required shall be provided.

j. Suspender / Stay Cable System

The cable stay system shall be in accordance with Attachment A, "Cable Stay Systems".

6. **Materials:**

a. Structural Concrete

Structural concrete shall be specified in accordance with the FDOT Standard Specifications for Road and Bridge Construction.

b. Mass Concrete

Consider mass concrete requirements in selecting member sizes and avoid mass concrete if practical. In addition to the requirements of FDOT Structures Design Guidelines, concrete in the following bridge structure components are designated as mass concrete:

1. Arch Footing
2. Arch Pedestals/Blocks
3. End Bent Caps

4. Pile Caps
5. Piers

c. Reinforcing Steel

Reinforcement shall be ASTM A615, Grade 60. Concrete cover shall be in accordance with FDOT Structures Design Guidelines, Table 1.4.2-1 and as shown on Concept Drawing B0-8 section H.

d. Prestressing Steel

1. Strand

Prestressing strands shall conform to ASTM A416, Grade 270 for low relaxation strand. Refer to the FDOT Structural Design Guidelines Section 4.3.1, for allowable anchoring and jacking stresses.

2. Bars

Prestressing bars shall conform to ASTM A722, Grade 150, Type 2, deformed.

e. Structural Steel

Structural steel shall conform to ASTM A709, Grade 50, unless otherwise noted. Stiffeners, internal and external cross frames, and lateral bracing may conform to ASTM A709, Grade 36, unless otherwise noted. Structural steel for integral pier caps and straddle bents shall conform to ASTM A709, Grade HPS 50W.

All ASTM A709 structural steel shall receive Charpy V-Notch testing in accordance with ASTM A709. Non-Fracture Critical Members subject to tensile stress shall be tested in accordance with ASTM A709, Table 9. Fracture Critical Members shall be tested in accordance with ASTM A709, Table 10.

Structural steel for ladders and platforms shall conform to ASTM A36 and shall be hot-dip galvanized in accordance with ASTM A123. Welding for non-bridge elements shall conform to AWS D1.1.

Anchor bolts shall conform to ASTM F1554. The anchor bolts, nuts, and washers shall be hot-dip galvanized in accordance with ASTM F2329.

All bolts shall be 7/8" diameter, high-strength bolts conforming to ASTM A325 Type 1, unless otherwise noted. Only bolt heads shall be exposed to view.

f. Suspender/Stay Cable

Stay cables shall be 0.6" diameter and conform to ASTM A416, Grade 270 for low relaxation strand. See Attachment A "Cable Stay Systems" for additional material requirements.

7. **Design Parameters:**

a. General

1. The distribution of force effects to the components of the arch bridge shall be determined by both spatial and planar structural analysis as justified by consideration of rib geometry, number of planes of cables, and the torsional stiffness of the deck superstructure.
2. Non-linear effects shall be considered in both the global and local analyses of the structural bridge system.
3. The forces and deformations shall consider the following:
    i. Non-linear response of the suspenders/cables;
    ii. The p-delta effect (geometric non-linearity) of the girder under axial load and bending;
    iii. The variation of load intensity with loaded length when load superposition is no longer valid;
    iv. The p-delta effect of the arch ribs under axial load and bending; effects of foundation lateral movements.
    v. The non-linear effect of live load that includes the moment due to dead load thrust acting on the live load displacement;
    vi. Material nonlinearity.
    vii. Foundation flexibility
4. For the segmental box girders, the dead load analysis shall include the time dependent effects of creep and shrinkage for the stage by stage cantilever construction and the completed bridge.
5. Live load analysis shall include checkerboard loading to produce maximum torque.
6. Construction loads shall be in accordance with the adopted MOT sequencing.

b. Concrete Design

1. Superstructure

The effective width of deck slab for analysis and for calculation of section capacity and stresses shall be determined by special elastic analysis that considers shear lag effects. Stresses in the deck slab shall be investigated for the combined effects of longitudinal global axial loads and bending moment plus transverse local bending moment.

c. Steel Design

Orthotropic steel deck shall not be used.

All structural steel members shall be designed in accordance with AASHTO LRFD Bridge Design

Specifications.

Influence lines or other elastic analysis procedures shall be used to evaluate live load plus impact effects.

1. Composite

The steel tub girders and required framing shall be designed compositely with the deck slab to resist the local and global bending moments from dead and live loads as well as the compression force from the inclined suspenders.

2. Redundancy

Designate all Fracture Critical Members on the plans. Structural components designated as Fracture Critical shall conform to the provisions of the current AASHTO/AWS Bridge Welding Code D1.5 Chapter 12.

3. Connections

All field connections of structural steel shall be slip-critical with Class A surface preparation using high-strength bolts. Shop connections may be bolted or welded.

Welding details and operations shall be in accordance with the current edition of the AASHTO/AWS D1.5 Bridge Welding Code. Welding procedures shall be submitted and approved prior to welding on the project. Welds requiring non-destructive testing shall be radiographically inspected, except where the geometry of the region o f the weld will not permit satisfactory information to be secured for verification of the weld quality. When such geometrical conditions exist, other inspection procedures or combinations of procedures such as ultrasonic inspection, dye penetrant inspection, and/or magnetic particle inspection, shall be used. Non-destructive testing shall be performed as required by the current edition of the AASHTO/AWS D1.5 Bridge Welding Code.

Shear connector installation is governed by OSHA Steel Erection Rule.

The following members are classified as ancillary members in accordance with the current edition of the AASHTO/AWS D1.5 Bridge Welding Code:

i. Expansion joint welds
ii. Drainage system welds

4. Camber

Steel members shall be cambered in accordance with AASHTO LRFD Bridge Design Specifications 6.7.2.

8. **Bridge Design Loads:**

a. Load Combinations

Load combinations shall be per AASHTO LRFD Bridge Design Specifications 3.4.1. The load factor for Extreme I, γ_{eq}, shall be 0.5

The effects of cable stay force adjustments shall be treated as locked-in erection stresses.

b. Dead Loads

1. Unit Weight

Unit weights in accordance with the FDOT Structural Design Guidelines, Section 2.2 and the AASHTO LRFD Bridge Design Specifications shall be used.

2. Wearing Surface

Allowance for future wearing surface shall not be considered. An allowance of a ½" sacrificial deck thickness for grinding and grooving shall be considered for all bridges.

3. Utilities

Utility loading shall be considered to the bridge structures. All utility loadings shall be included in the Design-Build Firm's design criteria.

c. Live Loads

1. Vehicular

Vehicular load shall be per FDOT Structure Design Guidelines Section 2.1.2.

2. Pedestrian

Pedestrian loading shall be used in accordance with AASHTO LRFD Bridge Design Specifications.

d. Thermal Loads

Movements of bridge structures shall be calculated assuming the uniform thermal gradient in accordance with the FDOT Structural Design Guidelines, Section 2.7.1

e. Creep and Shrinkage

The effect of time dependent concrete creep, shrinkage, and elastic shortening shall be included in all load combinations by calculating the redistribution of forces using the dead load factors corresponding to each

limit state.

f. Wind Loads – Approaches

Wind loads for the approach structures and bridge widening shall be calculated in accordance with AASHTO LRFD Bridge Design Specifications 3.8 and modified by the FDOT Structural Design Guidelines Section 2.4.

g. Wind Loads – Signature Bridge

For the Signature Bridge, provide a Wind Engineer who is a Florida licensed Professional Engineer and employed by a firm specializing in climatology, wind analysis, and wind tunnel testing. The firm shall have conducted wind tunnel testing on at least three cable-supported bridges with spans of at least 400 feet.

The Design-Build Firm shall prepare a site-specific Climatology and Wind Report in order to generate site specific wind climate data obtained from analysis of long-term wind data available from reliable data sources in the area. The site-specific climate properties shall be compared with wind speed information in codified sources. This report shall discuss the criteria, analysis, and design methodologies for determining the appropriate wind design loads for service and construction and ensure aerodynamic stability. The Climatology and Wind Report shall include the following items at a minimum:

1. A wind study that includes:
    i. Gust speeds and return period for the site
    ii. Extreme wind events for construction
    iii. Design wind directionality and distribution
    iv. Design wind speeds for complete structure and during construction at the deck level and along the height of the arches
2. A wind tunnel testing program that describes the testing program and procedures
3. Design methodologies including:
    i. Design codes;
    ii. Wind design speeds and pressures;
    iii. Wind load combinations considering both static and dynamic effects;
    iv. Aeroelastic phenomena of vortex excitation, galloping, flutter, and divergence;
    v. Computer models used to incorporate the results of the climatology study and wind tunnel tests.
4. The mean wind return periods and loads used for the design shall include:
    i. Design wind speed shall be 100-year mean hourly speed at deck level;
    ii. Design flutter speed shall be 10,000-year 10-minute mean speed;
    iii. Design wind speed for the construction phase shall be mean-hourly and 10-minute mean values for a 20-year return period;
    iv. Design flutter speed for the construction phase shall be for 1,000-year

return 10-minue speed.

The Design-Build Firm shall perform a sectional model wind tunnel testing as appropriate to verify satisfactory performance for aerodynamic stability. A Wind Tunnel Test Report shall be prepared including the following items:

1. Section model testing information stating objectives, criteria, wind tunnel test procedures, and model description. Also include proposed wind attack angles.
2. Static aerodynamic coefficients, aeroelastic flutter coefficients, and vortex-induced aerodynamic motions.
3. Static aerodynamic coefficients (lift, drag, and moment), aeroelastic flutter coefficients, and vortex-induced aerodynamic motions.

The Design-Build Firm shall perform a full aeroelastic model testing including the adjacent approach spans. The testing shall include the structure during critical construction stages and the completed state. The results of this testing shall be incorporated into a Wind Engineering Report. This report shall be prepared including the following items at a minimum:

1. Description of the aeroelastic model and damping
2. Description of the wind tunnel simulation
3. Description of the wind tunnel test and instrumentation
4. Aerodynamic stability from wind tunnel test results
5. Response to turbulent winds from wind tunnel test results
6. Response comparisons between the stability and buffeting analysis and the test results
7. Comparison of simultaneous peak moments at the base of the arches
8. Conclusions and recommendations.

The wind analysis shall be performed by the Design-Build Firm in accordance with AASHTO LRFD Bridge Design Specifications Section 3.8, ASCE 7-10 and the Wind Engineering Report. Both static and dynamic wind effects shall be considered utilizing computer models of the bridge that incorporate the results of the aeroelastic and sectional model wind tunnel tests.

The Design-Build Firm shall provide a cable dampening system for stability, if required.

h. Seismic Loads

Bridges shall meet the seismic provisions listed in the FDOT Structures Design Guidelines Section 2.3.

i. Collision

New pier columns shall be designed to withstand the vehicular collision force per AASHTO LRFD 3.6.5.

j. Cable Loss

Load factors and combinations for a single stay replacement shall comply with PTI Recommendations for Stay Cable Design, Testing, and Installation C.5.4.

k. Cable Replacement

Load factors and combinations for a single stay loss shall comply with PTI Recommendations for Stay Cable Design, Testing, and Installation C.5.5.

9. **Corrosion Protection/Durability:**

a. Service Life

The Design-Build Firm shall provide bridges that meet the required design service life either by selecting materials with reduced corrosion potential, by selecting materials and details, which resist degradation or by other mean acceptable to the Department. All bridges shall be considered to be subjected to severe corrosive conditions. The environmental classification for this project is as follows:

1. Superstructure: Moderately Aggressive
2. Substructure: Extremely Aggressive

The service life of the structures shall be 75 years. The service life for replaceable components is outlined in Table 11-1

Table 11-1 – Minimum Service Life for Replaceable Components

Replaceable Components	Minimum Service Life (years)
Bridge Bearings	40
Expansion Joints	30
Concrete Barriers	50
Bridge Rail	30
Overhead sign structures	40
Drainage System	75
Structural Steel Paint	20
Stay Cables	60
Stay Cable Dampers	40

a. Corrosion Protection Plan

For the Corrosion Protection Plan see "Specification for Inspection and Maintenance Requirements."

All structural steel shall be pained in accordance with sections 560 and 975 of the specifications. Paint all structural steel with a high performance from the Qualified Products List. The color of the finish coat shall conform to Federal Standard No. 595, color No. XXX.

Paint the inside surface of the steel box girders with one shop applied coat of approved primer and a compatible finish coat pigmented to Federal Standard 595, color No. 37925 (white). The finish coat of the interior surface is not required to be UV resistant and does not have to be the same product as the finish coat of the exterior surface of the box girder.

10. **Inspection and Maintenance:**

a. Access Requirements

The interior of any superstructure elements such as box girders shall be accessible for inspection and maintenance. The interior of the Signature Bridge arches shall be accessible for inspection and maintenance. Means to facilitate safe access to interior spaces shall be provided.

b. Inspection and Maintenance Manual

For the Inspection and Maintenance Manual requirements see the "Inspection and Maintenance Requirements".

11. **Signature Bridge Erection:**

a. Scope

Work described in this attachment applies to the erection of the Signature Bridge and the Metromover Bridge Reconstruction. Provide a Signature Bridge Erection Manual that includes the requirements herein and all necessary additional technical specifications for erection of the Signature Bridge.

b. Submittals

1. Preliminary Signature Bridge Erection Manual

Prepare and submit a Preliminary Signature Bridge Erection Manual for review and comment. The Preliminary Signature Bridge Erection Manual shall identify the initial approach to the procedures to be completed during all stages of erection of the Signature Bridge. The Preliminary Signature Bridge Erection Manual shall include the following:

i. Design criteria;
ii. Description of erection analysis software and modeling methodology;
iii. Required Governmental Approvals;
iv. Proposed erection methods, including equipment and any proposed traffic closures;

v. Identify erection stages;
vi. Survey procedures including location of survey and measurement points for each construction stage;
vii. Processes and procedures for weighing and trial erection of deck steelwork and feedback of the results into the erection geometry control;
viii. Processes and procedures for ensuring pre-cast and cast-in-place concrete weight match design assumptions;
ix. Approach to meet the general construction requirements;
x. Anticipated forces, stresses, and deflections in permanent and temporary structures at all erection stages;
xi. Triggers for upper and lower bound limits for deflection, force or stress at each construction stage;
xii. Procedures for geometry control;
xiii. Cable stressing methodology;

Schedule a meeting with the FDOT within twenty-one (21) Days after the submittal of the Preliminary Signature Bridge Erection Manual to discuss the proposed erection procedures and manual as well as on the FDOT's preliminary comments.

Once all comments to the Preliminary Signature Bridge Erection Manual and any additional comments from the meeting have been addressed, prepare and submit the Final Signature Bridge Erection Manual.

2. Final Signature Bridge Erection Manual

The Final Signature Bridge Erection Manual shall be developed from the Preliminary Bridge Erection Manual and include the following:

i. The proposed erection sequence, including complete and checked erection design calculations;
ii. Forces, stresses, and deflections at all erection stages in the foundations, arches, cables, superstructure, and any falsework. Erection model shall include a sufficient number of nodes to demonstrate that all members will meet design criteria;
iii. Camber curves for both arches and superstructure, cable lengths, cable forces adjustments, and shims required shall also be shown for each stage. Final cable adjustments shall be performed after all dead loads are in place;
iv. Evolution of cable forces through the construction period, after application of super-imposed loading and long term;

v. A complete description and stress calculations of the proposed process and sequence of erection including positions and weights of equipment at each position and weights of equipment at each stage in sufficient details to allow review of the effects of the erection procedure on the structure;

vi. Proposed erection methods, with step-by-step erection procedures and complete details of stay-cable fabrication, installation, and monitoring of stressing operations;

vii. Approach to meet the general construction requirements and construction loadings for all stages of the Construction Work;

viii. Detailed shop and erection drawings for each erection stage;

ix. Geometry control description identifying the special survey and monitoring to be implemented for bridge construction including location of survey and measurement points and tolerances.

Procedures shall be provided to ensure the intermediate static and dynamic stability of the structure for the various stages of the construction. Obtain all necessary permits and approvals for temporary supports.

Develop procedures for stabilizing the structure against wind loads such as hurricanes (as identified in the Climatology and Wind Study Report) at all construction stages. All details and layouts of any tie down assembly including all connections, foundation elements, and material properties shall be provided.

Submit the Final Signature Bridge Erection Manual to the FDOT for review and comment. Once all comments to the Final Signature Bridge Erection Manual have been addressed, the Final Signature Bridge Erection Manual shall be Signed and Sealed by the EOR and a design certificate provided by the Bridge Check Engineer.

No Signature Bridge erection work shall be performed until the Final Signature Bridge Erection Manual has been fully prepared, Signed and Sealed by the EOR, and certified by the Bridge Check Engineer, and all FDOT comments have been addressed.

Following submittal of the Final Signature Bridge Erection Manual, should for any reason modifications be made to the structure demonstrate that such modifications will have no adverse effect on the completed structure. All proposed modifications shall be approved by the EOR and certified by the Bridge Check Engineer. Completed details and stress computations will be required for all revisions to the plans. No such work shall be performed until it is approved by the Engineer of Record and the Bridge Check Engineer. All proposed modifications to details shown on the plans shall be submitted to the FDOT for review and comment.

c. Materials

Refer to the requirements of Attachment A – "Stay Cable Systems" and meet the requirements of all required Governmental Approvals.

d. Construction Requirements

1. Cable Stay Installation

Prepare a cable installation procedure for the stay cables which shall prescribe handling and installation procedures, cable stressing methodology, and elongations for the installation of each stay cable. The procedure shall include consideration of actual construction loads and static conditions at the time of cable installation.

Changes to construction and erection sequence or procedure from those assumed in the development of the stay cable installation procedure shall be incorporated in revisions to the stay cable installation procedures.

2. Cable Stressing

Accurate calibration of the cable jacks and gauges is critical to the geometry control of the structure and the resulting state of stress in the structure. Jacks and gauges for cable installation shall be calibrated to match using a load cell or calibrated static load machine by an independent laboratory at a minimum within one (1) month prior to the beginning of the cable installation, and at a mini- mum of every six (6) months thereafter, for the duration of the cable installation.

Calibration shall be accomplished with the jack actively applying load to the ma- chine, not the machine applying load to the jack. Prior to use after each calibration, each field gauge shall be calibrated against the master gauge for reference purposes. Any internal work performed on the jack shall require recalibration.

The detailed cable installation procedure, contained as part of the Signature Bridge Erection Manual, shall prescribe cable force, cable length, cable elongation, and deck elevations for each jacking operation, and shall establish the priority of force or geometry for control of the jacking operation. This procedure shall stipulate the permissible variance between force and elongation and deck elevation for each cable to be installed.

The cable stressing procedures shall include detailed provisions for monitoring the installation of each cable.

Permanent records shall be established for each cable installation. Such records shall include:

i. Survey records;
ii. Date, time, and ambient temperatures;
iii. Cable identity, details, and cable forces;
iv. Cable elongation measurements;
v. Ring nut setting;
vi. Deck loading conditions;
vii. All other special notations necessary and sufficient to establish the conditions under which the cable was installed.

This record shall include the as-built elevations of the deck along the center of each edge girder atop each stay cable defined work point for the length of the Signature Bridge immediately prior to and immediately after each stressing operation. The Engineer of Record shall approval each cable stressing operation. Engineer of Record approved copies of the data shall be submitted to the FDOT.

A strand and cable force verification method shall be performed by an experienced independent entity (independent of the Design-Build Firm). Verify the uniformity of strand forces. The forces in all stay cables shall be measured after completion of stay erection iterations for comparison with the predicted and erection tabulated forces. Develop procedures to ensure that the initial stressing is equalized for all tensile elements in a given cable within a range of 2.5%.

a. Falsework

Temporary supports and falsework shall be properly designed for all anticipated loads. All required Governmental Approvals for falsework shall also be submitted to the FDOT.

b. Geometric Controls and Loads

Provide geometric control of construction such that the completed structure will conform to the lines, grades, dimensions, and cable stresses on the plans. Furnish licensed and experienced engineering and surveying personnel and equipment to establish and verify elevations and alignment of the structure and cable stays at every stage of construction. Determine the need for the amount of shimming that may be required in the erection stages. The EOR shall approve and Sign and Seal the use of all shimming. The FDOT shall review and comment on each such use of shims.

The structure's geometric configuration shall be measured at 70 °F normal temperature. Provide sufficient computation and analysis, for the structure to reasonably assure that final adjustments can be made to obtain the dead load cable stress and deck elevations with the following tolerances:

Absolute tolerance in deck elevation at the centerline of the Signature Bridge at center span shall be four inches (4"), provided that the deck elevation at cable attachment points shall follow, within a tolerance of ± one inch (1") (unless a tighter tolerance is required to satisfy drainage) from the elevation based on the Signature Bridge cross-slope.

A smooth parabolic curve shall pass through the final deck elevation at the centerline of the Signature Bridge and the Signature Bridge deck tangent points of the designed vertical profile.

The final Signature Bridge deck geometry shall satisfy the vertical clearances requirements of the Project Documents with the deflections from all loadings as well as thermal and time dependent effects included.

Cables shall be adjusted for the dead load condition such that each individual cable shall not exceed values of ± five percent (5%) of the cable dead load computed from approved Shop Drawings. It is possible that one individual cable may have to be adjusted to lesser tolerances to prevent stress in other cables from exceeding the ± five percent (5%) tolerance.

The Design-Build Firm's cable installation procedure shall specify which is the live (stressing) end anchorage of the cable, i.e. at the arch anchorage or deck girder anchorage, and the live end anchorage detailed to provide for future cable replacement.

The stay cable anchorage shall allow for future force adjustments (increase or decrease) of the guaranteed ultimate strength of the stay cable without reliance upon an additional reference strand. The reference strand is a tensioned additional strand that may be removed at any time in the future without affecting the capacity of the stay cable to inspect strand conditions. Include in the cable installation plan fully developed details and procedures for removing/detensioning strands and re-installing strands.

Care shall be exercised during cable erection to prevent damage to cable sheathing and to prevent damage to the steel components of the cable. All damage to the pipe sheathing or steel cable anchorage pipe shall be immediately repaired in a manner provided by the supplier and subject to the approval of the Engineer of Record, otherwise the pipe shall be replaced.

12. **Construction Requirements:**

The Design-Build Firm's Engineer of Record for bridges shall analyze the effects of the construction related loads on the permanent structure. These effects include but are not limited to: construction equipment loads, change in segment length, change in construction sequence, etc. The Design-Build Firm's Engineer of Record shall review all specialty engineer submittals (camber curves, falsework systems, etc.) to ensure compliance with the contract plan requirements and intent. The Specialty Engineer [Firm] shall be qualified FDOT Consultant under the Type of Work he/she is providing services for. The EOR and Specialty Engineer shall not be from the same company [Firm].

a. Temporary Structures

Whenever the construction of a structural component (such as a wall, footing, or other such component) requires excavation that may endanger the public or an existing structure the Design-Build Firm must protect the existing facility and the public. If a critical temporary retaining wall is, therefore, required during the construction stage only, it may be removed and reused after completion of the work. Such

systems as steel sheet pilings, soldier beams and lagging or other similar systems are commonly used. In such cases, the Design-Build Firm is responsible for designing detailing the wall in the set of contract plans. These plans must be signed and sealed by the Structural Engineer in responsible charge of the wall design.

All properties adjacent to the construction area must be protected so as not to cause any property damage. Foundations of existing structures are not to be disturbed. Appropriate measures shall be taken as necessary to insure the structural integrity of existing structures.

All existing utilities uncovered during construction must be adequately supported so as not to cause any damage to the utilities. Services to adjacent properties must be maintained. Utilities which interfere with the proposed footing shall be encased or sleeved through the footing, where possible. Utilities which cannot be encased or sleeved shall be relocated.

b. Construction over Traffic

Construction activities not allowed over traffic include but are not limited to the following:

1. Beam, Girder and Segment placement
2. Deck form placement and removal
3. Concrete deck placement
4. Railing construction when railing is located at the edge of deck
5. Structure demolition
6. CIP closure pour placement
7. CIP concrete box placement

c. Demolition

Prior to any demolition activity, the Design/Build Firm shall comply with all Governing Regulations regarding demolition means and methods, demolition material disposal, site safety, and site cleanup.

The Lead Demolition Engineer shall have demonstrable experience in the demolition of similar structures.

Disposal of the existing structure components shall be the responsibility of the Design-Build Firm.

1. Demolition Standards

Demolish the Existing Bridge and structures in accordance with the following publications per the Standards Effective Date:

a. AASHTO Guide Design Specifications for Bridge Temporary Works
b. AASHTO Construction Handbook for Bridge Temporary Works
c. AASHTO LRFD Bridge Design Specifications
d. AASHTO LRFD Bridge Construction Specifications
e. Construction and Demolition Standards, American National Standards Institute/American Society of Safety Engineers (ANSI/ASSE) A10

f. Safety and Health Standards for Construction – Demolition; Occupational Safety and Health Administration (OSHA), 29 CFR Part 1926.850

2. Bridge Removal Plan

Prepare draft and final Bridge Removal Plans to define the means and methods for the complete demolition, removal, and disposal of the Existing Bridges.

Demolish, remove, and dispose of the existing structures as listed:

a. All the existing bridge structures within the project limits shall be demolished, except the existing bridge structures which are widened. The limits of the widening of the existing bridges shall be as indentified in the concept drawings.

Draft Bridge Removal Plans shall contain the following:

a. A plan and elevation view of the element of section to be demolished;
b. Initial Demolition Work Plan outlining the sequence the bridge or structure demolition will follow;
c. Information on the type and location of shielding to be used;
d. Initial Communication Plan.

Final Bridge Removal Plans shall meet the requirements of this section and include the Bridge Demolition Permit as attachment.

Bridge Removal Plans shall be submitted to FDOT and agencies or municipalities.

Each Bridge Removal Plan shall be Signed and Sealed by the Engineer of Record and, at a minimum, consist of a Demolition Work Plan and a Communication Plan.

The Bridge Removal Plan shall define all aspects of safety, structural capacity, structural stability, applicable regulations, and permits associated with the bridge removal Work.

All Work shall be conducted in such a manner as to safeguard the operations, facilities, right of way, and property of the agencies and municipalities having jurisdiction below the Demolition Work.

3. Demolition Work Plan

The Demolition Work Plan shall include the following minimum information:

a. A description of and design computations for temporary work items;
b. A staging plan identifying the equipment and methods to mobilize to the elevated structures and heavy demolition equipment locations;
c. Equipment and methods to install shielding and protective barriers to prevent debris from falling onto roadway. The materials to be used as the shielding and protective barrier shall also be identified. The Demolition Work Plan shall show the vertical clearance above roadways available after installation of shielding;
d. Equipment, methods, and sequence for demolition of the structures and removal of all debris. Method of removal shall include identifying pick points and the estimated size and weight of pieces to be removed;
e. Identify all Work, that may require maintenance and protection of traffic plans (MPT)

for approval;
f. Procedures to contain and collect debris that may fall on roadway(s);
g. A structural analysis of the bridge demonstrating that the bridge will remain structurally sound and stable during all phases of removal operations;
h. A schedule of demolition activities;
i. The hours of work and any other restrictions on Work to be performed above or adjacent to the roadways;
j. Procedures if lead paint and other Hazardous Materials are encountered.

4. Communication Plan

The Communication Plan shall cover communication requirements, including point of contact and method of contact, between the Design/Build Firm and the agencies and municipalities, with jurisdiction below the Demolition Work, during the demolition phase of Work for the elevated roadways and shall include:

a. Methods and manner of communications in the event an incident occurs that is not covered by the plan, such as debris falling on open roadways;
b. Notification procedures for the start of work, regular status and updates of progress of work and expected duration;
c. Notification procedures to request lane closures.

5. Demolition/Construction Requirements

a. Permits and Approvals

Prior to the start of any demolition operations:

i. Acquire all necessary permits for any and all demolition activities to be conducted;
ii. Meet all environmental requirements;
iii. Obtain approval by FDOT for applicable submittals such as plans, manuals, reports and calculations;
iv. Submit all executed permits and approvals to FDOT for records.

b. Removal Operations

Fully protect all permanent Work constructed as part of the Contract during all demolition activities. Repair or replace any component of the permanent Work damaged during demolition and removal operations.

Take appropriate measures to preserve and protect all in-place Utilities and surrounding property as defined in the Project Agreement.

i. Removal of Superstructure

Remove existing girders and bridge members in a sequence and by methods that will maintain the stability of the remaining members until all members have been removed. Maintain the stability of the structure under all conditions for the duration of Demolition Work.

ii. Removal of Substructures

All the existing sub structure components shall be removed including the foundations. For piled foundation the removal shall include complete removal of the existing pile cap and partial removal of the existing piles. The existing piles shall be cut off to the lowest elevation of the following:

a) 2 ft below the existing pile cap
b) 3 ft below the new pile cap if applicable
c) 4 ft below the existing ground
d) 4ft below the finished ground

For the case where the new foundation overlaps the existing foundation the existing piles shall be xxxxxxxxxxxxx. The contractor shall determine such locations and provide plans for xxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

c. Use of Explosives

At no time will blasting methods for demolition be allowed.

d. Protection of Roadways and Bicycle and Pedestrian Facilities

Bridge removal operations affecting roadway traffic, bicycle and pedestrian traffic shall be performed during closure periods of the bicycle and pedestrian facilities, except as specified below for preliminary Work.

Preliminary work shall be limited to operations that will not reduce the structural strength or stability of the Existing Bridge, or any element thereof, to a level that would constitute a hazard or increase the likelihood of falling debris. Removal of concrete deck, lighting, signs, and other related elements will be considered preliminary work if containment and/or support of this material is provided. Removal of main structural steel members shall not be considered preliminary work.

e. Salvaged Materials

The Design/Build Firm shall notify local, State and Federal government agencies of the availability of the bridge debris for their beneficial use.

f. Demolition Debris Report

Debris removal records shall be kept for all items removed from the Project as part of demolition and removal operations. A Demolition Debris Report shall be Signed and Sealed by the Engineer of Record. The report shall contain a comparison of the pre-demolition conditions and post-demolition debris removal records. The report shall also identify any demolition debris in the waterway, all corrective measures taken to remove the debris, and confirmation that all debris identified has been removed.

1. **Deliverables:**

Unless otherwise indicated, all deliverables shall be submitted in both electronic format and hardcopy format. Acceptable electronic formats include Microsoft Word, Microsoft Excel, or Adobe Acrobat (PDF)

files, unless otherwise indicated. At a minimum, the Design-Build Firm shall submit the following to FDOT:

Deliverable	For Approval or Acceptance	Number of Copies		Submittal Schedule	Reference Section
		Hardcopy	Electronic		
Corrosion Protection Plan	Approval	3	1	Within 30 Days following NTP	I.11.b
As-Built Corrosion Protection Plan	Approval	3	1	Prior to Completion	I.11.b
Climatology and Wind Report (if necessary)	Approval	3	1	Per agreed upon Submittal Date	I.10.g
Wind Tunnel Test Report (if necessary)	Approval	3	1	Prior to submittal of the Wind Engineering Study	I.10.g
Wind Engineering Study Report (if necessary)	Approval	3	1	Included in Bridge Design Submittal	I.10.g
Inspection and Maintenance Manual	Acceptance	3	1	Prior to Service Commencement	I.13.b
Stay Cable Wind, Rain, and Vibration Report (if necessary)	Approval	3	1	Prior to procuring vibration damping materials	Attachment A
Stay Cable Damping Evaluation Report	Approval	3	1	10 Days after installation of the cable damping system	Attachment A

Deliverable	For Approval or Acceptance	Number of Copies		Submittal Schedule	Reference Section
		Hardcopy	Electronic		
Stay Cable System Specification	Approval	3	1	TBD	Attachment A
Preliminary Cable Stay Erection Manual	Approval	3	1	At Final Design Review	I.14.b.1
Final Cable Stay Erection Manual	Approval	3	1	60 days prior to Signature Bridge construction	I.14.b.2
Structural Monitoring System Specification	Approval	3	1	TBD	Attachment A
Draft Bridge Removal Plan	Approval	3	1	At least 30 days before Final Bridge Removal Plan	I.15.c.2
Final Bridge Removal Plan	Approval	3	1	30 days before commencing demolition operations on any span	I.15.c.2
Demolition Debris Report	Approval	3	1	Within 28 days after completion of demolition operations	I.15.f
Metromover Jacking Plan	Approval	3	1	With 60% design plans	I.4.d

K. Specifications:

As part of this RFP, the Division I (General Requirements and Covenants) Design Build Specifications

have been included as attachment A-02.

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

The Design-Build Firm shall prepare and submit a signed and sealed Construction Specifications Package for the Project, containing all applicable Division II and III Special Provisions and Supplemental Specifications from the Specifications Workbook in effect at the time the Bid Price Proposals were due in the District Office and any signed and sealed Technical Special Provisions. Any subsequent modifications to the Construction Specifications Package shall be prepared, signed and sealed as a Supplemental Specifications Package. The Specifications Package shall be prepared, signed and sealed by the Design-Build Firms Engineer of Record who has successfully completed the mandatory Specifications Package Preparations Training.

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

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

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

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

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

L. Shop Drawings:

The Design-Build Firm shall be responsible for the preparation and approval of all Shop Drawings. Shop Drawings shall be in conformance with the Departments Plans Preparation Manual when submitted to the Department and shall bear the stamp and signature of the Design-Build Firm's Engineer of Record (EOR), and Specialty Engineer, as appropriate. The Department shall review the Shop Drawing(s) to evaluate compliance with Project requirements and provide any findings to the Design-Build Firm. The Departments procedural review of shop drawings is to assure that the Design-Build Firm's EOR has approved and signed the drawing, the drawing has been independently reviewed and is in general conformance with the plans. The Department's review is not meant to be a complete and detailed review. Upon review and approval of the shop drawing, the Department will initial, date, and stamp "Released for Construction" or "Released for Construction as Noted". Shop Drawings for a particular element shall not be submitted before the design plans for that element are Released for Construction.

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.

M. Sequence of Construction:

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

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

N. 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.

O. Temporary Traffic Control Plan:

1. Traffic Control Analysis:

The Design-Build Firm shall design a safe and effective Temporary Traffic Control Plan including 100% (ITS Videos) ITS coverage and traffic volume calculation, Bluetooth/WIFI/GPS vehicle detection capable of providing travel time and delay, posting of vehicle travel times through the work zone to efficiently move vehicular and pedestrian traffic during all phases of construction. The coverage parameters are described within attachment A-X. Topics to be addressed shall include, but are not limited to, construction phasing, utility relocation, drainage structures, signalization, ditches, front slopes, back slopes, drop offs within clear zone, temporary roadway lighting and traffic monitoring sites. Special consideration shall be given to the drainage system when developing the construction phases. Positive drainage must be maintained at all times.

The Temporary Traffic Control Plan shall address how to assist with maintenance of traffic throughout the duration of the contract. All hurricane evacuation routes shall be maintained at all times during construction. The Design-Build Firm will maintain access to business, residences, institutions and thru-traffic during construction.

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

The Design-Build Firm shall employ the use of advanced traffic modeling tools to verify traffic movement and conditions such as, but not limited to, ramp operations, corridor and intersection

timing/phasing, freeway and arterial weave/merge/diverge conditions, etc. The Design-Build Firm will be responsible to submit traffic models/simulations and analysis with the 90% TCP and prior to implementation.

The Design-Build Firm shall coordinate with TCP plans on any adjacent projects for consistency in the maintenance of traffic. It is anticipated that construction by others will be underway or near completion at each end and within this project during the life of this Contract. Coordinate construction operations with those of other Contractors as necessary.

Any and all roadways that intersect with the cross roads must remain accessible to the cross roads. The Design-Build Firm will utilize lane closure analyses, coordinate with local public officials (in charge of these intersecting roadways) and prepare an acceptable plan for maintaining local access. The Design-Build Firm will submit these analyses, coordination documentation, and traffic control plans at each plan submittal. Existing posted speeds on cross roads shall not be modified.

The regulatory speed of 45 mph on I-395 will be uniformly maintained within the limits of the work zone for each area. A reduction in speed on I-95 will not be permitted. Regulatory speed on ramps may be lowered by 10 mph from the existing posted speed, but at no time shall be less than 25 mph.

A minimum of two travel lanes in each direction shall be maintained along I-395 at all times. No reduction in the number of travel lanes along I-95 shall be permitted.

For the Direct Connect Ramps at the I-95/I-395 Interchange, one lane shall be maintained at all times. Existing number of lanes shall be maintained along the following arterials and local streets during construction.

- Biscayne Boulevard
- NW 14th Street

Modifications to other local streets and traffic patterns will need to be clearly identified in the Traffic Control Plan. Modifications to traffic patterns to other local streets will need to be approved by the local maintaining agency (Miami-Dade County or City of Miami) and will be the responsibility of the Design-Build Firm to obtain such approvals.

Entrance and Exit Ramp number of lanes as well as intersection terminals will follow the minimum lane requirements as shown in the Temporary Traffic Control Plan for all phases. See conceptual Temporary Traffic Control Plan provided in "Reference Documents – RD-01".

The Temporary Traffic Control Plan shall be constructed in the minimal phases as possible.

Temporary painted pavement markings as described in Standard Specification Section 710 shall be reapplied if the retroreflectivity values fall below 150 mcd / lx*m2 at any time within the duration of the project.

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

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

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

or continuous lane closures shall be considered as significant Projects.

A TMP will consist of three components:

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

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

Local events and the Project's impact on these events (lane closures) shall be considered in the development of the Temporary Traffic Control Plan.

2. **Temporary Traffic Control Plans:**

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

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

Changeable Message Signs shall be placed within five hundred (500) feet of the project limits. These signs serve as advanced construction notice and shall be in place two (2) weeks prior to the start of construction activities. At the completion of the two (2) week advanced construction notice period the signs shall be removed. The message should notify motorists that roadway construction is commencing and display the begin month and date. Changeable Message Signs shall be in place seven (7) days in advance of any lane or ramp closure. The display shall alternate with messages stating the exit name to be closed and the date and time of closure.

3. **Traffic Control Restrictions:**

The Traffic Control Plan provided by the Department in the Concept Plans shall serve as minimum requirements to the Design-Build Firm's Traffic Control Plan. The Design-Build Firm shall make provisions to permit existing drives on all cross streets be maintained open at all times.

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

Miami Boat Show
Urban Beach Festival
South Beach Food and Wine Festival
American Airlines Arena – All Events (http://www.aaarena.com/events/full-page-calendar)
Adrienne Aarsht Center for the Performing Arts – All Events

(http://www.arshtcenter.org/tickets/calendar/)

Closures:

All requests for lane closures (except in the event of emergencies) shall be submitted in writing a minimum of fourteen (14) days in advance. All lanes of traffic shall be open in each direction unless approved by the Engineer in advance.

All expressway to expressway movements via direct connect ramps shall be maintained operational during peak hours. The only exception will be the weekend closure of Ramp SE (NB I95 to EB 395) prior to Phase 2 opening to traffic; to complete the punch thru/construction of the EBCON (SB I95 to EB 395). This work shall not occur during an event weekend.

Movement	Reason	Duration
RAMP SE (NB I95 to EB 395)	Completion of EBCON	1 Weekend

A lane may only be closed while work is being performed. All lane closures, including ramp closures, must be reported to the local emergency agencies, the media and the District Public Information Officer within the time frame specified by the Department. All lanes of traffic shall be reopened at the end of the allowed lane closure time interval. The Design-Build Firm shall schedule and phase work activities to ensure lane closures do not exceed the allowable lane closure time. 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.

No lane closures shall be allowed on a Friday preceding a Saturday holiday, or the Monday following a Sunday holiday. The Department Engineer may adjust lane closure times if conditions warrant.

Single lane closures:
Single lane closures shall occur during non-peak hours and on non-event days/nights/weekends or 2 hours after the end of a special event. Mainline and direct connect ramp non-peak hours are:

- 12:00 am to 5:30 am Monday thru Thursday nights
- 1:00 am to 5:30 am Holidays, Friday, Saturday, and Sunday nights

Non-peak hours for all other ramps and side streets are:

- 12:00 am to 5:30 am Monday thru Thursday nights
- 1:00 am to 5:30 am Holidays, Friday, Saturday, and Sunday nights

Multiple Lane Closures:
Multiple lanes in the same direction on the mainlines may be closed on I395 and I95 as follows:

- 12:00 am to 5:30 am Monday thru Thursday nights
- 1:00 am to 5:30 am Holidays, Friday, Saturday, and Sunday nights

Complete Closures:
Complete closures of I-395, I-95, ramps, and local streets will only be allowed for overhead beam erection construction, and the demolition or installation of overhead sign structures (including ITS gantries). These complete closures may only be executed during non-peak hours.

Closure of all lanes in one or both directions is considered a complete closure.

A minimum of one lane in each direction shall be maintained open at all times along the following

arterials and local streets, unless a complete closure is warranted for overhead erection activities.

- Biscayne Blvd.
- NE 2ND Avenue
- NE 1ST Avenue
- N Miami Avenue
- NW 14TH Street

The closures of other cross streets within the project area will require an approved detour plan. Adjacent cross streets may not be closed simultaneously.

The Design-Build Firm shall provide detour plans to include, but not limited to, detour routes, detour signing, lane closures at points of closure, portable VMS placement and messages and location of off-duty law enforcement. The Design-Build Firm shall coordinate all detour routes with Miami-Dade County Signals, Signs Division and with the owners of detour facilities at least five (5) working days in advance of detour date to allow for implementation of special traffic signal timing patterns on the detour routes as necessary.

1. Work Restrictions

The Design-Build Firm must comply with all local ordinances, which may affect construction activities. All associated work activities shall take place within public right of way. The Design-Build Firm shall be solely responsible for obtaining any temporary permits, leases, etc., that it desires for any required construction staging outside the Project Right of Way, without any involvement by the Department. Any area where the Design-Build Firm may propose as construction staging areas, outside of the reconstruction area, must be surveyed prior to use and restored to the original working condition as acceptable to the Department.

The Design-Build Firm shall not drive piling or sheet piling within one-half (1/2) mile of any school on Florida Comprehensive Assessment Test (FCAT) testing days. The Design-Build Firm shall coordinate with the Miami-Dade County School Board for specific dates of this testing. Hours for pile driving, sheet piling or any other operation that creates excessive noise or vibrations shall be coordinated with local clinics, laser surgery related business and diagnostic facilities located within a one thousand (1000) foot radius, prior to the start of work activity. The resulting coordination shall be published to local business, municipalities and schools within the 1000-foot radius a minimum of 5 days prior to said activity.

P. 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, signing, and submitting the permit application package including all permit modifications, or subsequent permit applications.

If, as a result of design changes proposed by the Design-Build Firm, additional compensatory

environmental mitigation is required, it shall be the responsibility of the Design-Build Firm to pay for the mitigation.

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

1. **NEPA Requirements**

In accordance with NEPA, several environmental agency coordination meetings and concurrence reviews have been ongoing for the Project. The District Six ISDO-Environmental Management Unit will continue to coordinate with these agencies and provide additional information or surveys as requested throughout the design and construction phases.

The PD&E process was authorized by Florida Statute to comply with the requirements of the National Environmental Policy Act (NEPA) and other related federal and state laws, rules and regulations. The FDOT PD&E Manual was created as a guide for the process. PD&E studies can be long and complex undertakings. They are to be a continuation of the analyses from the earlier Planning and Programming stages of the project in the Efficient Transportation Decision Making (ETDM) process.
The objectives of a PD&E study are to perform necessary social, environmental and engineering studies of a proposed transportation improvement, to support decisions concerning if and where a project should be built and to decide what the basic design concepts will be. The social, environmental and engineering studies to be conducted are in response to comments received during the ETDM Planning and Programming screens. Throughout this process, it is essential that the public have effective input into these decisions. The public includes individual citizens as well as state and federal agencies, permitting agencies, local governments, neighborhood associations, businesses, and environmental and other interest groups. The products of a PD&E study are the reports of findings and recommendations, appropriate environmental documents and preliminary engineering concepts. The engineering included in a PD&E study varies depending on schedule, funding and required study. This engineering component might result in a level of detail necessary to obtain the project's environmental permits. Typical tasks accomplished in a PD&E study include agency coordination, data collection, development of alternatives, environmental analysis and report preparation/review, public involvement, evaluation and selection of alternatives, Value Engineering (VE), and documentation. 23 CFR Part 771.129(c) states that "after approval of the EIS, FONSI, or CE designation, the applicant shall consult with the Administration prior to requesting any major approvals or grants to establish whether or not the approved environmental document or CE designation remains valid for the requested Administration action".

This consultation effort is accomplished through the reevaluation process. Reevaluations serve to ensure project compliance with all applicable federal and state laws prior to the advancement of the project to the next major production phase (preliminary engineering, right-of-way acquisition, or construction advertisement). The reevaluation process also provides the mechanisms whereby commitments made by Any new commitments or laws which may have come into effect since the approval of the original final environmental document or Categorical Exclusion (CE) designation are addressed in the reevaluation. As a result, the environmental documentation on a project is always current with prevailing rules and regulations and any commitments resulting from the project development process or due to permit requirements.

The reevaluation is the only instrument available to fully document compliance with federal laws and any changes that may have occurred on a project since the approval of the original final environmental

document or CE designation. The extent and complexity of the reevaluation is, therefore, contingent upon the project's status at the time the reevaluation is prepared; changes to the affected environment since the approval of the original environmental document or CE designation, and the purpose of the reevaluation (e.g., design change).

2. Cultural Resources

Five historic sites occur within the vicinity of the Project: Sears, Roebuck, and Company Building (Sears Tower), Fire Station No. 2, St. Johns Baptist Church, Rio Mar Apartments and Citizens Bank. The locations of these sites are provided in the Cultural Resource Assessment Survey (CRAS) provided in Reference Document 2. Three of the sites were listed on the National Register of Historic Places (NRHP) and two other sites were determined eligible for NHRP listing. Historic sites and archaeological sites will not be available to the Design-Build Firm for staging or stockpiling activities.

The Design-Build Firm shall comply with the requirements with respect to the discovery of human remains during construction. In the event that human remains are found during construction activities, the provisions of Chapter 872.05, Florida Statue will apply. Chapter 872.05, F.S. states that, when human remains are encountered, all activity that might disturb the remains shall cease and may not resume until authorized by the State Medical Examiner and the State Archaeologist. In addition, the Design-Build Firm shall notify the ISDO-Environmental Management Unit – Cultural Resources Coordinator at (305) 470-5231.

3. Section 4(f) (federal projects only)

Section 4(f) of the Department of Transportation Act of 1996 provides protection for publicly owned parks, recreation areas, historic sites, wildlife and waterfowl refuges from conversion to a transportation use. FHWA guidance requires that any impacts from the use of a Section 4(f) property for highway purposes be evaluated. The Department completed an assessment of the Project's potential impacts on the identified resources and it was determined that proximity impacts will not impair the activities, features or attributes of these properties since I-395 is an existing facility.

The Design-Build Firm shall not enter or stage upon the following areas without prior consent of the Department: any public park, archaeological sites identified in the CRAS documents prepared for the Project, or any other Section 4(f) Resource.

4. Wetlands and Mitigation

The Project will not have any impact to wetland involvement.

5. Contaminated Materials

In accordance with FDOT policy and FHWA requirements, a contamination screening evaluation was performed to evaluate potential impacts from contaminated sites to the Project. A Contamination Screening Evaluation Report (CSER) was prepared pursuant to FHWA's Technical Advisory T 6640.8.A. The Design-Build Firm should reference the CSER included in Reference Document.

The Following Contamination Screening Evaluation Reports (CSERs) were performed for the project corridor during the PD&E Study phase to determine the potential for contamination involvement associated with project construction. Refer to such documents as follows:

1. *CSER- I-395 Corridor: From West side of the Midtown Interchange to the Approaches of the West Channel Bridges of the MacArthur Causeway, FM No. 251670-1-22-02 dated September 2008* in **Attachment X.**
2. *Update CSER- I-395 Corridor: Technical Memorandum From West side of the Midtown Interchange to the Approaches of the West Channel Bridges of the MacArthur Causeway, FM No. 251670-1-22-02 dated January 2013* in "Reference Documents - **RD-02".**
3. *Impact to Construction Assessment Report I-395 Corridor: Technical Memorandum from West side of the Midtown Interchange to the Approaches of the West Channel Bridges of the MacArthur Causeway, FM No. 251670-1-22-02 dated January 2013* in "Reference Documents – RD -02.

Based on the above reports, Contamination Baseline Assessments for several parcels acquired for the project and an Impact Construction Assessment was performed by the Department to determine potential contamination impacts. Based on said reports, the following areas have been identified as being contaminate

- Approximately Station (STA) XXX+00 to STA XXX+00 **vicinity parcel 100**
- Approximately Station (STA) XXX+00 to STA XXX+00 **vicinity parcel 102**
- Approximately Station (STA) XXX+00 to STA XXX+00 **vicinity parcel 140**

The Design-Build Firm shall review the above referenced documents which discuss known or suspected contamination on the project corridor. The Design-Build Firm shall then schedule an Environmental Coordination meeting with the DCIC to discuss the contamination-based issues on the project. After this meeting additional contamination assessment may be conducted by the Department if project plans are revised by the Design-Build Firm after RFP completion.

The Design-Build Firm shall be responsible to provide plans to the DCIC for review and approval upon further development of the Project design within the areas deemed potentially contaminated. This is of particular importance in areas including – but not limited to – new alignment, stormwater management facilities (i.e. stormwater pond), mast arm locations, elevated roadways or deep foundations. The Design-Build Firm shall make every effort to avoid placing a stormwater management facility on a contaminated site.

In the event that any suspected contamination is encountered during construction, the Design-Build Firm shall be required to adhere to Subarticle 120-1.2 of Section 120 (Excavation and Embankment) in the FDOT Standard Specifications for Road and Bridge Construction – "Unidentified Areas of Contamination."

The Department will be responsible for the removal, handling, transportation and disposal of all identified and/or unknown undesirable, contaminated and/or hazardous materials encountered during construction.

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The Design-Build Firm will be responsible for responding to all traffic incidents during the construction and management of the Project, including – but not limited to – contamination and hazardous materials release associated with traffic incidents, unauthorized dumping and/or similar incidents.

For groundwater monitoring wells found within the Project Right of Way, the Design-Build Firm shall be required to adhere to Subarticle 110-10.1 of Section 110 (Clearing and Grubbing) in the FDOT Standard Specifications for Road and Bridge Construction – "Water Wells Required to be Plugged."

The Design-Build Firm shall indemnify the DEPARTMENT against any and all claims arising from improper handling storage, transportation or disposal of contaminated materials. The Design-Build Firm shall also be solely and totally responsible at its own cost for completely cleaning up any contamination caused by its own activities. This includes, but is not limited to spillage/leakage of contaminants from equipment and/or portable tanks used in constructing the project.

Dewatering
Several potentially contaminated sites located within a 500-ft radius of the project corridor have been identified. The Contractor shall contact the DCIC at (305) 470-5228 for technical assistance before applying for a dewatering permit from any environmental regulatory agency to avoid potential contamination plume exacerbation and determine proper groundwater management associated with such sites.

Any proposed dewatering operations within the areas noted below shall be reviewed with the DCIC.

- Approximately Station (STA) XXX+00 to STA XXX+00 **vicinity parcel 100**
- Approximately Station (STA) XXX+00 to STA XXX+00 **vicinity parcel 102**
- Approximately Station (STA) XXX+00 to STA XXX+00 **vicinity parcel 140**
-

Q. Signing and Pavement Marking Plans:

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

Signing Concept Plans (reference document xxx) have been developed for this project. The Design-Build Firm shall reference the conceptual signing plan and use it as a guide as to where signs are to be placed and as a guide as to messages to be displayed on each sign.

The Design-Build Firm is responsible for removing and modifying existing signs outside or within the project limits in order to conform to the overall design. New signs should not be in conflict with existing signs along the entire corridor of the project. Coordination will be required with the Port of Miami Tunnel for singing. Coordination with adjacent projects is also required during construction and for final signing.

All interchange guide sings and lane designation signs on the Mainline, ramps or local roads shall be mounted overhead.

The Design- Build Firm must use traffic paint for all pavement markings (including crossroads) until the appropriate curing period in which the thermoplastic markings will be applied. The completion of

temporary pavement markings (double application of paint) shall be required prior to Substantial Completion. The Design-Build Firm shall complete the thermoplastic pavement markings prior to Final Acceptance.

High performance contrast tape is required for permanent pavement markings on all bridges with concrete pavement surfaces.

R. Lighting Plans:

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

Also refer to the Conceptual Design Plans and the VQM (see "Reference Documents - RD-01"). The lighting along the mainline I-395 shall be metal halide. The lighting at the Midtown Interchange shall be high pressure sodium. Fixtures shall be as shown in Lighting Report.

All plans are to be prepared in accordance with, unless otherwise noted herein, the Department's design standards, Plans Preparation Manual, Miami-Dade County and NEC requirement, and instructions issued by the Department to the Design-Build Firm. Plans shall be accurate, legible, complete in design and drawn to the scale as directed by the Department, and furnished in reproducible form.

Lighting System Requirements

Provide a complete lighting system for the Structure including the following lighting elements as described in the section below.

1. Roadway Lighting
2. Aesthetic Lighting for
    a. Main Span Structure
    b. Roadway Portals
    c. Under Deck
    d. Abutments
    e. Water Features
3. Aviation Beacons.

All lighting system elements must comply with the Visual Quality Manual and be coordinated with the Aesthetic Lighting Package and the Visual Quality Plans.

5. Roadway Lighting

All roadway lighting poles shall be located and shielded so they do not light or washout the lighting effect of the aesthetic lighting on the main span structures or cables.

Roadway Luminaire Requirements- Highway

a. Main Span Luminaire Standard: Lumec Cappela
b. Typical Roadway Luminaire Standard: Mongoose
c. CCT 4000K
d. Minimum 80 CRI

Roadway Luminaire Requirements- Local Streets

a. Poles, luminaires and lamps to match or be compatible with the existing roadway luminaires on each street. Different poles and luminaires are required for the different districts inside the project area.
b. No poles to be located under the structure. Use structure mounted lights as described in the Aesthetic Lighting section.

6. Aesthetic Lighting

All Aesthetic Lighting shall be designed in accordance with the Visual Quality Manual and the Aesthetic Lighting Package defined in Section xx. Design the system to minimize maintenance requirements and reduce the impact maintenance routines have on the Structure's operation.

At night, the Main Span structure is visible to motorists on the MacArthur Causeway and I-395, to vehicular and pedestrian traffic along Biscayne Boulevard, and to viewers from the islands, boats and cruise ships in Biscayne Bay. Visitors to the American Airlines Arena, the new Science and Art Museums, Bicentennial Park, the Adrienne Arsht Performing Arts Center, the Children's Museum and the colleges, residences and businesses in and around these sites will all have views of the bridge at night. The lighting must stand out against the backdrop of office towers and residential skyscrapers, all of which are competing for attention.

Wishbone Arch

The arches are lit by narrow-beamed, linear, color-changing LED luminaires mounted end to end along the four top edges of the arches. The luminaire is concealed by a valance that extends beyond the height of the luminaire. The luminaires graze light down the sides of the arch, turning the arch into a color changing band. The light grazing down will light up parts of the cables.

Lotus

White LED floodlights mounted at deck level and at the bottom of the center opening illuminate the interior surfaces of the Faux Lotus structure with beamspread distributions varying from wide to narrow. These fixtures are aimed to provide even illumination along the height and width of the surfaces. In the upper opening, cross focusing is used. In the lower two openings cross focusing is only used if the cross focused beam will not be intersected by a passing semi-trailer truck of typical height.

White LED floodlights mounted to the underside of the deck evenly wash the interior surfaces of the structure's base. These fixtures are inconspicuously mounted.

Linear white LED luminaires are mounted to the side of the deck in a continuous line outside of the cable stay anchorages. The fixtures are aimed parallel to the plane of the cables to provide an even wash of light at the bottom of the cables that fades out along the height of the cables. The continuous line of fixtures runs from the outer most cable stay anchorage to 20'-0" past the inner most cable stay for each of the 8 cable planes.

Design Builder's Option

Any proposed structure must have a color changing aesthetic lighting system separate from any general lighting used for the roadway and structure. The lighting should highlight the bridge elements parallel to

the roadway, lighting the surfaces facing away from the roadway and facing into the roadway. The highlighted surfaces shall create aesthetically pleasing night views of the structure for both motorists using the bridge and onlookers North and South of the structure. Any structural elements washed with light should be lit so the wash is not spotty. Any aesthetic lighting fixtures are to be inconspicuously mounted so they do not detract from the appearance of the structure during the day or at night. If direct view fixtures are used their mounting details must be designed to enhance the appearance of the bridge structure.

a. Aesthetic Lighting Controls

The color-changing lighting on the Wishbone or Third Option Main Span is controlled by a programmable aesthetic lighting control system. It is programmed to run kinetic or static looks each night, automatically turning on and off at a time agreed upon by the PAG. In addition, a custom mobile phone application will allow for the creation of lighting events on the main span in real time. This app will be controlled so as to ensure that drivers on I-395 are not distracted by abrupt changes to the lighting, but will allow a level of artistic license to students at Miami International University of Art and Design or others given access to the app. The control system will have a user interface which allows for the temporary override of the lighting event schedule and the enabling or disabling of app input.

b. Roadway Portal

At the street level along the entire corridor, portals are defined as areas where streets or trails pass beneath the structure for vehicular and pedestrian traffic traveling north to south. At each of these portals, the outer face of the box girder will be illuminated by continuous, linear, white LED luminaires mounted to the fascia of the deck and aimed back at the structure to wash the vertical surface of the box girder. The luminaires will run continuously from the outer edge of the sidewalk, across the roadway, to the outer edge of the sidewalk on the other side of the street. This will be repeated at each occurrence of this detail along each roadway and sidewalk passing under the structure. See RD-01 - Visual Quality Plans for portal lighting locations. This luminaire will be selected and located so as to also provide sufficient roadway and sidewalk illumination, though it may be supplemented by additional lighting on the underside of the box girder.

At the Main Span the portal luminaires will run continuously from the eastern abutment to the outside edge of the western sidewalk at NE 1st Avenue.

c. Abutments

The East and West abutments are illuminated by white LED, wall washing luminaires mounted to the underside of the Structure. These luminaires are set back from the abutments and spaced to provide even illumination of the abutment walls. The lighting will highlight any artwork applied to the abutments and provide vertical illumination for the nearby pedestrian paths.

7. Aviation Beacons

Note to Reviewer: More prescriptive notes to come after conceptual lighting plan is developed for two alternates that are advancing to the BDR.

S. Signalization and Intelligent Transportation System Plans:

1. General

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

The Design-Build Firm shall prepare design plans and provide necessary documentation for the procurement and installation of the Signalization and Intelligent Transportation System devices as well as overall system construction and integration. The construction plan sheets shall be in accordance with Department requirements and include, but not be limited to:
The Design-Build Firm shall prepare Signalization plans in accordance with Department criteria. Signal work shall be required at the following intersections (also refer to Signal Concept Design Plans):

- Intersection NW 14th Street and NW 3rd Avenue (ID: 2373)
- NW 1st Place and NW 14th Street (ID: 2372)
- I-395 WB On-ramp and N Miami Avenue (ID: 6933)
- I-395 EB Off-ramp and N Miami Avenue (ID: 6934)
- I-395 WB On-ramp at NE 1st Avenue (ID: 6935)
- I-395 WB On-ramp, NE 1st Avenue and NE 13th ST (ID: 2364)
- NE 12th Steet and NE 1st Avenue (ID: 3684)
- I-395 WB Off-ramp and NE 1st Avenue (ID: 6399)
- I-395 EB Off-ramp, NE 1st Ave and NE 13th St (ID: 6936)
- NE 2nd Ave and NE 12th St (ID: 3685)
- I-395 Off-ramp and NE 2nd Ave (ID: 6400)
- NE 2nd Ave and NE 11th Terrace (ID: 6401)
- SR-5/US-1/Biscayne Blvd and NE 11th Terrace (ID: 3645)
- Bayshore Ct and NE 13th St (ID: 2361)
-

- Project Layout / Overview sheets outlying the locations of field elements
- Detail sheets on:
  - Dymanic Message Sign (DMS) Structure, DMS attachment, DMS display/layout
  - Fiber optic vaults, pullbox 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.
    - Microwave Vehicle Detection System (MVDS) detection diagrams

- Trench details
- Closed Circuit Television (CCTV) camera mounting details
-

Anticipated DMS features and details:

DMS Feature	Approximate Location	Direction	Notes
	I395 and NW 12th Ave.	EB	
	I395 and eastshore of Watson Island	EB	

The Design-Build firm is responsible for ensuring project compliance with the Regional ITS Architecture and Rule 940 as applicable. This includes, but is not limited to, the development or update of a concept of operations, the development or update of a 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.

In addition to inventorying the existing ITS devices, the Design–Build firm will protect existing ITS infrastructure that will remain, as well as making provision for temporary ITS communications and relocation of ITS devices as necessary to preserve the overall operation of the existing ITS system.

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.

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.

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.

T. Landscape Opportunity Plans:

***Note to developer of the RFP:** Include the following language in the Design and Construction Criteria section when the project scope requires the Design-Build Firm to develop and provide a Landscape Opportunity Plan. This language is NOT to be modified without prior approval from the State Construction Office.*

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 design shall adhere to the FDOT Highway Beautification Policy with the intent of creating a unified landscape theme for the project.

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

Guided by the commitments made in the Record of Decision from the final EIS, the Design-Build Firm shall allocate a minimum of 10% of its bid price for urban design landscaping, which includes any vegetation, mulches, irrigation systems. See the Visual Quality Manual for conceptual urban design underneath the I-395 roadway. The urban landscaped areas are broken into three distinct zones as stated in the Visual Quality Manual (Reference Documents - RD-01).

There is existing sidewalk pattern along the east and west side of Biscayne Boulevard. At the end of any construction activities, the sidewalk pattern will be restored to the existing condition.

Prior to proceeding to final analysis and plans, the Design-Build Firm shall prepare a technical memorandum to describe the proposed concepts, including construction cost estimates for review and approval by the City of Miami and the Department. Following the approval of the landscape approved concept, complete landscape and irrigation plans for the Project shall be prepared by a licensed State of Florida registered Landscape Architect. Plans shall be prepared according to Chapter 9 of the FDOT Plans Preparation Manual and shall be in accordance with the governing FDOT Design Standards and Standard Specifications for Road and Bridge Construction identified for the roadway project.

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 in .pdf format including bookmarks for each section on a CD. 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, **(Note to developer of the RFP: *Max 7)*** (#) CD's, and **(Note to developer of the RFP: *Max 7)*** (#) hard copies of the Technical Proposal to:_____

The minimum information to be included:

Section 1: Project Approach

- Paper size: 8½" x 11". The maximum number of pages shall be **(Note to developer of the RFP: *Maximum of 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, measureable standards, and remedial work plan for any proposed Value Added features that are not Value Added features included in this RFP, or for extending the Value Added period of a feature that is included in this RFP. Describe any material requirements that are exceeded.
- Provide a Written Schedule Narrative that describes the Design and Construction phases and illustrates how each phase will be scheduled to meet the Project needs required of this Request for Proposal. Bar or Gantt charts are prohibited. Do not reveal or describe the Proposed Contract Time. Proposed Contract Time will be evaluated when Bid Price Proposals are received.

Section 2: Plans and Technical Special Provisions

- 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.

- Provide Landscape Opportunity Plan sheets that depict a Bold Landscape design for the entire project limits. The Landscape Plan shall include graphic plant symbols that show the plant location, plant type, plant quantity, plant botanical and common name and installed plant size. Paper size shall be 11"x17".
- Provide Technical Proposal Plans in accordance with the requirements of the Plans Preparation Manual, except as modified herein.
- The Plans shall complement the Project Approach.
- Provide any Technical Special Provisions which apply to the proposed work. Paper Size: 8½" x 11".

C. Evaluation Criteria: (Note: This criteria is under development by Central Office.)

This will be a Maximum Price Best Value selection that provides innovation and creativity during the selection process to ensure an aesthetically pleasing project meeting the requirements of the RFP.

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

Item	Value
1. Design	25-40
2. Construction	25-40
3. Innovation	0-10
4. Value Added	5-10
5. Aesthetics	0-10
Maximum Score	**100**

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

1. **Design (_25-40_ points)**

Credit will be given for the quality and suitability of the following elements:

- Structures design
- Roadway design / and safety
- Drainage design
- Environmental Design
- Design coordination plan minimizing design changes
- Geotechnical investigation plan
- Geotechnical load test program
- Minimizing impacts through design to:
  - Environment
  - Public
  - Adjacent Properties
  - Structures
- Traffic Control Plan design
- Incident Management Plan
- Aesthetics
- Utility Coordination and Design
- Design considerations which improve recycling and reuse opportunities

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

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

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

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

2. **Construction (_25-40_ points)**

Credit will be given for the quality and suitability of the following elements:

- Safety
- Structures construction
- Roadway construction
- Drainage construction
- Construction coordination plan minimizing construction changes
- Minimizing impacts through construction to:
  - 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

Credit will be given for developing and deploying construction techniques that enhance project durability, reduce long term and routine maintenance, and those techniques which enhance public and worker safety. This shall include, but not be limited to, minimization of lane and driveway closures, lane widths, visual obstructions, construction sequencing, and drastic reductions in speed limits.

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

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

3. **Innovation (_0-10_ points)**

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

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

4. **Value Added (_5-10_ points)**

Credit will be given for the following Value Added features:

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

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

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

1. Aesthetic

Credit will be given for the following project aesthetics

- Main span
- Mainline and Connector Ramps
- Civil
- Street Scape
- Lighting

D. Final Selection Formula: (Note: The formula for selection is under development by Central Office)

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

$$\frac{BPP + (PCT * TVC)}{TS} = \text{Adjusted Score}$$

BPP = Bid Price Proposal
PCT = Proposed Contract Time*
TVC = Time Value Costs ($_____ per day**)
TS = Technical Score (Combined Scores from ELOI and Technical Proposal)
Note to developer of the RFP:
****Not used when the Department establishes the Contract Duration for the Project***
*****This figure is used only in the calculation for the adjusted score and when the PCT included in the Final Selection Formula. On federally funded projects, this figure shall be used only if an Incentive/Disincentive provision is included in the Design-Build contract.***

***Note to developer of the RFP:** The following paragraph and table are to be used only when the PCT and TVC shown above are removed from the Final Selection Formula and when the Department requires the Design-Build Firm to establish the Contract Duration as part of the Bid Price Proposal submission. Ranges of Proposed Contract Time and the Points Awarded for each range are to be established. A tool to assist with the development of this table can be accessed at this link: http://www.dot.state.fl.us/construction/DesignBuild/DBRules/DBRulesMain.shtm The ranges and points awarded shown below are provided as an example only.*

Points will be added to the Technical Score, at the time of Bid Price Proposal opening, according to the Proposed Contract Time based on the following table. The number of days shown on the bid proposal form shall be the official Proposed Contract Time.

Proposed Contract Time (Days)	Points Awarded
900 - 875	0

874 - 849	1
848 - 823	2
822 - 797	3
796 - 772	4
771 or less	5

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. If the Proposed Contract Time is greater than Maximum Contract Time of (XXX) calendar days the Bid Price Proposal will be considered non-responsive.

E. Final Selection Process:

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

F. Stipend Awards:

Note to developer of the RFP: ***This section of the RFP document shall be used for all Adjusted Score Design-Build contracts, unless prior approval from the Chief Engineer has been obtained to exclude Stipend Award. The amount of the stipend compensation shall be within the ranges established by Rule 14-91, Design-Build Procurement and Administration Procedure 625-020-010 and the Design-Build Guidelines.***

The Department has elected to pay a stipend to a limited number of 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 $_____ 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 with original signatures and have delivered to the Department within one (1) week after the Short-List protest period, four (4) originals of 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 and the number of calendar days within which the Proposer will complete the Project. The lump sum price shall include all costs for all design, geotechnical surveys, architectural services, engineering services, Design-Build Firms quality plan, construction of the Project, and all other work necessary to fully and timely complete that portion of the Project in accordance with the Contract Documents, as well as all job site and home office overhead, and profit, it being understood that payment of that amount for that portion of the Project will be full, complete, and final compensation for the work required to complete that portion of the Project. One (1) hard copy Bid Price Proposal shall be hand delivered in a separate sealed package to the following:

_____

_____

_____

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

EXHIBIT C

This instrument prepared by,
or under the direction of,
Alicia Trujillo, Esq._____
District Chief Counsel
Florida Department of Transportation
1000 N.W. 111th Avenue
Miami, Florida 33172

Item/Seg No.: 251688-1-52-01
Sec/Job No. 87200-000C
SR No.: I-395
County: Miami-Dade
Parcel No.: 5593

PERPETUAL EASEMENT
(Public Purpose)

THIS EASEMENT made this _____ day of _____, 2015, by the STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, Grantor, to MIAMI-DADE COUNTY, Grantee.

WITNESSETH: That the Grantor for and in consideration of the sum of Ten Dollar and other valuable consideration paid, the receipt and sufficiency of which is hereby acknowledged, hereby grants unto the Grantee, its successors and assigns, an Easement (Parcel 5593) for transportation use for the purpose of operating and maintaining an elevated Metromover Bridge and an Underground Foundation Pier/Column related thereto (the "Facility") over the following described land (the "Easement Areas") in Miami-Dade County, Florida:

See Exhibit "C" Aerial Easements (Aerial Easements 1 and 2 and Ground Easements 1 and 2) – additional support for Metromover Bridge (9 pages) attached hereto and made a part hereof

TO HAVE AND TO HOLD the said premises unto the Grantee, subject, however, to the following conditions:

THAT this easement is solely for the purpose of operating and maintaining the elevated Metromover Bridge and the underground foundation pier/column and no other uses of the Easement Areas are permitted. Grantor reserves the right to use the Easement Areas so long as such use does not interfere with the rights and use of Grantee hereunder.

THAT in the event said transportation use is permanently discontinued or abandoned, Grantee's easement shall terminate, and title to the Easement Areas shall immediately revert to the Grantor, and Grantor shall have the right to immediately possess same. In the event Grantee's Easement terminates and Grantor deems it necessary to request the removal of the Facility occupying the Easement Areas, Grantee shall remove the Facility and restore the Easement Areas to a like or similar condition as existed prior to this Easement, at its sole cost and expense.

Item/Seg No.: 251688-1-52-01
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SR No.: I-395
County: Miami-Dade
Parcel No.: 5593

THAT Grantee shall not obstruct the State right-of-way located immediately underneath the Easement Areas, except as may be required temporarily from time to time to effect the construction, inspections, maintenance, repairs, improvements and replacement of the Facility.

Any such work is subject to formal approval and permit by Grantor. Grantee shall promptly repair any damage to the Grantor's right-of-way, resulting from Grantee's exercising its rights hereunder.

THAT Grantee will indemnify and hold Grantor harmless from any and all damages and/or liability, claims, demand, actions and/or suits of any nature arising out of, relating to, or resulting from any negligent or wrongful act(s) of Grantee's employees, agents, subcontractors and contractors, or instrumentalities, acting within the scope of their office or employment, in connection with the rights granted to or exercised by Grantee hereunder, to the extent and within the limitations of Section 768.28, Florida Statutes; however, nothing herein shall be deemed to indemnify Grantor from any liability or claim arising out of the negligent performance or failure of performance of Grantor.

THAT this Easement is subject to all applicable permit requirements and any other required agreements or approvals, and concurrences.

THAT the provisions of this Easement may be enforced by all appropriate actions at law and in equity by the respective parties.

THAT Grantor makes no representations as to the title or condition of the property within the Easement Areas or the suitability of the Easement Areas for the use intended hereunder.

THAT this Easement is accepted and approved by the Grantee pursuant to Resolution No. _____ passed by the Miami-Dade Board of County Commissioners, a copy of which is attached hereto and forms part hereof;

The rights and obligations of the parties shall inure to the benefit of and be binding upon their respective successors and assigns.

This instrument may be amended or modified only by written instrument, executed and acknowledged by the parties hereto or their successors and assigns, and recorded in the Public Records of Miami-Dade County.

Item/Seg No.:	251688-1-52-01
Sec/Job No.:	87200-000C
SR No.:	I-395
County:	Miami-Dade
Parcel No.:	5593

IN WITNESS WHEREOF, the said grantor has caused these presents to be executed in its name by its proper officers thereunto duly authorized, the day and year first above written.

OF

STATE OF FLORIDA DEPARTMENT TRANSPORTATION

By: _____
Gus Pego, P.E.
District Secretary

Witness: _____

_____
Name/Title

Attest: _____
Executive Secretary

Witness: _____

Affix Department Seal

_____
Name/Title

LEGAL REVIEW:

_____
Alicia Trujillo

District Chief Counsel

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Item/Seg No.: 251688-1-52-01
Sec/Job No.: 87200-000C
SR No.: I-395
County: Miami-Dade
Parcel No.: 5593

State of Florida)
County of Miami-Dade)

The foregoing instrument was acknowledged before me this _____day of _____,
2014, by Gus Pego, District Secretary for District Six, FDOT, who is personally known to me, or has produced _____as identification.

_____
Notary Public in and for the County and State
(Affix Notary Seal)

as mentioned above.

My Commission Expires:
_____

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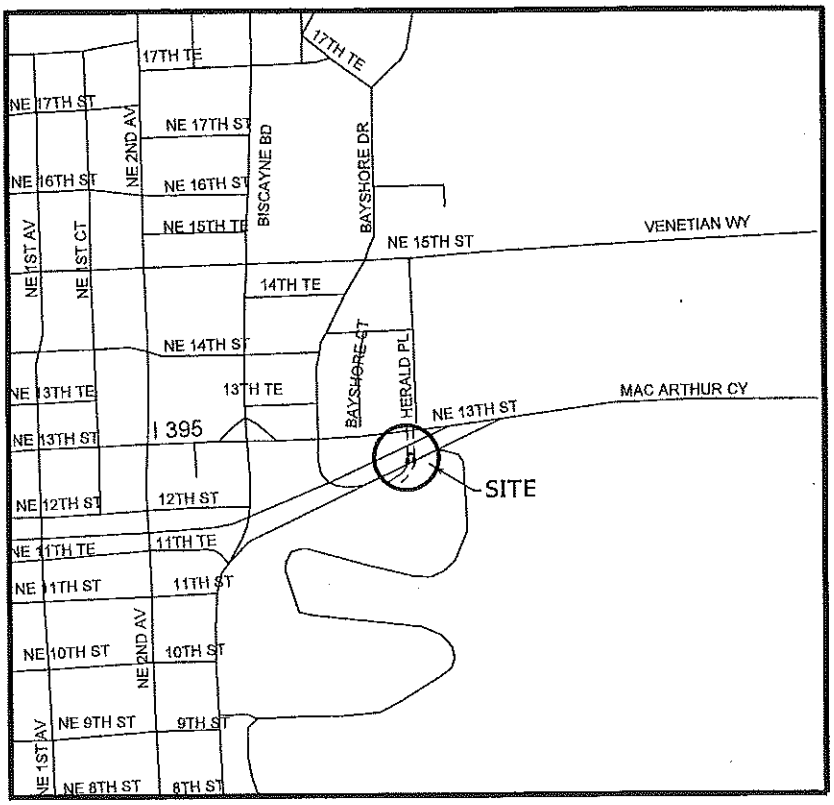
EXHIBIT "C"

PARCEL NO. 5593



SEC.31, TWP.53S, RGE.42E

N.T.S.

(VICINITY MAP)

SECTION 31, TONWSHIP 53 SOUTH, RANGE 42 EAST

Addition and/or deletions to survey maps, sketches or reports by any party other than the signing party are prohibited without the written consent of the signing party.

THIS DOCUMENT CONSISTS OF NINE (9) SHEETS AND SHALL NOT BE CONSIDERED FULL, VALID, AND COMPLETE UNLESS EACH SHEET IS ATTACHED TO THE OTHER.

ARTURO R. TOIRAC, DATE
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. 3102

SPLIT PARCEL	T.MOREJON	01-12-2015
COMMENTS BY MDC	T.MOREJON	06-30-2014
COMMENTS BY FDOT	T.MOREJON	05-28-2014
PS Number 3708 to Number 5593	T.MOREJON	05-05-2014
COMMENTS BY FDOT	T.MOREJON	04-30-2014
REVISION	BY	DATE

FLORIDA DEPARTMENT OF TRANSPORTATION

SKETCH TO ACCOMPANY LEGAL DESCRIPTION

STATE ROAD NO. 836/I-395 — MIAMI-DADE COUNTY

	BY	DATE
DRAWN	T.MOREJON	04-17-2014
CHECKED	A.TOIRAC	04-17-2014

PREPARED BY:
CH PEREZ & ASSOCIATES CONSULTING ENGINEERS, INC.
9594 NW 41st STREET, SUITE 201, DORAL, FL, 33178
TEL: 305-592-1070 LB 7360

DATA SOURCE:
SEE GENERAL NOTES

F.P. NO. 251688-1 — SECTION 87200-000C — SHEET 1 OF 9

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EXHIBIT "C"

LEGAL DESCRIPTION - PARCEL 5593:

PARCEL 5593 (Additional Easements)

Those two (2) additional aerial easements within that airspace vertically enclosed; the Bottom Plane of which having an Elevation of 31.26 feet, according to the North American Vertical Datum of 1988 (NAVD88) as established by the United States National Geodetic Survey, and the Top Plane extending to the infinite.
Those additional aerial easements adjoining westerly and easterly of the EXISTING METROMOVER CORRIDOR as shown in CROSSING AGREEMENT NCA-5 OF METROMOVER OMNI EXTENSION, PROJECT No. 663137, as recorded in R.M.B. 124 at Page 65, above that portion of SR 836 (I-395) lying northwesterly of the southeasterly Limited Access Lines as shown in Florida Department of Transportation Right of Way Map for Section 87200-000C, said portion of SR 836 (I-395) also being located northwesterly of Tract "A" of "MUSEUM PARK", according to the plat thereof lying in the SW¼ of Section 31, Township 53 South, Range 42 East , as recorded in Plat Book 169 at Page 27 of the Public Records of Miami-Dade County, Florida; having horizontal boundaries more particularly described as follows:

AERIAL EASEMENT 1.

Commence at the northwesterly corner of said Tract "A"of said Plat Book 169 at Page 27; said corner being the point of intersection of the northerly line with the northwesterly line of said Tract "A"; thence run S87°38'30"W, along the westerly extension of the most northerly line of said Tract "A", for a distance of 168.38 feet to the point of intersection with the Existing Limited Access Right of Way Line lying southeasterly of SR 836 (I-395) as per the F.D.O.T. Right of Way Map for Section 87200-000C; thence run N62°34'13"E, along the last described Existing Limited Access Right of Way Line, for a distance of 30.11 feet; thence run N63°00'41"E, along said Existing Limited Access Right of Way Line, for a distance of 80.00 feet; thence run N65°13'06"E, along said Existing Limited Access Right of Way Line, for a distance of 47.04 feet to the point of intersection with the westerly line of said EXISTING METROMOVER CORRIDOR, said point being on a circular curve concave to the Northwest; thence run northeasterly along said circular curve, coincident with the westerly line of said EXISTING METROMOVER CORRIDOR, having a radius of 115.93 feet through a central angle of 07°50'57" subtending a 15.87 foot chord which bears N28°17'00"E for an arc distance of 15.88 feet to the Point of Beginning of the hereinafter described Easement; thence run N08°53'29"E, along the westerly line of said additional easement, for a distance of 57.51 feet to the point of intersection with the westerly line of said EXISTING METROMOVER CORRIDOR; thence run S03°03'27'W, along the westerly line of said EXISTING METROMOVER CORRIDOR, for a distance of 36.93 feet to the point of intersection with a circular curve concave to the Northwest; thence run southwesterly, along said circular curve, coincident with the westerly line of said EXISTING METROMOVER CORRIDOR, having a radius of 115.93 feet through a central angle of 10°26'45", subtending a 21.11 foot chord which bears S19°08'09"W for an arc distance of 21.14 feet, to the Point of Beginning.
Containing an area of 115 square feet, more or less.

THIS DOCUMENT CONSISTS OF NINE (9) SHEETS AND SHALL NOT BE CONSIDERED FULL, VALID, AND COMPLETE UNLESS EACH SHEET IS ATTACHED TO THE OTHER.

(CONTINUE TO PAGE 3)

REVISION	BY	DATE
SPLIT PARCEL	T.MOREJON	01-12-2015
COMMENTS BY MDC	T.MOREJON	06-30-2014
COMMENTS BY FDOT	T.MOREJON	05-28-2014
PS Number 3708 to Number 5593	T.MOREJON	05-05-2014
COMMENTS BY FDOT	T.MOREJON	04-30-2014

FLORIDA DEPARTMENT OF TRANSPORTATION

LEGAL DESCRIPTION

STATE ROAD NO. 836/I-395 — MIAMI-DADE COUNTY

	BY	DATE
DRAWN	T.MOREJON	04-17-2014
CHECKED	A.TOIRAC	04-17-2014

PREPARED BY:
CH PEREZ & ASSOCIATES CONSULTING ENGINEERS, INC.
9594 NW 41st STREET, SUITE 201, DORAL, FL, 33178
TEL: 305-592-1070 LB 7360

DATA SOURCE: SEE GENERAL NOTES

F.P. NO. 251688-1 | SECTION 87200-000C | SHEET 2 OF 9

EXHIBIT "C"

LEGAL DESCRIPTION - PARCEL 5593:

PARCEL 5593 (Additional Easements)

Those two (2) additional aerial easements within that airspace vertically enclosed; the Bottom Plane of which having an Elevation of 31.26 feet, according to the North American Vertical Datum of 1988 (NAVD88) as established by the United States National Geodetic Survey, and the Top Plane extending to the infinite.
Those additional aerial easements adjoining westerly and easterly of the EXISTING METROMOVER CORRIDOR as shown in CROSSING AGREEMENT NCA-5 OF METROMOVER OMNI EXTENSION, PROJECT No. 663137, as recorded in R.M.B. 124 at Page 65, above that portion of SR 836 (I-395) lying northwesterly of the southeasterly Limited Access Lines as shown in Florida Department of Transportation Right of Way Map for Section 87200-000C, said portion of SR 836 (I-395) also being located northwesterly of Tract "A" of "MUSEUM PARK", according to the plat thereof lying in the SW¼ of Section 31, Township 53 South, Range 42 East , as recorded in Plat Book 169 at Page 27 of the Public Records of Miami-Dade County, Florida; having horizontal boundaries more particularly described as follows:

AERIAL EASEMENT 1.

Commence at the northwesterly corner of said Tract "A"of said Plat Book 169 at Page 27; said corner being the point of intersection of the northerly line with the northwesterly line of said Tract "A"; thence run S87°38'30"W, along the westerly extension of the most northerly line of said Tract "A", for a distance of 168.38 feet to the point of intersection with the Existing Limited Access Right of Way Line lying southeasterly of SR 836 (I-395) as per the F.D.O.T. Right of Way Map for Section 87200-000C; thence run N62°34'13"E, along the last described Existing Limited Access Right of Way Line, for a distance of 30.11 feet; thence run N63°00'41"E, along said Existing Limited Access Right of Way Line, for a distance of 80.00 feet; thence run N65°13'06"E, along said Existing Limited Access Right of Way Line, for a distance of 47.04 feet to the point of intersection with the westerly line of said EXISTING METROMOVER CORRIDOR, said point being on a circular curve concave to the Northwest; thence run northeasterly along said circular curve, coincident with the westerly line of said EXISTING METROMOVER CORRIDOR, having a radius of 115.93 feet through a central angle of 07°50'57" subtending a 15.87 foot chord which bears N28°17'00"E for an arc distance of 15.88 feet to the Point of Beginning of the hereinafter described Additional Easement; thence run N08°53'29"E, along the westerly line of said additional easement, for a distance of 57.51 feet to the point of intersection with the westerly line of said EXISTING METROMOVER CORRIDOR; thence run S03°03'27'W, along the westerly line of said EXISTING METROMOVER CORRIDOR, for a distance of 36.93 feet to the point of intersection with a circular curve concave to the Northwest; thence run southwesterly, along said circular curve, coincident with the westerly line of said EXISTING METROMOVER CORRIDOR, having a radius of 115.93 feet through a central angle of 10°26'45", subtending a 21.11 foot chord which bears S19°08'09"W for an arc distance of 21.14 feet, to the Point of Beginning.
Containing an area of 115 square feet, more or less.

THIS DOCUMENT CONSISTS OF NINE (9) SHEETS AND SHALL NOT BE CONSIDERED FULL, VALID, AND COMPLETE UNLESS EACH SHEET IS ATTACHED TO THE OTHER.

(CONTINUE TO PAGE 3)

REVISION	BY	DATE
SPLIT PARCEL	T.MOREJON	01-12-2015
COMMENTS BY MDC	T.MOREJON	06-30-2014
COMMENTS BY FDOT	T.MOREJON	05-28-2014
PS Number 3708 to Number 5593	T.MOREJON	05-05-2014
COMMENTS BY FDOT	T.MOREJON	04-30-2014

FLORIDA DEPARTMENT OF TRANSPORTATION

LEGAL DESCRIPTION

STATE ROAD NO. 836/I-395 — MIAMI-DADE COUNTY

	BY	DATE
DRAWN	T.MOREJON	04-17-2014
CHECKED	A.TOIRAC	04-17-2014

PREPARED BY:
CH PEREZ & ASSOCIATES CONSULTING ENGINEERS, INC.
9594 NW 41st STREET, SUITE 201, DORAL, FL, 33178
TEL: 305-592-1070 LB 7360

DATA SOURCE: SEE GENERAL NOTES

F.P. NO. 251688-1 — SECTION 87200-000C — SHEET 2 OF 9

EXHIBIT "C"

AERIAL EASEMENT 2. (SEE PG. 7 OF 9)

Commence at the northwesterly corner of said Tract "A"of said Plat Book 169 at Page 27; said corner being the point of intersection of the northerly line with the most northwesterly line of said Tract "A" thence run S87°38'30"W, along the westerly extension of the most northerly line of said Tract "A", for a distance of 168.38 feet to the point of intersection with the Existing Limited Access Right of Way Line lying southeasterly of SR 836 (I-395) as per the F.D.O.T. Right of Way Map for Section 87200-000C; thence run N62°34'13"E, along the last described Existing Limited Access Right of Way Line, for a distance of 30.11 feet; thence run N63°00'41"E, along said Existing Limited Access Right of Way Line, for a distance of 80.00 feet; thence run N65°13'06"E, along the said Existing Limited Access Right of Way Line, for a distance of 97.04 to the point of intersection with the easterly line of said EXISTING METROMOVER CORRIDOR, said point being on a circular curve concave to the Northwest; thence run northeasterly, along said circular curve, coincident with the easterly line of said EXISTING METROMOVER CORRIDOR, having a radius of 149.22 feet through a central angle of 04°59'09" subtending a 12.98 foot chord which bears N13°22'15"E for an arc distance of 12.98 feet to the **Point of Beginning** of the hereinafter described Easement; thence continue northeasterly, along said circular curve, coincident with the easterly line of said EXISTING METROMOVER CORRIDOR, having a radius of 149.22 feet through a central angle of 13°03'00"subtending a 33.91 foot chord which bears N04°21'11"E for an arc distance of 33.99 feet to the point of tangency; thence run N02°10'19"W, along the easterly line of said EXISTING METROMOVER CORRIDOR, for a distance of 17.01 feet to the point of intersection with the northerly line of the herein described Easement; thence run N90°00'00"E, along the northerly line of said Easement, for a distance of 1.74 feet to the point of intersection with the easterly line of the herein described Easement; thence run S00°22'21'E, along the last described easement line, for a distance of 68.83 feet to the point of intersection with the southerly line of the herein described Easement; thence run S89°37'39"W, along the southerly line of said Easement, for a distance of 4.00 feet; thence run N00°22'21"W, along the westerly line of said Easement, for a distance of 18.05 feet to the **Point of Beginning.**

Containing an area of 163 square feet, more or less.

Both aerial easements containing an aggregate area of 278 square feet, more or less.

TOGETHER WITH:

Those two (2) additional ground easements adjoining westerly and easterly of the EXISTING METROMOVER CORRIDOR as shown in CROSSING AGREEMENT NCA-5 OF METROMOVER OMNI EXTENSION, PROJECT No. 663137, as recorded in R.M.B. 124 at Page 65, being portions of SR 836 (I-395) lying northwesterly of the southeasterly Limited Access Lines as shown in F.D.O.T. Right of Way Map (F.D.O.T.) for Section 87200-000C, said portion of SR 836 (I-395) being located northwesterly of Tract "A" of "MUSEUM PARK", according to the plat thereof, lying in the SW ¼ of Section 31, Township 53 South, Range 42 East, as recorded in Plat Book 169 at Page 27 of the Public Records of Miami-Dade County, Florida; being more particularly described as follows:

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(CONTINUE TO PAGE 4)

REVISION	BY	DATE
SPLIT PARCEL	T.MOREJON	01-12-2015
COMMENTS BY MDC	T.MOREJON	06-30-2014
COMMENTS BY FDOT	T.MOREJON	05-28-2014
PS Number 3708 to Number 5593	T.MOREJON	05-05-2014
COMMENTS BY FDOT	T.MOREJON	04-30-2014

FLORIDA DEPARTMENT OF TRANSPORTATION

LEGAL DESCRIPTION

STATE ROAD NO. 836/I-395 — MIAMI-DADE COUNTY

	BY	DATE
DRAWN	T.MOREJON	04-17-2014
CHECKED	A.TOIRAC	04-17-2014

PREPARED BY: CH PEREZ & ASSOCIATES CONSULTING ENGINEERS, INC. 9594 NW 41st STREET, SUITE 201, DORAL, FL, 33178 TEL: 305-592-1070 LB 7360

DATA SOURCE: SEE GENERAL NOTES

F.P. NO. 251688-1 — SECTION 87200-000C — SHEET 3 OF 9

163

EXHIBIT "C"

GROUND EASEMENT 1. (SEE PG. 8 OF 9)

Commence at the northwesterly corner of said Tract "A"of said Plat Book 169 at Page 27; said corner being the point of intersection of the northerly line with the northwesterly line of said Tract "A"; thence run S87°38'30"W, along the westerly extension of the most northerly line of said Tract "A", for a distance of 168.38 feet to the point of intersection with the Existing Limited Access Right of Way Line lying southeasterly of SR 836 (I-395) as per the F.D.O.T. Right of Way Map for Section 87200-000C; thence run N62°34'13"E, along the last described Existing Limited Access Right of Way Line, for a distance of 30.11 feet; thence run N63°00'41"E, along said Existing Limited Access Right of Way Line, for a distance of 80.00 feet; thence run N65°13'06"E, along said Existing Limited Access Right of Way Line, for a distance of 47.04 feet to the point of intersection with the westerly line of said EXISTING METROMOVER CORRIDOR, said point being on a circular curve concave to the Northwest; thence run northeasterly, along said circular curve coincident with the westerly line of said EXISTING METROMOVER CORRIDOR, having a radius of 115.93 feet through a central angle of 15°22'07" subtending a 31.00 foot chord which bears N24°31'25"E for an arc distance of 31.10 feet, to the **Point of Beginning** of the hereinafter described Easement; thence run N81°06'31"W, along the southerly line of the herein described Easement, for a distance of 6.09 feet to the point of intersection with the westerly line of the herein described Easement; thence run N08°53'29"E, along the westerly line of said Easement, for a distance of 30.00 feet to the point of intersection with the northerly line of the herein described Easement; thence run S81°06'31"E, along the northerly line of said easement, for a distance of 4.29 feet to the point of intersection with the westerly line of said EXISTING METROMOVER CORRIDOR; thence run S03°03'27'W, along the westerly line of said EXISTING METROMOVER CORRIDOR, for a distance of 24.24 feet to the point of intersection with a circular curve concave to the Northwest; thence run southwesterly, along said circular curve, coincident with the westerly line of said EXISTING METROMOVER CORRIDOR, having a radius of 115.93 feet through a central angle of 02°55'34" subtending a 5.92 foot chord which bears S15°22'34"W for an arc distance of 5.92 feet, to the **Point of Beginning.**
Containing an area of 171 square feet, more or less.

GROUND EASEMENT 2.

Commence at the northwesterly corner of said Tract "A"of said Plat Book 169 at Page 27; said corner being the point of intersection of the northerly line with the most northwesterly line of said Tract "A" thence run S87°38'30"W, along the westerly extension of the most northerly line of said Tract "A", for a distance of 168.38 feet to the point of intersection with the Existing Limited Access Right of Way Line lying southeasterly of SR 836 (I-395) as per the F.D.O.T. Right of Way Map for Section 87200-000C; thence run N62°34'13"E, along the last described Existing Limited Access Right of Way Line, for a distance of 30.11 feet; thence run N63°00'41"E, along said Existing Limited Access Right of Way Line, for a distance of 80.00 feet; thence run N65°13'06"E, along said Existing Limited Access Right of Way Line of S.R. 836, for a distance of 97.04 feet to the point of intersection with the easterly line of said EXISTING METROMOVER CORRIDOR, said point being on a circular curve concave to the Northwest; thence run northeasterly, along said circular curve, coincident with the easterly line of said EXISTING

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(CONTINUE TO PAGE 5)

REVISION	BY	DATE
SPLIT PARCEL	T.MOREJON	01-12-2015
COMMENTS BY MDC	T.MOREJON	06-30-2014
COMMENTS BY FDOT	T.MOREJON	05-28-2014
PS Number 3708 to Number 5593	T.MOREJON	05-05-2014
COMMENTS BY FDOT	T.MOREJON	04-30-2014

FLORIDA DEPARTMENT OF TRANSPORTATION

LEGAL DESCRIPTION

STATE ROAD NO. 836/I-395 — MIAMI-DADE COUNTY

	BY	DATE
DRAWN	T.MOREJON	04-17-2014
CHECKED	A.TOIRAC	04-17-2014

PREPARED BY:
CH PEREZ & ASSOCIATES CONSULTING ENGINEERS, INC.
9594 NW 41st STREET, SUITE 201, DORAL, FL, 33178
TEL: 305-592-1070 LB 7360

DATA SOURCE: SEE GENERAL NOTES

F.P. NO. 251688-1 — SECTION 87200-000C — SHEET 4 OF 9

EXHIBIT "C"

(CONTINUED FROM PAGE 4)

METROMOVER CORRIDOR, having a radius of 149.22 feet through a central angle of 04°11'48" subtending a 10.93 foot chord which bears N13°45'55"E for an arc distance of 10.93 feet to the Point of Beginning of the hereinafter described Easement; thence continue northeasterly, along said circular curve coincident with the easterly line of said EXISTING METROMOVER CORRIDOR, having a radius of 149.22 feet through a central angle of 11°36'27" subtending a 30.18 foot chord which bears N05°51'48"E for an arc distance of 30.23 feet to the point of intersection with the northerly line of the herein described Easement; thence run N89°37'39"E, along the northerly line of said easement, for a distance of 4.14 feet to the point of intersection with the easterly line of the herein described Easement; thence run S00°22'21'E, along the easterly line of the herein described Easement, for a distance of 30.00 feet to the point of intersection with the southerly line of the herein described Easement; thence run S89°37'39"W, along said southerly line of the herein described Easement, for a distance of 7.41 feet to the Point of Beginning.

Containing an area of 158 square feet, more or less.

Both ground easements containing an aggregate area of 329 square feet, more or less.

GENERAL NOTES:

1. Easement from STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION to MIAMI-DADE COUNTY.
2. This Sketch Is Not a Survey.
3. Reproductions of this map are not valid without the signature and original raised seal of the Florida Licensed Surveyor and Mapper in responsible charge.
4. Bearings and coordinates are relative to the State Plane Coordinates System, Florida East Zone, Traverse Mercator Projection, North American Datum (NAD83) 1983 adjustment 2007 and are based on a PNC Project Baseline bearing of N 03°42'37" W being established between FDOT monuments:
PNC02 stamped 87_11_PNC02 (N 526779.1510, E 919562.7520) and
PNC04 stamped 87_11_PNC04 (N 528164.0790, E 919472.9400)
and therefrom a bearing of N 87°50'53" E along the Monument Line of NE 13th Street (RICKMERS STREET).
5. Vertical Datum NAVD 88; Project Units U.S. Survey Feet.
6. Addition and/or deletions to survey maps, sketches or reports by any party other than the signing party are prohibited without the written consent of the signing party.
7. Prepared for Florida Department of Transportation.
8. Date Prepared: APRIL 18th, 2014.

THIS DOCUMENT CONSISTS OF NINE (9) SHEETS AND SHALL NOT BE CONSIDERED FULL, VALID, AND COMPLETE UNLESS EACH SHEET IS ATTACHED TO THE OTHER.

ARTURO R. TOIRAC, DATE
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. 3102

SPLIT PARCEL	T.MOREJON	01-12-2015
COMMENTS BY MDC	T.MOREJON	06-30-2014
COMMENTS BY FDOT	T.MOREJON	05-28-2014
PS Number 3708 to Number 5593	T.MOREJON	05-05-2014
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FLORIDA DEPARTMENT OF TRANSPORTATION

LEGAL DESCRIPTION

STATE ROAD NO. 836/I-395 — MIAMI-DADE COUNTY

	BY	DATE
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DATA SOURCE:
SEE GENERAL NOTES

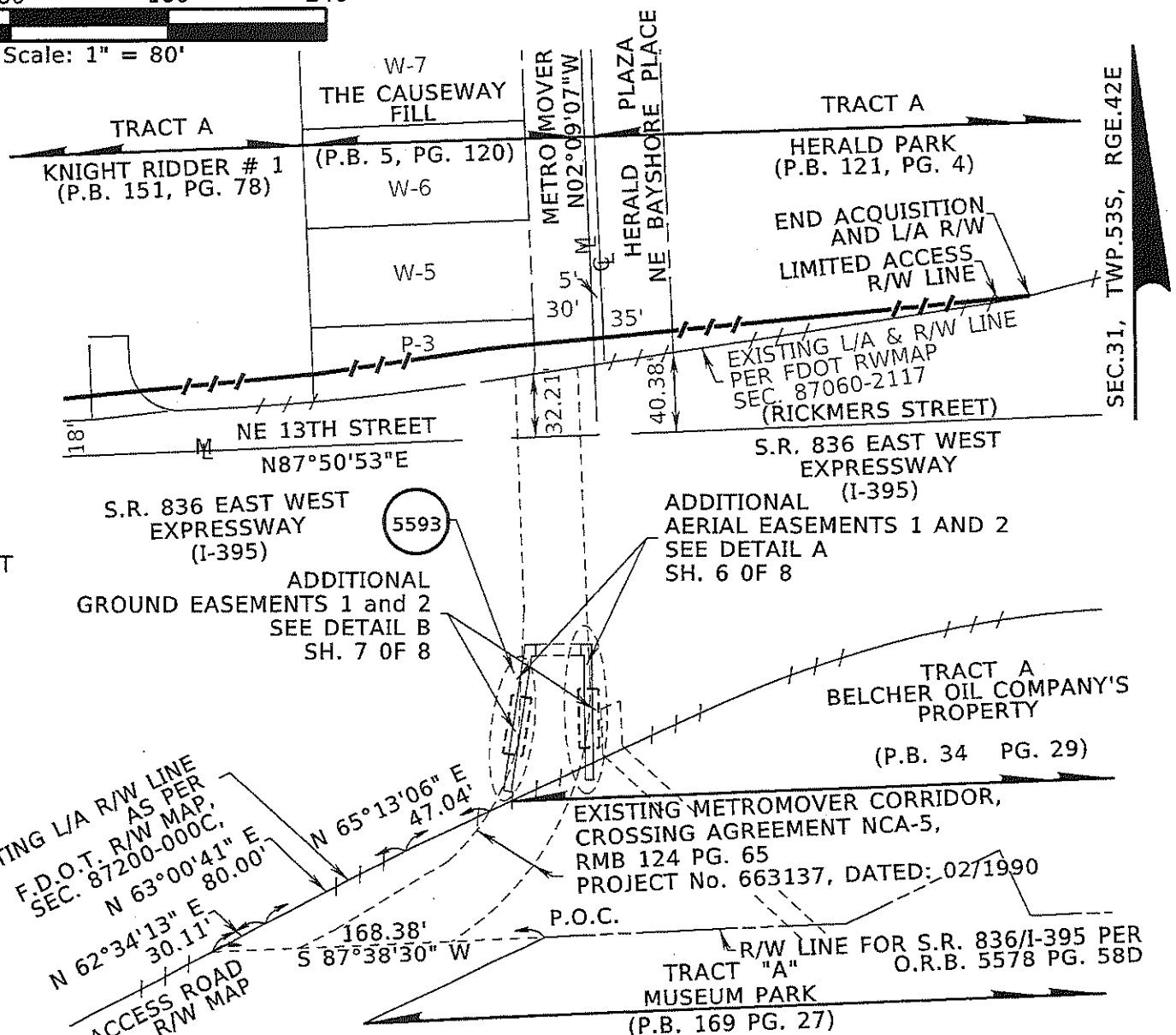
F.P. NO. 251688-1 | SECTION 87200-000C | SHEET 5 OF 9

EXHIBIT "C"
PARCEL 5593
OVER SR 836/I-395

0 40 80 160 240
Scale: 1" = 80'

LEGEND:

F.D.O.T.	=	FLORIDA DEPARTMENT OF TRANSPORTATION
S.R.	=	STATE ROAD
O.R.B.	=	OFFICIAL RECORD BOOK
℄	=	BASELINE SURVEY
℄	=	CENTERLINE
ℳ	=	MONUMENT LINE
ℙ	=	PROPERTY LINE
LB	=	LICENSED BUSINESS
L/A	=	LIMITED ACCESS
R	=	RADIUS
A	=	CURVE LENGTH
Δ	=	DELTA
CB	=	CHORD BEARING
CD	=	CHORD DISTANCE
N/A	=	NOT APPLICABLE
PG.	=	PAGE
P.B.	=	PLAT BOOK
P.O.B.	=	POINT OF BEGINNING
P.O.C.	=	POINT OF COMMENCEMENT
R/W	=	RIGHT OF WAY
SEC.	=	SECTION
TWP.	=	TOWNSHIP
RGE.	=	RANGE
SF	=	SQUARE FEET
SH.	=	SHEET
N.T.S.	=	NOT TO SCALE
No.	=	NUMBER
(R)	=	RECORDS
//////	=	EXISTING LIMITED ACCESS R/W LINE
-/-/-/-	=	PROPOSED LIMITED ACCESS R/W LINE
-----	=	RIGHT OF WAY LINE
5593	=	PARCEL IDENTIFICATION NUMBER
3	=	BLOCK IDENTIFICATION NUMBER



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FLORIDA DEPARTMENT OF TRANSPORTATION
SKETCH TO ACCOMPANY LEGAL DESCRIPTION

REVISION	BY	DATE
SPLIT PARCEL	T.MOREJON	01-12-2015
COMMENTS BY FDOT	T.MOREJON	05-28-2014
PS Number 3708 to Number 5593	T.MOREJON	05-05-2014
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STATE ROAD NO. NO. 836/I-395 — MIAMI DADE COUNTY

	BY	DATE
DRAWN	T.MOREJON	04-17-2014
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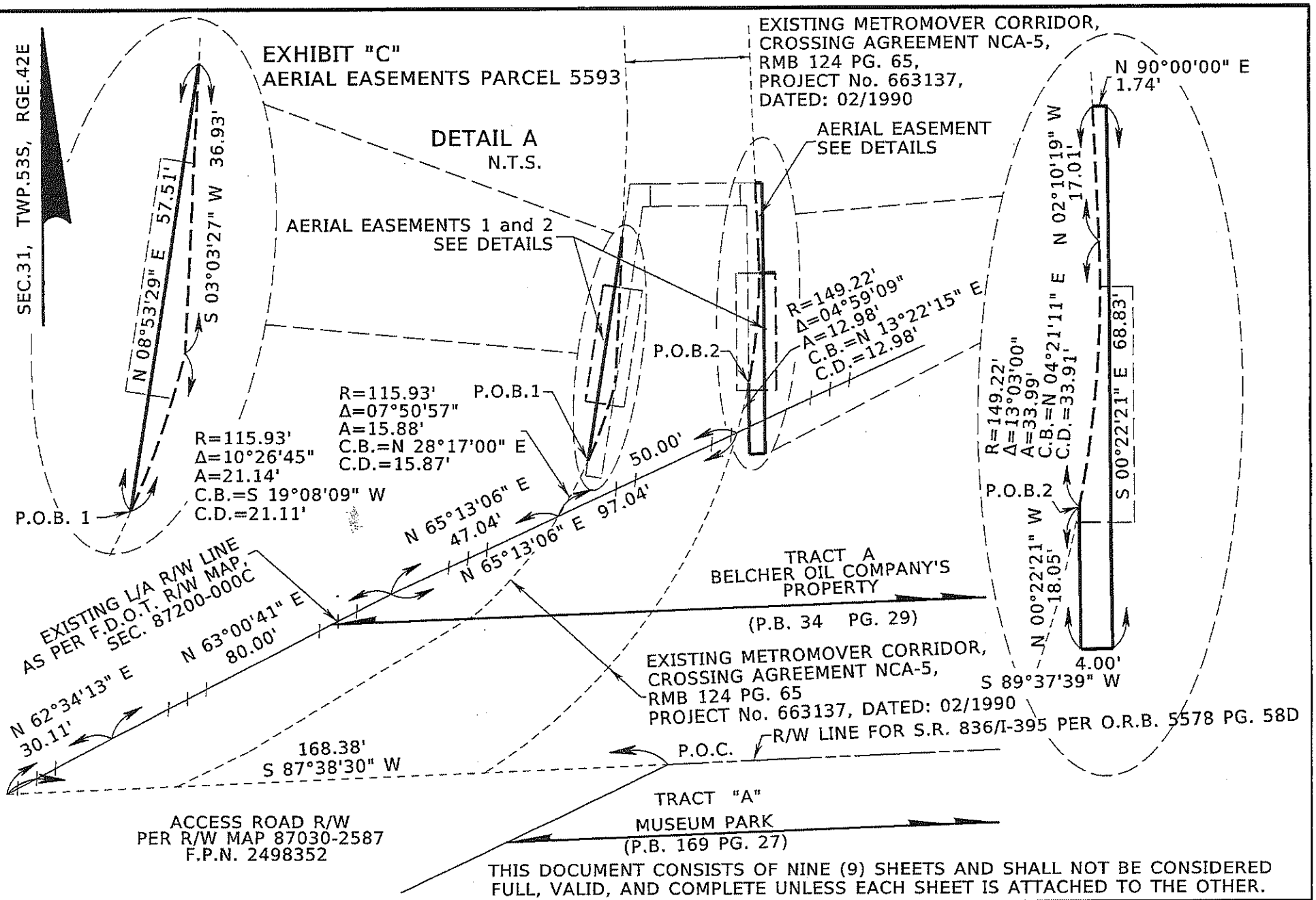
PREPARED BY: CH PEREZ & ASSOCIATES CONSULTING ENGINEERS, INC. 9594 NW 41st STREET, SUITE 201, DORAL, FL 33178 TEL: 305-592-1070 / FAX: 305-592-1078 LB 7360

DATA SOURCE: SEE GENERAL NOTES

F.P. NO. 251688-1 — SECTION 87200-000C — SHEET 6 OF 9



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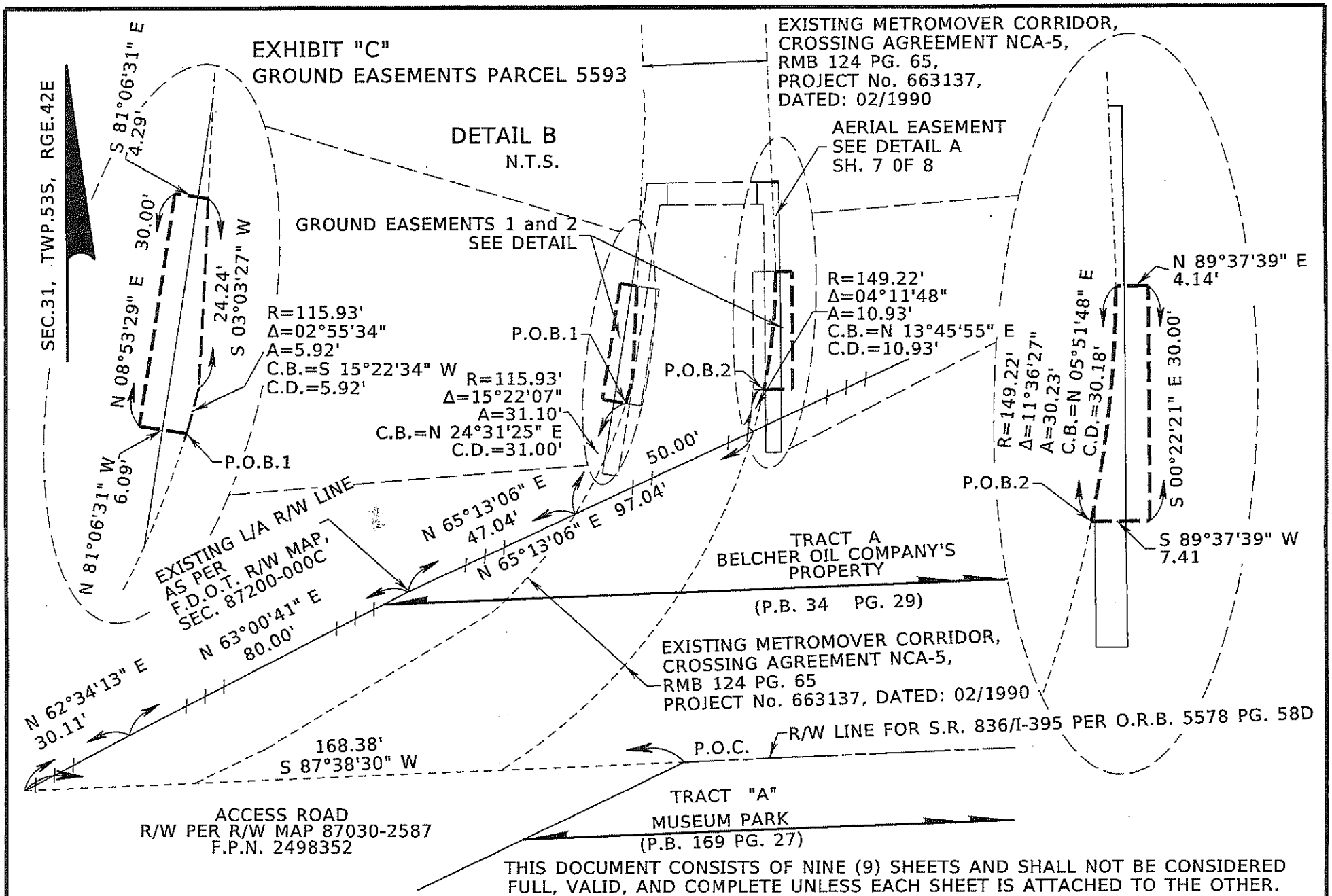
F.P. NO. 251688-1 — SECTION 87200-000C — SHEET 7 OF 9



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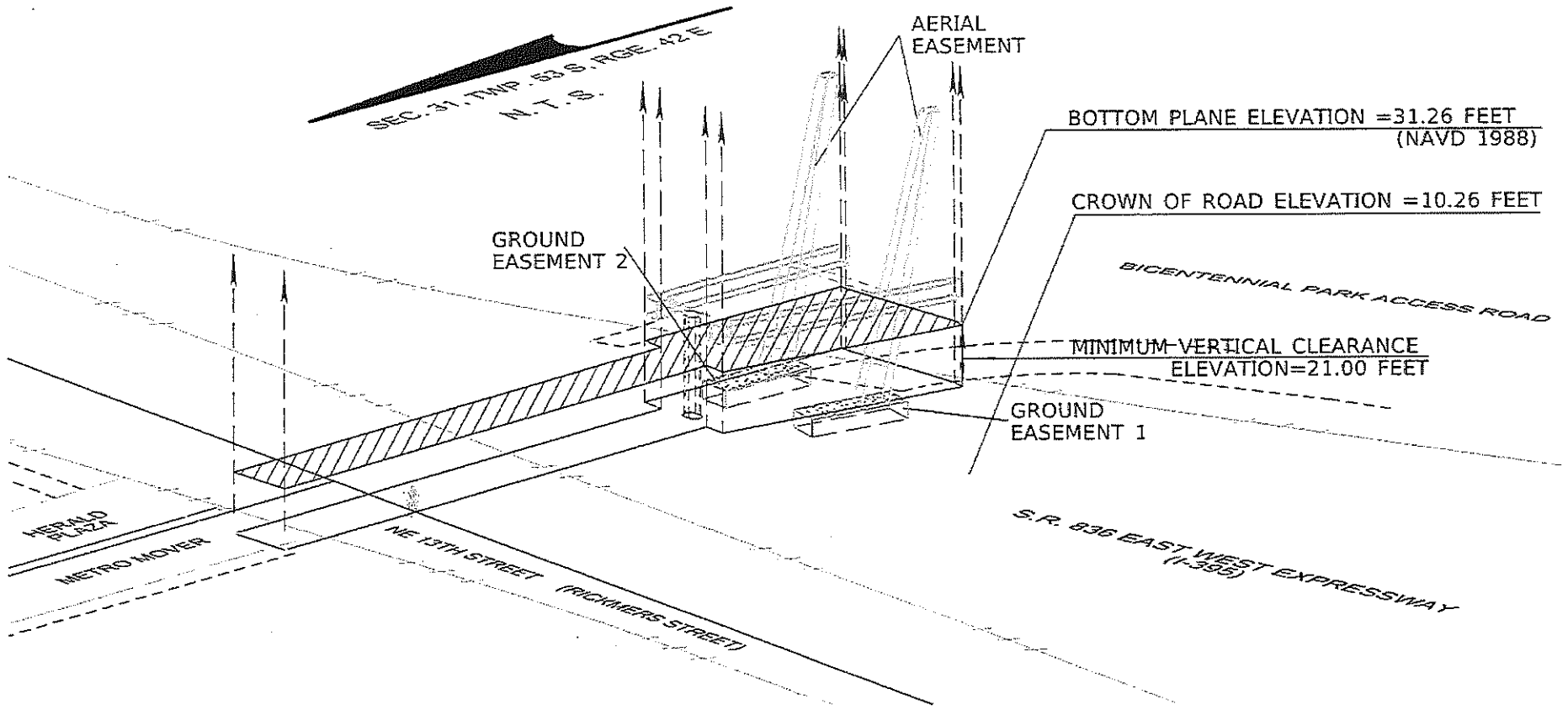
PREPARED BY:
CH PEREZ & ASSOCIATES CONSULTING ENGINEERS, INC.
8994 NW 41st STREET, SUITE 201, DORAL FL 33178
TEL: 305-592-1070 / FAX: 305-592-1078 LB 7380

DATA SOURCE: SEE GENERAL NOTES

F.P. NO. 251688-1 | SECTION 87200-000C | SHEET 8 OF 9

EXHIBIT "C"
AERIAL EASEMENT PARCEL 5593
OVER SR 836/I-395



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FLORIDA DEPARTMENT OF TRANSPORTATION
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DATA SOURCE: SEE GENERAL NOTES

F.P. NO. 251688-1 — SECTION 87200-000C — SHEET 9 OF 9

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