

**I-595 RFP Volume II - Technical Requirements**  
**Division II, Section 1 - Project Description**

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*Florida Department of Transportation*  
*District 4*

**To Design, Build, Finance, Operate and Maintain**  
**The I-595 Corridor Roadway Improvements Project**  
**Final Version for Execution**

**Financial Project Number: 420809-3-52-01**  
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## Section 1

## Project Description

### A. General

#### 1. Project Location

The I-595 corridor is located in central Broward County, Florida. The Project extends from the I-75/Sawgrass Expressway interchange west of SW 136th Avenue to the I-595/I-95 interchange, for a total project length of approximately 10.5 miles. The I-595 corridor passes through or lies immediately adjacent to six governmental jurisdictions: the City of Sunrise, Town of Davie, City of Plantation, City of Ft. Lauderdale, and Town of Dania, as well as unincorporated areas of Broward County.

The majority of the I-595 corridor is comprised of two facilities: I-595 and SR-84. The I-595 portion of the corridor is a six-lane, limited access facility. SR-84 is typically a four-lane facility, with two lanes in each direction located north and south of I-595. In addition to the interchanges with the two roadway systems at each end of the corridor, there are nine other interchanges along the corridor at the following crossroads: SW 136<sup>th</sup> Avenue, Flamingo Road (SR-823), Hiatus Road, Nob Hill Road, Pine Island Road, University Drive (SR-817), Davie Road, Florida's Turnpike (SR-91) and US 441 (SR-7).

#### 2. Design and Construction

The proposed Project improvements described herein are based on the Indicative Preliminary Design provided in the Reference Documents. The improvements consist of the following primary elements:

- Reconstruction, widening, milling and resurfacing of the I-595 and SR-84 roadways (and associated interchange modifications) within the Project limits described above;
- Construction of three (3) reversible Express Lanes in the I-595 median, serving express traffic to/from I-75 Sawgrass Expressway and to/from I-95 with a direct connection to/from Florida's Turnpike; and
- Geometric improvements to the I-595 / Florida's Turnpike interchange and widening / reconstruction of the Florida's Turnpike mainline from Griffin Road to south of Peters Road, and widening of the median of Florida's Turnpike to integrate the Express Lanes direct connection.

The Concessionaire will be responsible for the preparation of all design and construction documents and the construction of the Project improvements in accordance with the Contract Documents, utilizing Project standards, materials and information provided in Volumes II and III and the Reference Documents.

#### 3. Operations and Maintenance

During the Term, the Concessionaire will operate and maintain (i) the existing I-595 mainline, SR-84 and associated roadway infrastructure from the date of NTP 2, and (ii) the Project's capital improvements (with the exception of the Express Lanes toll system equipment and the Florida's Turnpike mainline from Griffin Road to Peters Road) from the Substantial Completion Date. The O&M Limits during the Construction Period and the Operating Period are provided in Exhibits 4.1 and 4.2 of Vol III – Additional

Mandatory Standards. In addition, the Concessionaire will be responsible for carrying out the maintenance of all physical elements of the Project facility and ultimately handing back the facility in a manner that is compliant with the Handback Requirements set forth in the Technical Requirements.

#### **4. Project Objectives**

The primary objectives throughout the Term of the Project are to:

- Optimize mobility in the corridor by maximizing traffic throughput and minimizing congestion in both the Express Lanes and the General Purpose Lanes;
- Maintain a high level of quality and safety provisions in the engineering, construction, maintenance and operations services provided by the Concessionaire;
- Ensure a premium free-flow service is provided at all times on the Express Lanes, providing a reliable travel time; and
- Expedite the construction of improvement components that provide congestion relief, while minimizing impacts to adjacent communities and adhering to established NEPA commitments for the Project.

### **B. I-595 and SR-84**

#### **1. I-595 Mainline**

Mainline I-595 currently has three General Purpose Lanes in each direction with zero, one or two auxiliary lanes between interchanges. Opposing traffic is separated by a grass median that ranges from 64 feet to 68 feet in width. The proposed improvements will maintain the existing number of General Purpose Lanes in both directions, and provide additional auxiliary lanes between interchanges to reduce congestion caused by merge, diverge and weaving movements.

The proposed eastbound profile grade line will generally remain in its existing location, 32-34 feet right of the centerline of construction. The eastbound General Purpose Lanes will require widening and/or reconstruction, including reconstruction in the two I-595 Express Lane exchange areas to accommodate the Express Lanes access/egress ramps. To minimize Project Right of Way impacts and accommodate a future transit alignment to the south, the westbound roadway will be shifted to the north to provide for the Express Lanes in the median.

Mechanically stabilized earth (MSE) walls are proposed in lieu of fill slopes where the I-595 profile rises to pass over crossroads. Barrier wall and/or guardrail along the outside shoulder will be required for much of the I-595 mainline due to clear zone issues and grade differentials between I-595 and SR-84.

#### **2. I-595 Interchanges**

As presently configured, I-595 is served by tight diamond interchanges with frontage roads at SW 136<sup>th</sup> Avenue, Flamingo Road, Hiatus Road, Nob Hill Road, Pine Island Road, University Drive, and Davie Road. In addition to the tight diamond configuration, the University Drive interchange also includes flyover ramps serving the southbound to eastbound and northbound to westbound movements. The SR-7 and Florida's Turnpike

interchanges are complex system interchanges with frontage roads.

Major improvements are proposed for the mainline interchanges to eliminate operational deficiencies in the outer lanes caused by merge, diverge and weaving segments along the mainline. The proposed improvements accomplish this by introducing seven (7) braided ramps, eliminating on and off-ramps by combining ramp movements (including three (3) bypass bridges), and exchanging the location of ramps (placing off-ramp before the on-ramp). The improvements either eliminate the mainline weaving segments or move the weave onto the frontage road (SR-84). All ramps will be parallel in type with auxiliary lanes beginning/ending at the ramp gores to improve the operations of the merging and diverging segments.

The mainline bridges over all crossroads will be widened or reconstructed, and the University Drive interchange flyovers will likely be removed and reconstructed adjacent to the existing flyovers to accommodate the Express Lanes in the median. Refer to the Bridge Database Matrix in the Reference Documents for more information on the proposed bridge improvements.

### **3. SR-84**

Currently, SR-84 is a four-lane frontage road facility (two lanes in each direction) located along the north and south sides of I-595. Limited Project Right of Way, proposed mainline auxiliary lanes, realigned ramps, braiding of ramps, proposed bicycle/pedestrian facilities and impacts to the North New River Canal make retaining the existing drainage system impractical. SR-84 will be reconstructed as a four-lane facility (two 12-foot lanes in each direction), with Type F curb and gutter on the outside and an 8-foot shoulder (4-foot paved) on the inside. The curb and gutter is necessary to contain roadway drainage within the Project Right of Way, to allow for a pedestrian/bicycle path on the outside between Davie Road and SR-7, and to reduce clear zone requirements.

SR-84 will generally maintain its current profile wherever possible in order to maintain access to existing driveway/access points. It will also be located on the outside of the I-595 mainline ramps and bypass ramps in order to accommodate a continuous 4-foot undesignated bicycle lane along the outside, sidewalk, and access to adjacent properties. One exception where SR-84 cannot be maintained on the outside occurs in the westbound direction between Pine Island Road and Nob Hill Road, due to the limited space adjacent to the North New River Canal and the need for braiding the I-595 off-ramp with the SR-84 on-ramp in this location. The improvements to westbound SR-84 will likely require reconstruction of the intersections at SW 136<sup>th</sup> Avenue, Flamingo Road, Hiatus Road, Nob Hill Road, Pine Island Road, University Drive, and Davie Road. Currently, SR-84 ends to the east of Davie Road and EB traffic is forced onto the I-595 mainline. SR-84 will be extended through the Florida's Turnpike and SR-7 interchanges, and a continuous connection will be required to eliminate local traffic having to enter onto the I-595 mainline.

## **C. Express Lanes and Exchanges**

The Express Lanes will significantly improve the capacity and operations of the I-595 corridor by providing three (3) reversible lanes in the median. The lanes will reverse direction in order to better serve peak traffic demands (eastbound in the a.m. / westbound in the p.m.), removing a

portion of the long distance through traffic from the I-595 General Purpose Lanes. To maximize the operational efficiency, the lanes will be tolled utilizing variable pricing. Broward County's Bus Rapid Transit (BRT) and registered 3+ carpools will travel toll free on the Express Lanes.

Ingress and egress to and from the Express Lanes will be limited to four (4) exchange points. The western ingress/egress point is proposed west of Flamingo Road, serving I-75 and Sawgrass Expressway; the eastern location is proposed between Florida's Turnpike and SR-7, serving points east of SR-7 including I-95; the southern location is proposed along Florida's Turnpike between I-595 and Griffin Road; and the northern location is proposed along Florida's Turnpike between Peters Road and I-595. The I-595 and Turnpike mainline medians will be widened to accommodate the Express Lane exchanges.

West of Davie Road, the Express Lanes will generally follow the profile of the I-595 General Purpose Lanes, requiring median bridge structures over the crossroads. The Express Lanes typical section will include three 12-foot lanes and 10-foot left and right shoulders, with barrier wall separation between the Express Lanes and the I-595 General Purpose Lanes. East of Davie Road, the Express Lanes will elevate to provide the direct connection to the Turnpike median.

Overhead Dynamic Message Signs (DMS) will guide motorists into or away from the auxiliary lanes leading to the Express Lanes, depending on the time of day. Opposing traffic will be prohibited from entering the Express Lanes by access control gates that extend from the inside barrier wall in the area of the auxiliary lanes. Access control barriers and automated security gates will also be used to prohibit motorists from entering or exiting the Express Lanes in the wrong direction. The detailed requirements for the access control subsystem are provided in Attachment 1 of Vol II Div II Sect 3.

Tolls will be collected electronically from a single reversible tolling point within the at-grade portion of the Express Lanes. The Concessionaire will be responsible for the construction and maintenance of the tolling gantry structure and all related infrastructure, as described in the Tolling Infrastructure Support Requirements provided in Attachment 2 of Volume II, Division II, Section 3. The Department will conduct a public hearing regarding the tolling of the facility prior to any toll collection within the I-595 corridor.

Florida's Turnpike Enterprise (FTE) will provide, install, operate and maintain the electronic tolling equipment for the Express Lanes, and will manage all SunPass customer services and violation enforcement. The Department will set the toll rates and retain the toll revenue.

Emergency response provisions for the Express Lanes will include emergency access gates and a fire suppression system. Five (5) emergency access gates (two in the eastbound direction; three in the westbound direction) will provide emergency responders with strategic accessibility to the Express Lanes from the I-595 General Purpose Lanes. The fire suppression system will provide an emergency water supply to the Express Lanes via a piping system and fire department connections adjacent to fire hydrants located along the south side of eastbound SR-84. The requirements for the emergency access gate assemblies and fire suppression system are provided in Vol II Div II Sect 3, Sect 3 Att 1, and Sect 4.

## **D. Florida's Turnpike**

### **1. Turnpike Mainline**

The Florida's Turnpike mainline will be realigned from north of Griffin Road to the south

abutment of the Turnpike bridges over I-595, and also from the north abutment of the Florida's Turnpike bridges over I-595 to Peters Road. The Florida's Turnpike median will require widening in these areas to allow for the Express Lanes exchange areas. The Florida's Turnpike mainline will be widened from Griffin Road to Peter's Road.

## **2. Turnpike Interchange**

The proposed reconfiguration of interchange ramps will reduce the number of weaving sections, increase acceleration lengths, and improve operations within the interchange. The addition of the westbound to northbound ramp will remove traffic from the short weaving section where eastbound and westbound I-595 traffic currently converges, then diverges to northbound and southbound Turnpike. The eastbound/westbound I-595 bridge to southbound Turnpike will be reconstructed as a three-lane bridge. The Griffin Road southbound off-ramp will be relocated to the north to accommodate the additional lane from the eastbound/westbound I-595 bridge to southbound Turnpike. The two existing northbound Turnpike off-ramps to eastbound and westbound I-595 will be combined to form a three-lane off-ramp, then diverge, rather than having two separate mainline exits. The I-595 to northbound Turnpike loop ramp and the southbound Turnpike off-ramp will be reconstructed with larger radii.

## **E. Permits / Environmental Approach**

### **1. NEPA Compliance / Approval**

On June 29, 2006 the Federal Highway Administration (FHWA) approved a Type II Categorical Exclusion for the Project, in accordance with the National Environmental Policy Act of 1969 (NEPA) and 23 CFR 1771. Refer to Volume III – Additional Mandatory Standards for the Type II Categorical Exclusion. Any required NEPA reevaluation shall be completed and subsequently approved by the FHWA prior to the implementation of any qualifying new construction, reconstruction, resurfacing or Renewal Work for the Project.

The Department completed a Design Change Reevaluation of the original PD&E Study to address the change in typical section due to the at-grade Express Lanes and to further document any changes in the Project commitments, criteria, environmental documentation and scope that have occurred subsequent to FHWA's approval of the Type II Categorical Exclusion. The Department has also completed a Construction Advertisement Reevaluation to address updates to Project design exceptions and variations, completion of the Traffic and Revenue Study, and updates to the various Project commitments and environmental documentation. Refer to Volume III for the FHWA approved Design Change and Construction Advertisement Reevaluation documents.

The Concessionaire will be responsible for coordination with the Department, scheduling and preparation of all Project reevaluations required subsequent to the execution of the Agreement, which includes, but is not limited to a reevaluation for the tolling of I-595. The Concessionaire will also be responsible for tracking the status of all Project commitments as described in the Type II Categorical Exclusion, Design Change Reevaluation and Construction Advertisement Reevaluation, scheduling and evaluation of changes to previous Project commitments, and the establishment of new commitments as required.



## **2. Permits**

A list of the regulatory permits that will likely be required for the Project is contained in Vol II Div II Sect 3.F.3. The Concessionaire shall be responsible for identifying and securing all necessary regulatory and building permits, as well as performing any tasks relating to transferring and/or modifying any previously secured permits. The Department has, in the interests of expediency, commenced the process for securing several of the Project permits as identified in Vol II Div II Sect 3.F.3. Copies of draft permit applications as well as other permit documentation are provided in the Reference Documents.

## **3. Aquatic and Natural Environment**

In planning the Project, significant effort has been made to ensure that the Project can be implemented with minimal impact on the landscape and natural environment. Off-site property was not considered in the original NEPA compliance review, but it is not anticipated that the Concessionaire will need to utilize any public parks, historic or archaeological sites, recreation areas, or wildlife and waterfowl refuges for any staging and/or stockpiling activities. Portions of the Project site in temporary use during the Construction Period must be landscaped to recreate and re-establish the pre-existing landscape and/or functionality. Temporary use sites will need to be coordinated with the District Construction Environmental Coordinator to ensure there are no environmental impacts.

## **4. Residential Environment and Noise**

The Project area includes adjacent land uses that will be affected by noise and vibration from construction activities. The Concessionaire will be responsible for abatement of operational and construction noise to acceptable levels as measured within the Project Right of Way, along the approach, and at nearby residential and commercial noise-sensitive receptor locations in accordance with the Concessionaire's Vibration Monitoring Plan.

The construction of sound barriers will be included in the Project. As part of the completed PD&E Study and the subsequent noise reevaluation, sound barriers at thirteen (13) locations throughout the corridor are recommended for design and construction. A table listing the locations and dimensions of the recommended sound barriers, and a figure depicting their general locations are provided in the Sound Barrier Summary in the Reference Documents.

## **5. Cultural Resources: Historic and Archaeological**

The Sewell Lock is listed, and the North New River Canal is eligible for listing on the National Register of Historic Places (NRHP). The preferred alternative from the PD&E Study did not impact Sewell Lock. In letters dated January 9, 2006 and April 26, 2006 (as provided in Appendix C of the Type II Categorical Exclusion), the State Historic Preservation Officer concurred that the proposed Project would have no adverse effect on any resources listed, or potentially-eligible for listing on the NRHP.

Subsequently, the Department has coordinated with SHPO to further discuss the additional bulkheading required along the canal as a result of the Indicative Preliminary Design. SHPO has concurred that the additional bulkhead will not have an adverse impact on the canal's eligibility. The SHPO November 19, 2007 concurrence letter is provided as an appendix to the Design Change Reevaluation in Volume III. The Concessionaire shall provide technical support to the Department in the continued coordination with SHPO regarding the placement of, and the construction materials to be used for the bulkheads and sound barriers, as well as any modifications to the bridge structures that cross the canal.

## **6. Contamination**

A Level I contamination evaluation was completed for the Project during the PD&E Study phase, during which over 1,000 sites within one half-mile of the I-595 corridor were researched. The Contamination Screening Evaluation Report (CSER) has been updated to reflect any changes at these sites, new concerns, and the exact location of sites on which I-595 was constructed. The Department has conducted a Level II Contamination Assessment along the Project corridor to determine potential contamination impacts for sites assigned high or medium risks. Preliminary Level II information (CSER Update and Level II reports) is provided in the Reference Documents. A Level III Contamination Assessment Report will be developed by the Department for any contaminated properties that need to be acquired by the Department.

The I-595 corridor passes over an area affected by the deep groundwater contamination plume from an offsite source identified by the U.S. Environmental Protection Agency (EPA) under Sections 106 and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA aka. Superfund). The offsite source of contamination is known as the Florida Petroleum Reprocessors (FPR) Superfund Site and is located in the vicinity of the I-595 / Florida's Turnpike interchange.

Meetings were held with the EPA, and plans were reviewed for all improvements within the I-595 corridor, including Florida's Turnpike interchange and mainline. Based on this coordination, a Consent Decree was drafted and lodged (July 29, 2005) by the U.S. Department of Justice, which provides provisions to design and construct all roadway improvements within the contaminated area. Refer to Volume III for the Consent Decree document. The Concessionaire shall adhere to all provisions of the Consent Decree and shall provide technical support to the Department in coordinating with the EPA during the design and construction phases of the Project.

A review of the Consent Decree in regard to constructability of the Project has also been completed by the Department, and is provided to the Concessionaire for informational purposes in the development of final design plans (refer to the Consent Decree Preliminary Constructability Review in the Reference Documents).

In coordination with the Department's Contamination Impact Coordinator (DCIC), the Concessionaire shall be responsible for any contamination assessment necessary and all necessary remediation based on the final project design. Refer to the Concession Agreement and Vol II Div II Sect 3.F.9 for further description of the Concessionaire's contractual obligations relating to the identification, removal, handling and disposal of unknown, undesirable, contaminated and/or hazardous material encountered throughout the duration of the Term.

## **F. Drainage**

A comprehensive stormwater management facility design evaluation has been performed for the Project in accordance with methodologies approved by the FHWA and in accordance with drainage design criteria specified by South Florida Water Management District (SFWMD), and local regulatory agencies including Broward County Environmental Protection Department (BCEPD), Central Broward Water Control District (CBWCD), Old Plantation Water Control District (OPWCD), and Tindall Hammock Irrigation and Soil Conservation District (THISCD). The Stormwater Management Facility Design Evaluation Report is provided in the Reference Documents.

The Department has coordinated its proposed stormwater management facility design concepts with the regulatory agencies and local drainage districts based on the Indicative Preliminary Design concept. It shall be the Concessionaire's responsibility to finalize the stormwater management facility types, sizes, and locations, and to assure issuance and/or execution of all drainage-related conceptual/master plan permits and right of way agreements. Refer to the draft permit applications and associated documentation provided in the Reference Documents.

The proposed stormwater management facilities include wet/dry retention ponds located within interchange infield areas, shared use ponds within adjacent golf courses, offsite rock pits, and exfiltration trenches within the roadway corridor. In addition to the drainage-related permits, the Department has also conducted a hydraulic analysis of the SFWMD North New River Canal and continues to coordinate closely with the SFWMD Right of Way Division to ensure any impacts to the canal right of way can be mitigated appropriately. Refer to the North New River Canal Hydraulic Analysis Report provided in the Reference Documents.

The Concessionaire will be responsible for designing, permitting, constructing, and maintaining the Project corridor stormwater management collection, conveyance, and storage/treatment facility systems, including connections to existing or constructed offsite facilities.

## **G. North New River Canal (NNRC)**

The SFWMD North New River Canal (NNRC) runs parallel to the I-595 corridor throughout the project length, and is navigable from the Sewell Lock downstream to the Atlantic Ocean. The I-595 westbound improvements will require the placement of approximately 7.5 miles of bulkhead along the southern bank of the canal, and approximately 0.5 miles along the north side to maintain the conveyance capacity of the canal. The bulkhead along the north bank is required: 1) to address specific navigation requirements negotiated with the U.S. Coast Guard; and 2) where the shift in the westbound alignment results in the placement of bulkhead beyond the offset in which the existing design water surface elevation coincides with the canal side slope, thus compensating for any potential reduction in canal conveyance capacity. As the NNRC is eligible for the National Register of Historic Places (8BD3279), the Department has coordinated with, and received a determination from the State Historic Preservation Officer that the required bulkheading will not have an adverse effect or alter the characteristics of the canal.

In addition to bulkhead construction, the Concessionaire will also be responsible for dredging the NNRC in areas where the construction of the bulkhead results in a loss of canal cross-sectional area. Due to westbound SR-84, turn lane and bulkhead construction, the existing bridges crossing the NNRC at Commodore Drive, SW 125<sup>th</sup> Avenue, Hiatus Road, Nob Hill Road and Pine Island

Road are anticipated to require replacement.

## **H. Utility Coordination / Adjustments**

Various overhead and underground utilities will be impacted by the Project improvements. The locations of existing utilities within the Project limits, to the extent such locations are currently known by the Department and/or have been verified by field-testing, are provided on the Existing Utility Base Map in the Reference Documents. Test pitting has been conducted at select locations to better assess the actual location of existing utilities. The results of the field investigations are provided in the Subsurface Investigation Report in the Reference Documents. Potential utility conflict areas based on the Indicative Preliminary Design and the associated utilities are identified in the Utility Conflict Matrix in the Reference Documents.

The Concessionaire will be responsible for the coordination, scheduling, negotiations and agreements, permitting, reviews, cost, and in some cases the design and construction activities associated with any required utility adjustments. The Concessionaire's roles and responsibilities for each anticipated utility adjustment are described in Vol II Div II Sect 3.H.

## **I. Transit Accommodation**

As part of the Project commitments, the I-595 corridor improvements are to accommodate a future envelope suitable for light rail transit within the Project limits. The currently preferred alternative of the Central Broward East-West Transit Analysis (CBEWTA) Study crosses the I-595 corridor from the north and to the west of 136<sup>th</sup> Avenue, remains elevated and generally parallel to I-595 between the eastbound mainline and SR-84, and then crosses I-595 within the SR-7 interchange to continue northward along the east side of SR-7. Through extensive coordination with the on-going CBEWTA Study, an envelope for the transit alignment has been accommodated within the corridor. Refer to the Preliminary Transit Alignment and Transit Design Criteria provided in the Reference Documents and Volume III, respectively.

The Concessionaire will be required to develop the preliminary transit alignment to a design level sufficient to verify the prevention of any required future reconstruction of the Project facilities to be constructed by the Concessionaire, and to identify and preserve future foundation footprints required for the future transit construction.

## **J. Broward County Greenways**

Broward County has developed its Greenways System plan to connect all major neighborhoods within the County using travel ways designed for non-motorized transportation modes. The countywide Greenways System consists of bicycle and equestrian paths, nature trails, and waterways. Portions of SR-84 and the I-595 crossroads have been designated as major components of this Greenways System.

As part of the I-595 improvements and in a Memorandum of Agreement (MOA) with Broward County, the Department has committed to construct a concrete, bi-directional mixed use path within the Project limits adjacent to the NNRC from 136<sup>th</sup> Avenue to approximately 3000 feet east of SR-7. The Greenway is to be constructed within the SFWMD existing right of way. The recreational path will leave the Project corridor at University Drive, head south to Nova Drive and re-enter the corridor at Davie Road. The portion of the Greenways System between University Drive and Davie Road will be constructed by Broward County.

As part of the Greenways construction within the I-595 Project limits, six (6) new bridges will be required over the NNRC and adjacent finger canals, as well as improvements to the existing bridge over the finger canal west of Flamingo Road. Refer to the Greenways concept alignment included as part of the Indicative Preliminary Design (Line & Grade Concept) and the I-595 Typical Section Package in the Reference Documents.

The Concessionaire will be responsible for the design and construction of the Greenway path and bridges within the limits provided in the Indicative Preliminary Design. The Concessionaire will also be responsible for any required Section 4(f) Project activities for any proposed modifications to the Greenway concept, and will be required to coordinate with the District Planning & Environmental Management Office on all Section 4(f) activities. Broward County will be responsible for the Greenways construction between University Drive and Davie Road; design, construction, and permitting of all Greenways landscaping and appurtenances, as well as the new pedestrian/bicyclist bridge over the NNRC east of SR-7; and the maintenance of the entire Greenways System after the Greenways construction has been accepted by Broward County and other Project construction has been completed within the SFWMD right of way.

#### **K. Right of Way**

Acquisition of Project Right of Way has been restricted to very narrow confines. Project Right of Way is required along the southbound Turnpike, the northeast quadrant of the I-595 / Turnpike interchange, and along the eastbound I-595 roadway. Easements will be required by the Department for offsite drainage conveyance to the golf course facilities located north and south of I-595. Refer to the proposed Project Right of Way limits as part of the Indicative Preliminary Design (Line & Grade Concept) in the Reference Documents.

The Department intends to have all Project Right of Way acquired and ready for construction by October 2010, though it is anticipated that portions of the Project Right of Way will be acquired and ready prior to 2010. Refer to Vol II Div II Sect 2.C for detailed information on the anticipated Project Right of Way clear dates for the various areas of acquisition.

The Concessionaire will be solely responsible for securing any temporary rights needed for construction operations, including but not limited to staging and stockpiling.

#### **L. Geotechnical**

The Department has conducted a preliminary subsurface testing program for the I-595 Corridor. Refer to the Preliminary Geotechnical Exploration in the Reference Documents. No geotechnical recommendations are provided in this report. Subsurface data collected to date is provided to the Concessionaire for informational purposes only. The boring details provided are specific to those locations only. The Concessionaire's Geotechnical Engineering Consultant is expected to review the existing data and conduct supplementary subsurface investigations, as deemed required by the Concessionaire: where its design and/or method statements identify that it is necessary or prudent to do so; if referenced codes, manuals, guidelines or other design criteria require additional subsurface investigations; where the confirmation of subsurface conditions as presented in the Contract Documents is required to substantiate a design assumption; or where the subsurface data in the Contract Documents implies a high degree of geotechnical uncertainty. The Concessionaire shall make all arrangements with landowners and occupiers for gaining the necessary access for subsurface investigations.

All risks associated with subsurface conditions, including undesirable, contaminated and/or hazardous materials will be borne by the Concessionaire.

**M. ITS / Systems Integration**

The Concessionaire shall be responsible for the design, construction, integration, operation, and maintenance of the existing, new and permanent I-595 corridor Intelligent Transportation Systems (ITS) deployment to support traffic management and operations of the Express Lanes and the General Purpose Lanes. This deployment shall include a fiber optic communication network subsystem, an Express Lanes Access Control subsystem, an emergency access gates (EAG) subsystem, a Closed Circuit Television (CCTV) camera traffic monitoring subsystem, a Dynamic Message Sign (DMS) subsystem, a Changeable Message Sign (CMS) subsystem, a Highway Advisory Radio (HAR) subsystem, a Microwave Vehicle Detection Station (MVDS) subsystem, Electronic Toll Collection (ETC) subsystem, and a power backup subsystem, including all ancillary components within the I-595 corridor. The Concessionaire's responsibilities for each of these subsystems are defined in Attachments 1 and 2 of Vol II Div II Sect 3 and in Vol II Div II Sect 4.

The Concessionaire shall be responsible for the design, construction and integration of a CCTV camera traffic monitoring subsystem and a MVDS subsystem along Florida's Turnpike at the I-595 / Turnpike interchange from Peters Road to Griffin Road. The Concessionaire shall also be responsible for the relocation of the DMS/CMS subsystem currently installed on the Turnpike between Peters Road and Griffin Road. The Concessionaire shall turn these subsystems over to FTE upon the completion of construction and acceptance by the Department.

Refer to the ITS Deployment Requirements provided as Attachment 1 to Volume II, Division II, Section 3 for a full description of the Concessionaire's responsibilities in the maintenance of the interim ITS system during construction, and the design, construction and integration of the new I-595 and FTE ITS systems.

**N. Operations and Maintenance**

The Concessionaire will be responsible for operation and maintenance of the Project in accordance with the Operations and Maintenance Requirements specified in Vol II Div II Sect 4, which includes detailed requirements for the preparation of operations procedures and manuals, maintenance procedures and manuals, maintenance management information systems, etc. The operations and maintenance criteria have stringent requirements with respect to safety, operations activities, and maintenance activities as required in order to provide a safe environment for the public's use of the facilities.

**O. Handback Requirements**

The Concessionaire will be required to handback the operations and maintenance of the facility to the Department at the Termination Date. The Handback Requirements contained in Vol II Div II Sect 5 define the terms and conditions of the transfer and identify inspection and Renewal Work requirements, the required conditions of the facilities and equipment, the expected life remaining, system demonstration tests, etc., all of which are required prior to the actual handback.