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From I-75 Interchange to I-95 Interchange

O S Broward County, Florida

OF TRANS

December 14, 2006

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I-75 A

419338-1

419342-1

SEG. FM NO. **I-595 SEGMENT LIMITS** 420809-1 I-595 Corridor Design Consultant 409353-1 W. of Davie Rd. to SR 7 (WB) E. of Univ. Dr. to E. of TPK (EB) 2 413271-1 E. of Univ. Dr. to W. of Davie Rd. (WB) 3 413272-1 413058-1 E. of Nob Hill Rd. to E. of Univ. Dr. (WB) 4 421854-1 Advanced ROW Acquisition 419339-1 E. of P. Island Rd. to E. of Univ. Dr. (EB) 5 413270-1 6 W. of 136th Ave. to E. of Nob Hill Rd. (WB W. of Nob Hill Rd. to E. of P. Island Rd. (EB) 7 413057-1 413274-1 W. of 136th Ave. to W. of Nob Hill Rd. (EB) 8 413273-1 9 Reversible Lanes (136th Ave. to E. of SR 7) 10 419341-1 Direct Conn. from Rev. Lanes to TPK Median 10A TBD Rev. Lanes Interim Improvements (Segs. 11 & 12) 11A 409354-3 Environmental Mitigation (Segs. 11 & 12) 409354-2 11 SR 7 to I-95 Interchange (WB) 413277-1 12 E. of TPK to I-95 Interchange (EB) TPK from I-595 to Griffin Rd. & SB On-Ramp (SB) трк с 419336-1 TPK D 419337-1 TPK SB Flyover Ramp to I-595





TPK from Griffin Rd. to I-595 (NB)

Direct Conn. From Rev. Lanes to I-75 Median



Florida Department of Transportation District Four

PROJECT MANAGEMENT PLAN

for

I-595 (SR 862) CORRIDOR IMPROVEMENTS

From I-75 Interchange to I-95 Interchange Broward County, Florida

December 14, 2006

SEG.	FM NO.	I-595 SEGMENT LIMITS
-	420809-1	I-595 Corridor Design Consultant
1	409353-1	W. of Davie Rd. to SR 7 (WB)
2	413271-1	E. of Univ. Dr. to E. of TPK (EB)
3	413272-1	E. of Univ. Dr. to W. of Davie Rd. (WB)
4	413058-1	E. of Nob Hill Rd. to E. of Univ. Dr. (WB)
-	421854-1	Advanced ROW Acquisition
5	419339-1	E. of P. Island Rd. to E. of Univ. Dr. (EB)
6	413270-1	W. of 136 th Ave. to E. of Nob Hill Rd. (WB)
7	413057-1	W. of Nob Hill Rd. to E. of P. Island Rd. (EB)
8	413274-1	W. of 136 th Ave. to W. of Nob Hill Rd. (EB)
9	413273-1	Reversible Lanes (136 th Ave. to E. of SR 7)
10	419341-1	Direct Conn. from Rev. Lanes to TPK Median
10A	TBD	Rev. Lanes Interim Improvements (Segs. 11 & 12)
11A	409354-3	Environmental Mitigation (Segs. 11 & 12)
11	409354-2	SR 7 to I-95 Interchange (WB)
12	413277-1	E. of TPK to I-95 Interchange (EB)
TPK C	419336-1	TPK from I-595 to Griffin Rd. & SB On-Ramp (SB)
TPK D	419337-1	TPK SB Flyover Ramp to I-595
TPK E	419338-1	TPK from Griffin Rd. to I-595 (NB)
I-75 A	419342-1	Direct Conn. From Rev. Lanes to I-75 Median

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i. INTRODUCTION

i.1 PURPOSE OF THE PMP

The ultimate purpose of the Project Management Plan (PMP) is to clearly define the roles, responsibilities, processes and activities of the FHWA, FDOT, Executive Oversight Committee (EOC), Corridor Design Consultant (CDC), Segment Design Consultant (SDC's), CEI Consultants (CCEI's), Contractors and other stakeholders in meeting the project objectives and goals described in Section i.3.

The PMP outlines the proposed management structure and strategy, and describes all aspects of contract and project administration, quality assurance/control, contract deliverables, budget and cost control methods, document control, scheduling, and internal/external communication for optimal control throughout the project duration.

i.2 UPDATING AND CONTROL OF THE PMP

Adherence to the goals and objectives of the PMP, as well the preparation of PMP updates will be the responsibility of the Corridor Management Team (CMT) throughout the duration of the project.

i.3 PROJECT OBJECTIVES AND GOALS

The project objectives and goals include:

- The project segments will be completed on time. The scheduled completion date for each segment will be met or bettered.
- The project segments will be completed within budget. The total project budget for each segment will be met or bettered.
- The project will be completed with the highest degree of quality possible.
- The project will be completed in a safe environment, for both the workers and the traveling public.
- All Federal and statutory requirements will be achieved.
- Public trust, support, and confidence will be maintained throughout the life of the project. The means to achieve this include:
 - The media and public will be continually and adequately informed.
 - o Inconvenience to commuters, residents and businesses will be minimized.
 - All environmental and other commitments will be accomplished.
 - Integrity and competency will be maintained regarding the stewardship and oversight of all public funds.
 - FHWA, FDOT, local agency and public expectations will be maintained.

i.4 LEGAL AND STATUTORY AUTHORITIES

Legal and statutory authority for this project is under the provisions of:

- Titles 23 and 49, United States Code
- Titles 23 and 49, Code of Federal Regulations
- Chapter 334, Florida Statutes.

i.5 PMP REFERENCE INFORMATION

A list of acronyms contained within the PMP is included as **Exhibit M** of the Appendices. Hyperlinks to the various standards and procedures references contained within the PMP are included as **Exhibit N** of the Appendices.

1.0 PROJECT DEVELOPMENT, DESCRIPTION AND SCOPE OF WORK, AGREEMENTS

1.1 PROJECT DEVELOPMENT

1.1.1 Background and History

The I-595 corridor is located in central Broward County, Florida and is maintained and operated by the Florida Department of Transportation District 4 (FDOT D4). The I-595 improvement limits extend 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 (refer to the Appendices, **Exhibit A for the project corridor map**). 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 Fort Lauderdale, and Town of Dania, as well as unincorporated areas of Broward County.

The current I-595 facility was opened in 1989, coordinating the movement of high traffic volumes between the developable areas in the western parts of the Southeast Florida region with the established north-south freeway and principal arterial systems to the east. 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. In addition to the interchanges with the two freeway systems at each end of the study corridor (I-75 to the west and I-95 to the east), there are nine other interchanges along the corridor at the following crossroads: SW 136th 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 SR 7 (US 441).

The SR 84 portion of the corridor lies both north and south of the I-595 mainline. The two lanes north of the mainline operate one-way westbound, while the two lanes south of the mainline operate one-way eastbound. In the area west of the I-75 interchange and continuing east to Davie Road, the SR 84 lanes serve as a collector-distributor system to the I-595 mainline. The SR 84 system is suspended through the I-595 interchanges with Florida's Turnpike and SR 7. East of the SR 7 interchange, the SR 84 and I-595 rights of way separate. The SR 84 alignment veers to the northeast and the I-595 alignment continues nearly due east.

For various reasons, travel demand within the corridor had increased at a pace where the longrange traffic forecasts for the current highway would be reached in the short-term. Quantification of traffic growth in the corridor, assessments of corridor operations, and recommendations for measures that could be enacted in the short term were prepared in the *Interstate 595 Freeway Operational Analysis, Final Report* in 1994.

To prepare for the continued evolvement of I-595, the FDOT determined that a Corridor Master Plan should be developed. In the late 1990's, most of the recommendations from the Master Plan for the region's I-95 corridor (prepared in the early 1980's) had been implemented, and the corridor was rapidly approaching its planning horizon. Therefore, I-95 was also in need of a new Master Plan which would address any remaining safety, capacity, and multimodal options that could be incorporated within the next 25 years. These two efforts were combined, and the *I-95/I-595 Master Plan Study* was completed in 2003.

The result of the Master Plan Study was a Locally Preferred Alternative (LPA) for the I-595 corridor, focusing on improvements between I-75 and I-95. This LPA served as the base alternative for further evaluation under the recently completed *I-595 Project Development and Environment (PD&E) Study*.

1.1.2 Project Purpose and Need

The I-595 corridor is an important link within the Florida Intrastate Highway System (FIHS). The FDOT published an *FIHS 2025 Cost Feasible Plan Update* in 2003. The importance of this update was that it contained revenue forecasts that reflect the priorities and economic realities of the state's post-9/11 economy. The highway portion of the proposed I-595 improvements appears as five separate projects in the District 4 portion of the FIHS Long-Range Plan. The projects include reconstruction of multiple interchanges, construction of express lanes, and improvements to the causeway mainline itself.

The I-595 corridor is also considered a Designated Strategic Intermodal System (SIS) Highway Corridor link of the state's intermodal transportation network. FDOT's Central Office staff has completed the bulk of the SIS network development. The first coordinated intermodal SIS network Needs List has been completed and includes all SIS facilities projects that have passed established criteria and that have been identified in at least one other long-range planning effort. On November 2, 2005, the Executive Office of the Governor announced the SIS Growth Management projects proposed for funding between fiscal years 2005/2006 and 2010/2011, which included nine of the I-595 corridor projects identified in the *I-595 PD&E Study*. The I-595 Master Plan-defined LPA is also included in the Broward County MPO *2030 Long-Range Transportation Plan*.

The purpose of the improvements proposed for the I-595 corridor is in compliance with the FDOT Mission Statement:

The Department will provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities.

1.1.2.1 Safe Transportation

The proposed improvements will enhance the safe operation of the corridor by increasing the number of persons, vehicles and travel modes it can accommodate. This is an asset to residents, visitors, and commerce.

The improvements proposed for the corridor specifically address the following conditions:

- The separation of long-distance users of the corridor from those having local interchange destinations as will be achieved by the construction of the median express (reversible) lanes will help to eliminate the speed differential and lane changing friction that is a contributing factor in sideswipe and angle crashes on interstate facilities.
- The introduction of braided ramp configurations at selected locations, reconfiguration of interchange ramps at other locations, increased numbers of auxiliary lanes between interchange pairs, and extension of the SR 84 Collector-Distributor (C-D) network through a greater portion of the corridor will also help in reducing congestion along the mainline, thereby improving ramp-traffic merging operations and relocating the congestion that occurs to the slower speed SR 84 C-D system.
- The I-595 corridor plays an important role in the region's emergency evacuation plans. Improvements to the corridor will help move large volumes of people and vehicles away from coastal areas, directing traffic to central Florida roadways (Florida's Turnpike, I-75, and US 27) and allowing the Interstate routes closer to the coast to be used for influx of emergency responders and supplies.

These measures will, in turn, improve not only the efficiency and safety of corridor operations, but will also help to improve emergency service provider response times while increasing the person throughput of the corridor.

1.1.2.2 Economic Prosperity

Because of its critical location in the center of Broward County and its proximity to a wide range of other major transportation hubs and corridors, such as Port Everglades, Fort Lauderdale-Hollywood International Airport, Florida East-Coast Rail Line, and Tri-County Commuter Rail, as well many of the region's major north-south expressways and principal highways, improvements to the I-595 corridor are a boost to the state and regional economic competitiveness in the global market.

I-595 is the only east-west corridor that serves to connect all of the major north-south routes in the region: US 27, Sawgrass Expressway, Florida's Turnpike, SR 7, I-95, and US 1. Initial investigations into development of an additional east-west corridor have indicated that such an effort would be very costly and require a number of years to implement. Widening of the I-595 corridor, however, would greatly assist in meeting the additional capacity needs. It is also a measure that can be implemented at considerably less cost and within a much more reasonable time frame than development of a new corridor. The Freight Movement Initiative backed by the Broward County Metropolitan Planning Organization has been one of the most vocal proponents of capacity improvements to the I-595 corridor.

The role of the I-595 corridor in the SIS, its integration into the growth and success of major transportation hubs, and its key role in the general freight and goods movement strategies of the region serve to underscore the economic benefits that will come from maximizing the operational efficiency of the I-595 corridor. Improvements in corridor capacity and interchange configurations will result in reduced congestion, less delay, and decreased travel times for goods and freight movement.

1.1.2.3 Quality of Life

Implementation of the proposed improvements is important for continuing and improving the quality of life for residents, business, and visitors to the communities of Southeast Florida. It allows the communities located along the corridor to achieve the goals of their long-range comprehensive plans by supporting their continued economic development.

The proposed improvements to the I-595 corridor have been developed in a manner that ensures that the qualities of life that are of value to Florida citizens are sustained: preserving parklands, protecting sensitive wetlands, and taking appropriate measures to mitigate any environmental impacts that may occur. The potential environmental impacts of the project are detailed in the *I-595 Environmental Determination, Type 2 Categorical Exclusion* recently concurred by FHWA.

1.1.3 Federal NEPA and Decision Document

FDOT D4 has completed the *I-595 PD&E Study* that encompasses the project limits. The Environmental Class of Action Determination for a Type 2 Categorical Exclusion has been deemed appropriate by FHWA, and Location and Design Concept Approval (LDCA) from FHWA was received on June 29, 2006. This documentation is included in the Appendices as Exhibit B.

1.1.4 Project Commitments

During the I-595 corridor study process, extensive coordination with numerous government officials, agencies, municipalities and organizations was undertaken to ultimately derive the approved corridor design concept and commitments (refer to the *PD&E Public Involvement Report*). Government agencies and organizations with jurisdictional interest in the project are provided in Sections 2.3 - 2.5.

• The first section below is a summary of the understandings established with FHWA at the conclusion of the *I-95/I-595 Master Plan Study*.

- The second set of commitments summarizes agreements reached between the FDOT and agencies having jurisdiction over facilities or resources adjacent to or within the I-595 corridor that are immediately impacted by, or have the potential to be impacted by, the proposed corridor improvements.
- The final set of commitments indicates how future aspects of the project will be conducted to
 assure that the interests of public agencies, elected officials, citizens, and related projects are
 respected as the proposed I-595 corridor improvements are enacted in the coming years.

1.1.4.1 Status of Master Plan Based Understanding with FHWA

At the conclusion of the *I-95/I-595 Master Plan Study*, FDOT made a presentation to FHWA which covered the study findings and proposed a series of follow-up actions regarding the I-595 corridor. As a result of the presentation, conducted on July 10, 2001, FDOT and the FHWA came to an understanding of how to proceed with these actions. The following is a summary of each of the key items presented to FHWA, the understanding reached between FHWA and FDOT regarding that proposal, and the current status of each proposal.

1. The alternatives to be studied during the I-595 PD&E Study should only include the Master Plan LPA Build Alternative, and variations of it, and a No Build Alternative. This is possible because 15 different build alternatives were examined during the Master Plan Study. The Master Plan LPA, which had a design year of 2020, is to be updated and further developed during this PD&E phase of study to accommodate traffic for a design year of 2034, which is an additional 14 years of traffic growth within the corridor.

Understanding: The *I-595 PD&E Study* build alternative will consist of the Master Plan LPA concept, modified to accommodate an additional 14 years of growth in the I-595 corridor, and using 2034 as the forecast year for design traffic.

Status: The Master Plan LPA concept was modified to accommodate Year 2034 traffic. This modified version of the LPA became Alternative 1A of the *I-595 PD&E Study*. Due to right of way impacts associated with Alternative 1A, other design concepts were developed that combined a series of design modifications to meet year 2034 travel demands within the I-595 corridor. Subsequently, FHWA Location and Design Concept Approval (LDCA) was received in June 2006 for the preferred alternative (Alternative 2A). The components of Alternative 2A are described in Section 1.2.

2. For PD&E projects of a Type 2 Categorical Exclusion or lesser class of action, no Public Hearing will be conducted. Public Hearings will be conducted for projects requiring an Environmental Assessment or Environmental Impact Statement. The public will have another opportunity to review these projects during the Broward County MPO's annual Transportation Improvement Program (TIP) adoption process.

Understanding: The FHWA agreed to this proposal.

Status: Several changes to the Master Plan LPA Build Alternative were required to minimize potential environmental impacts, construction costs, and the right of way acquisition needed to implement the I-595 corridor improvements based on the 2034 design year traffic. Therefore, FHWA and FDOT decided that a formal Public Hearing would need to be conducted during the *I-595 PD&E Study* to present the design alternatives and the No Build alternative that were evaluated during the study. A formal Public Hearing was conducted on November 29, 2005.

3. An Interchange Operational Analysis Report (IOAR) using Highway Capacity Software (HCS) will be prepared for the segment of I-595 between University Drive and the west end of the study corridor. A Systems Interchange Modification Report (SIMR) using CORSIM will be prepared for the I-595 segment between I-95 and University Drive.

Understanding: The FHWA agreed to a traffic operational approach that could be used in subsequent development of systems interchange analyses and reports to the FHWA. Agreement was reached on creating a SIMR for the segment of I-595 between I-95 and the University Drive interchange (inclusive).

<u>Status:</u> In a letter dated January 28, 2005, FHWA approved the SIMR prepared for the I-595 corridor (from I-75 to I-95).

4. Design Exceptions are proposed for the viaduct that spans Pond Apple Slough Natural Area and the vertical and horizontal curves of the University Drive flyover ramp replacement. Reducing the width of the shoulders to less than 10 feet, in select areas, and reducing selected through-lane segments to less than 12 feet will dramatically reduce the right of way acquisition and construction costs of improvements within the I-595 corridor. This can be accomplished by restriping the existing roadway surface rather than constructing modifications to it. It is also proposed that FHWA authorize FDOT to reconstruct the flyover ramps at the University Drive interchange in-kind, as long as there are no crash or safety concerns within the interchange area. These proposals for the I-595/University Drive interchange will reduce right of way impacts in that portion of the corridor. As part of its understanding with FDOT, any design exceptions requested from FHWA will be supported by safety and design parameter analyses.

Understanding: With proper documentation of safety impacts and design parameter analyses, FHWA will grant design exceptions and in-kind reconstruction of the University Drive interchange flyover ramp replacements as part of a coordinated effort to reduce right of way acquisition and construction costs.

Status: The restriping project for adding an additional lane in the westbound direction on the viaduct section was approved by the FHWA and has been constructed. Design exceptions were required for substandard shoulder widths on I-595 westbound over the south fork of the New River, I-595 westbound over SR 84, I-595 westbound over SR 7, and the I-595 westbound ramp from I-95 southbound.

Analysis of crash data within the I-595 corridor indicates that there is not a crash problem within the I-595/University Drive interchange area. Therefore, the design exceptions and inkind ramp reconstruction previously identified for this interchange area have been incorporated into the improvements proposed for the I-595 corridor.

5. Level of Service failures are unresolved for the EB on-ramps at Nob Hill Road, Pine Island Road, and Davie Road. Continuing Level of Service failures along the EB on-ramps at the Nob Hill Road, Pine Island Road, and Davie Road interchanges may remain unresolved under the proposed design concept due to geometric constraints and proposed construction costs of alternate treatments. The *I-595 PD&E Study* will go forward with the philosophy that the Interstate highway mainline will be given priority in the system for moving corridor traffic. Areas that may not accommodate the demand will be restricted to on-ramps only.

Understanding: FHWA agrees with the philosophy that the Interstate mainline should be given priority in achieving acceptable operational performance levels. However, FHWA expects FDOT to fully document any proposed design solutions that result in any Level of Service failures remaining in the corridor after all proposed improvements are constructed to demonstrate that the failures have been moved away from the mainline and onto the ramps.

<u>Status:</u> All proposed failures remaining within the I-595 corridor have been identified and documented in the PD&E Study. The documentation that these failures do not occur on mainline segments, but rather at the on-ramps, is provided in Section 6.0 of the *Preliminary Engineering Report*.

6. An evaluation of the use of tolls for the reversible lanes portion of the project is proposed in the I-595 PD&E Study. Florida's Turnpike Enterprise will perform a detailed Toll and Revenue Analysis for the reversible lanes portion of the project corridor. The reversible lanes are the only portion of the corridor for which tolls are being considered.

Understanding: The FHWA has agreed that an analysis of the feasibility of placing tolls on the reversible lanes as a means of generating revenues that could capitalize a significant percentage of the reversible lanes construction costs is warranted.

<u>Status:</u> The Florida Turnpike Enterprise has completed a preliminary revenue model and report to determine the feasibility of placing tolls on the reversible lanes. The evaluation and coordination regarding the tolling of reversible lanes will continue to be evaluated into the design phase of the project. Consideration will be given to tolling these lanes as not only a means of generating revenue, but also as a way to manage the traffic through congestion pricing.

7. Impacts to Tri-Rail Double Tracking and Fort Lauderdale-Hollywood International Airport Expansion projects will be avoided. The *I-595 PD&E Study* proposed improvements will not encroach into or negatively impact vertical clearances for the rail corridor or the airport approach glide paths. Modifications to I-595 developed as part of the airport's access changes will be included in the study documents.

Understanding: The FHWA agreed with this concept. However, proposed changes in I-595/airport access identified by Broward County may be reflected in the proposed design concept when identified as being performed "by others."

Status: Through subsequent refinements of the scope of services for the *I-595 PD&E Study*, the limits of the study corridor addressed only mainline improvements through the I-595/I-95 interchange. The eastern terminus of the *I-595 PD&E Study* did not extend far enough to the east to involve either the Tri-Rail line or airport access improvements. Coordination with Broward County regarding proposed improvements with the I-595/I-95 interchange will continue through the design and construction phases of the project.

1.1.4.2 PD&E Study Commitments

As the *I-595 PD&E Study* progressed, several special agreements were developed between the FDOT and other public agencies with regard to specific project elements, as follows:

- 1. The South Florida Water Management District (SFWMD) North New River Canal runs parallel to the study corridor throughout the project length. The FDOT made several commitments related to preserving the flow capacity and maintainability of the canal while making improvements to the I-595 mainline, the SR 84 frontage road system, and several interchange areas. These commitments included the following:
 - FDOT will provide SFWMD with the wind loadings that are used in the design of the noise walls.
 - FDOT will provide a 100 feet staging area next to all bridge structures.
 - FDOT will provide a minimum 25 feet gap, or appropriate maintenance access approved by SFWMD, in the noise wall at the SFWMD "Lot #29" (purchased by SFWMD for maintenance of Sewell Lock).
 - FDOT will provide a 3-foot asphalt mow strip, similar to a guardrail treatment, in front of proposed noise walls. This will assist the SFWMD with maintenance adjacent to the walls.

In the event that noise abatement measures cannot be constructed on the south side of the canal and therefore must be provided on the north side of the canal, FDOT will adhere to the following commitments:

- FDOT will typically locate the noise walls ±4 feet from the residential property line to allow for construction of the wall and foundation.
- FDOT will encroach into the SFWMD right of way for the noise walls on the north side of the SFWMD right of way, where the existing canal right of way is more than 44 feet. The FDOT will provide a minimum of 40 feet from top of bank to the noise wall for maintenance of the canal.
- FDOT will not meander the noise walls for trees and fences but will hold to the northern SFWMD right of way line and the ±4 feet offset.
- FDOT may need to provide access to docks located south of the proposed noise walls. To accomplish this, it may be necessary to stagger the walls, which would

ultimately reduce the berm width. The issue of access and its design will be coordinated with the SFWMD during the design phase of the project.

- 2. In a meeting held on October 21, 2005, the United States Coast Guard agreed that the 55-foot vertical clearance criterion for the North New River Canal will not apply to the proposed bridges (i.e. direct connection ramp/bridge from/to Florida's Turnpike, WB I-595 ramp/bridge to NB Florida's Turnpike, and the New River Greenway Pedestrian Bridge) crossing over the section of canal between Sewell Lock and SR 7. The FDOT committed to maintain at least 20-foot of vertical clearance and 30-foot of horizontal clearance (15 feet each side of the centerline of the waterway) for navigation, which was concurred by the Coast Guard.
- 3. Access to Sewell Lock Park, located on the north side of the I-595 corridor west of the Davie Road interchange, is provided from SR 84 WB. The Park is a historic site and a Section 4(f) resource owned by the Broward County Parks and Recreation Department. FDOT agreed that no permanent impacts to either Sewell Lock Park or its access from SR 84 will result from the improvements proposed for the I-595 corridor.
- 4. The I-595 corridor passes over an area impacted by a deep groundwater contamination plume from an offsite source identified by the United States Environmental Protection Agency 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.

Meetings were held with the U.S. Environmental Protection Agency 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 by the U.S Department of Justice which provides provisions to design and construct all roadway improvements within the contaminated area. The FDOT committed to adhere to all provisions of the Consent Decree and coordinate with the EPA on any substantial construction plan changes during the final design phase. A copy of the Consent Decree is provided in the *Contamination Screening Evaluation Report*.

- 5. Pond Apple Slough Natural Area is a wetland area located adjacent to the I-595 corridor east of the SR 7 interchange area. FDOT committed to the SFWMD and the Broward County Parks and Recreation Department that designs developed for improvements to the I-595 corridor will minimize impacts to limited access right of way adjacent to Pond Apple Slough Natural Area and provide any mitigation measures that are required by the jurisdictional agencies.
- 6. Broward County has developed its Greenways System plan to connect all major neighborhoods within the County using travelways designed for non-motorized transportation modes. The countywide Greenways System will consist of bicycle and equestrian paths, nature trails, and waterways. Portions of SR 84 and I-595 crossroads have been designated as major components of this Greenways System.

FDOT agreed to modify its plans for the corridor by relocating the Greenway from the south bank of the North New River Canal (immediately north of I-595) to the north bank of the North New River Canal (immediately south of SW 25^{th} Street) between SR 7 and theoretical SW 51^{st} Avenue. The relocated Greenway would be within 200 feet of the existing alignment and would occupy SFWMD right of way for the North New River Canal from SR 7 to SW 41^{st} Avenue, Broward County right of way for SW 25^{th} Street between SW 41^{st} Avenue and SW 44^{th} Terrace, and SFWMD right of way for the North New River Canal from SW 44^{th} Terrace to theoretical SW 51^{st} Avenue. At theoretical SW 51^{st} Avenue, a new bridge will be constructed for the Greenway over the North New River Canal to connect it to the south bank of the North New River Canal bulkhead. From Davie Road to Sewell Lock Park, the Greenway will follow its current alignment. FDOT has committed to construct the relocated section of the Greenway or its function. As a result, there will be minimal impacts to the Greenway during construction as documented in the *Programmatic Section* 4(f) *Evaluation* that was approved by FHWA on

March 14, 2006. Refer to Appendix G of the *Environmental Determination, Type 2 Categorical Exclusion* for the Section 4(f) approval letter from FHWA. The Broward County Greenways Project Manager has concurred with this proposed action.

The relocation of the Broward County Greenway is acceptable to the SFWMD as long as it remains flush with the ground and does not impact the SFWMD's ability to maintain the canal bank. Erosion concerns must be addressed during construction and final disposition of the Greenway.

- 7. FDOT has included recommendations for the location of a transit envelope within the I-595 corridor suitable for future implementation of a light rail transit (LRT) system. These envelopes have been incorporated into the typical sections developed for each Build Alternative proposed for the I-595 corridor improvements. This includes an understanding that the Federal Transit Authority (FTA) Preliminary Engineering phase for the *Central Broward East-West Transit Alternatives Analysis (CBE-WTAA)* will evaluate the transit project's location and impacts in more detail. FDOT will re-evaluate the *I-595 PD&E Study* before advancing the right of way phase of any I-595 corridor project to avoid potential right of way acquisition from the same parcel twice. This re-evaluation will consider the latest progress and information from the transit study.
- 8. To minimize adverse effects to the endangered Wood stork, the FDOT will determine if there are any active Wood stork breeding colonies within 18.6 miles of the proposed improvements at the time the Environmental Resource Permit (ERP) application is submitted to the U.S. Army Corps of Engineers (ACOE). If the proposed improvements are determined to be within the core foraging area (18.6 miles) of any active Wood stork breeding colony, any wetlands impacted will be replaced within the core foraging area of the active Wood stork breeding colony. The compensation plan will include a temporal lag factor, if necessary, to ensure wetlands provided as compensation adequately replace the wetland functions lost due to the project, and the wetlands offered as compensation will be of the same hydroperiod as the wetlands impacted. If the replacement of wetlands within the core foraging area is not practicable, the FDOT will coordinate with the U.S. Fish and Wildlife Service (USFWS) to identify acceptable wetland compensation outside the core foraging area, such as purchasing wetland credits from a "FWS Approved" mitigation bank.

The FDOT agrees to follow the USFWS Standard Construction Conditions for the Florida Manatee during implementation of the project, and Technical Special Provisions will be incorporated into the contractor's bid documents.

The FDOT agrees to follow the USFWS Standard Protection Measures for the Eastern indigo snake during implementation of the project, and Technical Special Provisions will be incorporated into the contractor's bid documents.

- 9. The FDOT will provide the following information to the National Marine Fisheries Service (NMFS) as the project progresses to the design, permitting, and implementation stage:
 - A detailed description of the construction activities. The information will describe whether subaqueous work will be implemented, types of construction methods proposed (i.e., pile drivers, cranes, dredges, hoppers, or barges, etc).
 - A list of conservation and avoidance measures for listed species on construction methods (i.e., best management practices for water quality protection and erosion control to be implemented in the project design and implemented during construction).
 - A short description or drawings of the new bridge(s) over tidal waters. The drawing or description will indicate the number of piles in the water for the bridge fenders and the location of the new piers.
 - A Stormwater Management Plan. The plan will include the type of treatment and maintenance of the stormwater treatment system. The treatment will be in accordance with state and Federal (NPDES) standards.

- 10. The FDOT will keep a boundary fence around the Cherry Camp archaeological site (8BD82) for the duration of the I-595 construction projects to prevent staging areas or temporary access roads from impacting the site.
- 11. In order to minimize the unavoidable effects of right of way acquisition and displacement of people, the FDOT will carry out a Right of Way and Relocation Program in accordance with Florida Statute 339.09 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646 as amended by Public Law 100-17).

1.1.4.3 Commitments for Later Phases of the Project

The following commitments have been made by the FDOT and will be adhered to during the final design and/or construction phases:

- 1. FDOT will continue to coordinate with elected officials and agency/municipality representatives over the course of the final design phase of the project.
- 2. FDOT will continue to coordinate with Florida's Turnpike Enterprise regarding the design of I-595/Florida's Turnpike interchange structures, project funding, sequencing of the improvements, and the design and construction schedules.
- 3. FDOT will continue to coordinate with the State Historic Preservation Officer (SHPO) regarding the design of noise walls adjacent to the North New River Canal.
- 4. FDOT will create a Community Awareness Plan (CAP) so that public involvement is maintained throughout the entire project.
- 5. FDOT will seek community input regarding the desires, types, heights, and locations of noise barriers where it has been deemed reasonable and feasible during the PD&E process. The FDOT is committed to the construction of feasible noise abatement measures at noise-impacted locations, contingent upon the following conditions: detailed noise analyses during the final design process support the need for abatement; reasonable cost analyses indicate that the economic cost of the barriers will not exceed the guidelines; preferences regarding the compatibility of the proposed mitigation measures with adjacent land uses, particularly as addressed by officials having jurisdiction over such land uses has been noted; safety and engineering aspects as related to the roadway user and the adjacent property owner(s) have been reviewed; and any other mitigating circumstances identified in the *FDOT PD&E Manual*, Volume II, Section 17-4.6.1.
- 6. FDOT will maintain access to businesses and residences to the maximum extent possible during construction.
- 7. FDOT will require that the sequence of construction be planned in such a way as to minimize traffic delays. The project will involve the development and use of a Maintenance of Traffic Plan / Traffic Control Plan. The local news media will be notified in advance of road closings and other construction-related activities, which could inconvenience the community so that business owners, residents, and/or tourists in the area can plan travel routes in advance. A sign providing the name, address, and telephone number of an FDOT contact person will be displayed onsite to assist the public in obtaining answers to questions or complaints about project construction. The existing corridor Intelligent Transportation System (ITS) will be utilized to assist in minimizing traffic delays during construction.
- 8. FDOT will mitigate for any wetland impacts resulting from the construction of this project by using one or more of the options discussed during the Interagency Meeting on June 28, 2005. These options include, but do not limit FDOT to: rehydration of Pond Apple Slough Natural Area; property acquisition and wetland restoration adjacent to I-595 and Pond Apple Slough Natural Area; purchase of credits in an appropriate Wetland Mitigation Bank; or utilization of the Senate Bill. FDOT will maintain coordination with all appropriate regulatory and government agencies regarding the mitigation required for unavoidable impacts to wetlands adjacent to Pond Apple Slough Natural Area.
- FDOT will evaluate the use of drainage structures, such as box culverts, to minimize or avoid haul road impacts to natural flow areas from the limited access right of way into Pond Apple Slough Natural Area.

- 10. FDOT will require the contractor to adhere to air quality and noise provisions of the *FDOT Standard Specifications for Road and Bridge Construction (FDOT Specifications)*, as well as appropriate Best Management Practices, to minimize the adverse effects on air and noise quality from construction activities.
- 11. FDOT will require the contractor to dispose of all oil, chemicals, fuel, etc., in an acceptable manner according to local, state, and federal regulations and forbid any dumping of 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 be required to adhere to the *FDOT Specifications*.

1.1.5 Status of Project

The *I-595 PD&E Study* was completed in March 2006, and Location and Design Concept Approval (LDCA) was received in June 2006 for the preferred alternative (Alternative 2A). Notice to Proceed for the Corridor Design Consultant (CDC) was issued July 28, 2006. The corridor Master Design Plan was initiated in August 2006, and design advertisement of the first two project segments is scheduled for the first quarter of FY 2007/2008.

1.2 DESCRIPTION AND SCOPE OF WORK

As previously identified, the limits of the I-595 Corridor Improvements Project extend 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 approved concept alternative (PD&E Alternative 2A) provides for six 12-foot general purpose lanes (three in each direction), 10-foot inside and outside paved shoulders, and 12-foot auxiliary lanes between interchanges. SR 84 will have two 12-foot lanes and 4-foot paved shoulders (undesignated bicycle lanes), with Type F curb and gutter and 6- to 12-foot wide shared use path proposed on the outside. Alternative 2A also includes three 12-foot reversible lanes with 10-foot shoulders on a 59-foot wide bridge structure elevated in the I-595 median. The proposed typical section is provided in the Appendices as Exhibit C; refer to the *PD&E Preliminary Engineering Report*, Chapter 5 – Design Criteria, Chapter 9 – Preliminary Design Analysis, and Appendix D - Preferred Alternative Concept Plans for the detailed description of project design criteria and components. Consistent with the previous Master Plan LPA, Alternative 2A consists of the following major improvement components:

- Elevated reversible lanes, serving express traffic to/from I-75/Sawgrass Expressway from/to east of SR 7, with a direct connection to the median of Florida's Turnpike
- Auxiliary lanes to reduce friction on the general use lanes caused by merge, diverge, and weaving movements
- Continuous connection of SR 84 between Davie Road and SR 7
- Collector-Distributor (C-D) system between Davie Road and I-95
- Two-lane off-ramps
- Braided interchange ramps to eliminate mainline weaving segments
- Combined ramps and cross-street bypasses to reduce congestion
- Addition of a westbound to northbound (WB-NB) ramp and other modifications to the I-595/Florida's Turnpike interchange
- Accommodation of an envelope for a potential transit element to be integrated within the corridor.

1.2.1 Mainline I-595

Mainline I-595 is a 70 mph facility and currently has three general purpose lanes in each direction with one to 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 alignment maintains 6 general purpose lanes in their current location, with the exception of the two reversible lane interchange areas where the mainline median is widened on both sides to allow for the reversible lane access/egress ramps. With the exception of these two areas, the left and right PGL will remain in their current location, 34 feet left and right of the centerline of construction and at their current elevations. The I-595 general purpose lanes will be milled and resurfaced with widening to the outside for additional auxiliary lanes. Mechanically stabilized earth (MSE) walls are proposed in lieu of fill slopes where the I-595 profile rises to pass over cross streets. Barrier wall along the outside shoulder is required for much of the I-595 mainline because of clear zone issues and grade differentials between I-595 and SR 84. All entrance ramps along I-595 are parallel type entrance ramps and are designed for a 50 mph design speed.

1.2.2 Mainline I-595 Interchanges

As presently configured, I-595 is served by tight diamond interchanges with frontage roads at SW 136th 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 SB-EB and NB-WB 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 friction in the outer lanes caused by merge, diverge and weaving segments along the mainline. The proposed improvements accomplish this by introducing braided ramps, eliminating on and off-ramps by combining ramp movements, and swapping 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. All ramps are parallel in type with auxiliary lanes beginning/ending at the ramp gores to improve on the operations of the merging and diverging segments.

The University Drive interchange flyovers are proposed to be removed and reconstructed adjacent to the existing flyovers to accommodate the median widening needed for the transit envelope and mainline improvements to the outside. Even with reconstruction of the flyovers, the elevated reversible lanes are required to pass over the University Drive flyovers at a fourth level. As part of the Master Design Plan development, the feasibility of salvaging one or both of the flyovers will be fully evaluated.

1.2.3 Reversible Lanes

The reversible lanes will be located on an elevated structure within the existing I-595 median. The reversible lanes will be constructed one level higher than the mainline, with the exception of where the reversible lanes go to the fourth level to avoid the University Drive flyovers and the locations where the transit enters and exits the median. The proposed reversible lane structure will be 59 feet wide and will have three 12-foot travel lanes and a 10-foot paved shoulder on each side. It is intended that the reversible lane system flow west-to-east during the morning peak period and from east-to-west during the evening peak period, removing a portion of the long distance through traffic from the general purpose lanes.

The third lane on the proposed elevated reversible lane structure provides an opportunity for a direct link between I-75, the Florida's Turnpike, and I-95. In addition, the direct connection provides additional capacity within the corridor with a third reversible lane while removing traffic from the general purpose lanes.

1.2.4 Reversible Lane Exchanges

Access and egress to and from the reversible lanes will be limited to four exchange points. The western access/egress point is proposed between the SW 136th Avenue and Flamingo Road interchanges, 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 mainline and Florida's Turnpike mainline medians will be widened to accommodate the reversible lane exchanges. Two inside auxiliary lanes will be developed for access into the reversible lane system. The auxiliary lanes will be separated from the I-595 mainline by a 4-foot buffer area. Overhead Dynamic Message Signs (DMS) will guide motorists into or away from the auxiliary lanes leading to the reversible lanes, depending on the time of day. Opposing traffic will be prohibited from entering the reversible 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 may also be used to prohibit motorists from entering or exiting the reversible lanes in the wrong direction. Barrier wall will be installed along the I-595 mainline to eliminate clear zone violations in the reversible lane exchange area. The two lanes will then increase in grade to second level on MSE wall. Once a vertical clearance of 16.5 feet is attained, the reversible lanes change to structure and converge with the additional lane providing a direct connection to/from Florida's Turnpike or to/from I-75.

1.2.5 Florida's Turnpike Mainline

The Florida's Turnpike mainline must be realigned from north of Griffin Road to the south abutment of the Florida's 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 from 26 feet to 81.5 feet in these two areas to allow for the reversible lane exchange areas in the median. In addition, Florida's Turnpike northbound will be widened to the outside to allow for the extra laneage from the proposed WB-NB on-ramp. Florida's Turnpike and FDOT D4 are currently coordinating the northbound project design in conjunction with the proposed I-595 improvements.

1.2.6 Florida's Turnpike Interchange

A new westbound to northbound (WB-NB) slip ramp will be added in the northeast quadrant of the interchange. The addition of this ramp removes WB-NB traffic from the short weaving section where eastbound and westbound I-595 traffic converges, then diverges to Florida's Turnpike, northbound and southbound. Barrier walls will be placed within the existing weave section to prohibit vehicles from any unnecessary weaving movements. The eastbound/westbound I-595 bridge to Florida's Turnpike southbound 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 eastbound I-595 and westbound bridge to the southbound Florida's Turnpike. The two existing northbound 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 Florida's Turnpike ramp is proposed to be on structure and at a larger radius than the existing ramp. The interchange improvements have been analyzed for construction and project phasing to ensure that the interchange is constructed in a logical manner.

1.2.7 Transit Facilities

The Master Plan LPA recommended development of a transit element within the I-595 corridor. The transit concept incorporated into the study corridor was from the LPA that emerged from the *Central Broward East-West Transit Alternatives Analysis (CBE-WTAA)*, a separate investigation

that recommended construction of a light rail transit system within the I-595 right of way. On April 14, 2005, the Broward County MPO endorsed the I-595 corridor as the preferred location for the transit alignment, and selected light rail transit (LRT) as the preferred transit mode.

In response to the potential transit needs, the design alternatives prepared for the I-595 PD&E Study have incorporated a transit envelope within the I-595 corridor (between SW 136th Avenue and SR 7) suitable for future implementation of an LRT system, with the understanding that the Federal Transit Authority (FTA) Preliminary Engineering phase for the CBE-WTAA will evaluate the transit project's location and impacts in more detail. The proposed envelope for the transit corridor is located in the I-595 median under the elevated reversible lane structure. The reversible lane structure will be raised from the second to third level to allow the transit to enter/exit the median at level two east of Flamingo Road and west of University Drive. The transit line will then be lowered to run along the same profile as the I-595 mainline. It is anticipated that the transit line will enter and exit the median from the south side of I-595 between SW 136th Avenue and Hiatus Road, and in the vicinity of University Drive. However, the final transit alignment and station locations will be developed in subsequent phases of the CBE-WTAA. The I-595 Corridor Management Team will meet with CBE-WTAA representatives on a regular basis to ensure accommodation of key transit design components, including median geometry and transit entry/exit points, structural depth requirements, and station locations.

1.2.8 SR 84

Currently, SR 84 is a rural four-lane facility (two lanes in each direction) located along the north and south sides of I-595 and designed for a 50 mph speed. Limited right of way, proposed mainline auxiliary lanes, realigned ramps, braiding of ramps, proposed bicycle/pedestrian facility and potential impacts North New River Canal make maintaining the rural design criteria impractical. It is proposed that SR 84 be changed to a suburban four-lane facility (two 12-foot lanes in each direction), with Type F curb and gutter on the outside and a 4-foot paved shoulder on the inside (8-foot overall width). The curb and gutter is necessary to contain roadway drainage within the 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. Guardrail is proposed along the curb and gutter to protect the canal drop off hazard in the WB direction. Additional right of way is required along the north side of WB SR 84 for much of the segment. Meetings were held with SFWMD regarding this issue, and the resulting project commitments to minimize impacts to the North New River Canal are described in Section 1.1.4.2.

SR 84 is proposed to maintain its current elevations in order to maintain access to existing driveway/access points wherever possible. It is also to be located on the outside of the I-595 mainline ramps and bypass ramps in order to maintain a continuous 4-foot undesignated bicycle lane along the outside, sidewalk, and access to adjacent parcels. One exception where SR 84 cannot be maintained on the outside occurs in the WB direction between Pine Island Road and Nob Hill Road. The reason for this is 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 WB SR 84 will require reconstruction of the intersections at SW 136th 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 is proposed to be extended through the Florida's Turnpike and SR 7 interchanges, and a continuous connection will be made to eliminate local traffic having to enter onto the I-595 mainline.

1.2.9 Sewell Lock Park

Sewell Lock Park is a historic property located along westbound SR 84 west of the Davie Road interchange. The original layout for the braided ramps proposed between Davie Road and University Drive would have resulted in impacts to Sewell Lock Park. Initial efforts shifted the

project to the south in an effort to avoid the park. However, in doing so, a significant impact to the FP&L substation located on the opposite side of the corridor (along the eastbound SR 84 lanes) resulted. Therefore, the braided ramp configuration was repositioned farther to the west, eliminating the most severe impacts to the property. SR 84 also was repositioned slightly to the south. When combined with design exceptions that will narrow lanes the lanes on eastbound SR 84 to 11 feet and reduce the sidewalk to 6 feet in the immediate vicinity of the substation, permanent impacts to both the park and the substation can be avoided.

1.2.10 Pedestrian / Bicycle Facilities

The I-595 corridor has been designated by Broward County to be a major component in the Broward County Greenways system. A bi-directional mixed use path is currently being designed and constructed by Broward County and will be located on the north side of the North New River Canal from the western I-595 PD&E Study project limits to University Drive. The recreational path leaves the project corridor between University Drive and Davie Road, re-enters the corridor at Davie Road, and runs along the south side of the North New River Canal to SR 7. As part of the *Programmatic Section* 4(f) *Evaluation*, it was determined that impacts to the Greenway are unavoidable. Therefore, the portion of the Greenway between Davie Road and SR 7 will be relocated by FDOT as part of the I-595 improvements.

In addition to the Greenway, a 12-foot shared use, bi-directional path is proposed along the outside of EB SR 84 between SW 136th Avenue and University Drive. The path will be reduced to 6 feet between University Drive and Davie Road to avoid substantial right of way impacts to the adjacent FP&L substation. Undesignated 4-foot bicycle lanes are also proposed along SR 84 in both directions to accommodate those riders that currently use SR 84. The bicycle lanes will be undesignated because of proximity to the interstate ramps and high speed traffic.

1.2.11 Pond Apple Slough Natural Area

The proposed widening of the existing I-595 causeway structures over Pond Apple Slough Natural Area between SR 7 and I-95 will allow for the extension of the C-D road system to the east, terminating at I-95. Avoidance of wetland impacts to the fullest extent possible has been carefully considered while still widening the corridor to accommodate the additional lanes necessary to satisfactorily handle future traffic demand. The least invasive solution is to widen the existing structures to the inside as much as physically possible to avoid excessive widening to the outside into the environmentally sensitive areas of the Pond Apple Slough Natural Area. All developed alternatives have the same optimum design for this section of the project (construction methodology, proposed layout, and access road). During the final design phase, the use of drainage structures, such as box culverts, will be evaluated to minimize or avoid haul road impacts to natural flow areas in the Pond Apple Slough Natural Area.

1.2.12 Right of Way

FDOT will acquire all right of way needed for the project. Acquisition of additional right of way has been restricted to very narrow confines. As indicated in previous sections, during the PD&E process every effort was made to minimize impacts through alternative designs and design criteria variations and exceptions in order to protect the Section 4(f) lands and the pristine waters and sensitive environmental features adjacent to the corridor. A majority of the right of way requirements is due to the need for offsite wet detention ponds to attenuate the runoff from the significant addition of impervious area. It is anticipated that the drainage impacts, and subsequently right of way needs and costs, will be substantially reduced through the negotiation of shared use agreements with several golf courses within the corridor. Refer to Section 1.3.2.3 for further information.

Right of way requirements will be refined as part of the Master Design Plan development and finalized as part of the design phase. Refer to Sections 3.5 and 15.0 for further information.

1.2.13 Utilities / Railroads

The existing utilities along the corridor include Bellsouth (telephone and fiber optic), MCI/Sprint (fiber optic cable), FP&L (electric), City of Hollywood (water and sewer), and City of Fort Lauderdale (water and sewer). An FP&L company substation is located in the southwest quadrant of the I-595/Davie Road interchange. West of Florida's Turnpike, an abandoned Enron/Sunniland pipeline runs parallel to I-595 on the north side of SR 84. A water/wastewater treatment plant is located on Fort Lauderdale-Hollywood International Airport property in the southwest quadrant of the I-595/US 1 Interchange. There is also a Florida Gas Transmission gas pipeline passing through the I-595/Florida's Turnpike interchange. Existing utility owners and contact information, as well as the utility coordination process is provided in Sections 8.6.3 and 16.1.

In locations where design modifications, or design exceptions and/or variations cannot avoid utility impacts and/or relocations, the need for utility relocations will be assessed during the Master Design Plan development and finalized during the Final Design phase of each project segment.

Most utility companies have technologies to alter facilities without inconvenience to the customers. However, to the maximum extent feasible, mitigation measures for utility disruptions will include the following measures:

- Evaluating utility impacts on a corridor-wide basis to provide for a consistent and cost and time efficient relocation plan for each affected utility
- Minimizing or eliminating impact to major existing utilities
- Maintaining utility connections in temporary locations
- Minimizing the time without service
- Installing alternate or new service before disconnecting the existing service
- Allowing service disruption only during periods of non-usage or minimum usage.

The South Florida Rail Corridor (SFRC) is located at the eastern terminus of the project. Currently, the I-595 ramps to I-95 are elevated over the rail, and no at-grade I-595 roadway elements are proposed that would interfere with the rail corridor. Prior to construction, FDOT will coordinate with the SFRC in order to address construction operations and monitoring requirements over the rail corridor.

1.2.14 Work Breakdown Structure / Project Segments

As a continuation of the PD&E Study, the corridor has been divided and prioritized into 18 independent project segments to maximize bid competition, minimize market (labor and material) impacts, and expedite the project schedule.

The segment limits were defined considering factors such as minimizing the influence of interchange, intersection, and weave operations (i.e.- independent segments), anticipated change of grades at the interface of segments, mainline access and egress to/from SR 84, and environmental impacts.

The segments have been prioritized in accordance with the areas of highest operational improvement need. The Turnpike interchange improvements (Segments 1 and 2 on the I-595 corridor, and TPK C, D, and E on the Turnpike corridor) were determined to be the highest priority due to the high traffic volumes and insufficient existing weaving sections. FDOT D4 will

administer the design and construction contracts for Segments 1 and 2, and will provide the line and grade geometrics for TPK C, D and E as part of the Master Design Plan. Florida's Turnpike Enterprise will administer the design and construction contracts for TPK C, D and E.

The second priority is the westbound and eastbound I-595 improvements from Davie Road to the western project limit (Segments 3-8). Upon the completion of the improvements from the Turnpike to the west, the reversible lanes can then be constructed (Segments 9 and 10). Segment I-75 A will not be further evaluated as part of the I-595 corridor improvements, but will be included as part of FDOT D4's upcoming *I-75 PD&E Study* to ensure compatibility with the I-75 corridor improvements.

The lowest priority, Segments 11 and 12, have the lowest traffic demand along the corridor, as well as the largest environmental impacts.

The current sequencing and segment limits will be further evaluated and refined as part of the Master Design Plan development. It is currently anticipated that all the segments will be designed, and a majority constructed as independent contracts, but consideration will be given to alternative delivery methods (e.g.- design-build, public-private partnerships, etc.) and/or bundling of project segments upon further evaluation of the maintenance of traffic, construction staging, contract value, and funding availability and timing. As part of this evaluation, consideration will be given to expediting the construction of the reversible lanes in an effort to accelerate congestion relief for the general purpose lanes.

The 15 I-595 corridor projects, plus the 3 Turnpike projects to be constructed within the I-595 corridor project limits are as follows, in order of construction priority (refer to the project map in Exhibit A of the Appendices for further description and proximity information):

SEGMENT	FM NO.	PROJECT LIMITS
1 (TPK A)	409353-1	West of Davie Rd. to SR 7 (SR 7 / TPK Interchange) (WB)
2 (TPK B)	413271-1	East of University Dr. to East of Turnpike (TPK Interchange) (EB)
3	413272-1	East of University Dr. to West of Davie Rd. (WB)
4	413058-1	East of Nob Hill Rd. to East of University Dr. (WB)
-	421854-1	Advanced ROW Acquisition
5	419339-1	East of Pine Island Rd. to East of University Dr. (EB)
6	413270-1	West of SW 136 th Ave. to East of Nob Hill Rd. (WB)
7	413057-1	West of Nob Hill Rd. to East of Pine Island Rd. (EB)
8	413274-1	West of SW 136 th Ave. to West of Nob Hill Rd. (EB)
9	413273-1	West of SW 136 th Ave. to East of SR 7 (Reversible Lanes)
10	419341-1	Direct Connect (East) from Rev. Lanes to Turnpike Median
10A	TBD	Interim Improvements to Accommodate Rev. Lanes (Segs. 11&12)
11A	409354-3	Environmental Mitigation (Segs. 11&12)
11	409354-2	SR 7 to I-95 Interchange (WB)
12	413277-1	East of Turnpike to I-95 Interchange (EB)
TPK C*	419336-1	Turnpike from I-595 to Griffin Rd. and SB On-Ramp (SB)
TPK D*	419337-1	Turnpike SB Flyover Ramp to I-595
TPK E*	419338-1	Turnpike Auxiliary Lanes from Griffin Rd. to I-595 (NB)
I-75 A**	419342-1	Direct Connect (West) from Reversible Lanes to I-75 Median

Notes:

* TPK C, D & E segments to be designed and constructed under the authority of Florida's Turnpike Enterprise

** I-75 A segment to be further evaluated as part of the I-75 PD&E Study

The project limits and sequencing of the projects will be further evaluated as part of the Master Design Plan analysis described in Section 3.3.

1.3 FORMAL AGREEMENTS

1.3.1 Formal Agreements in Place

1.3.1.1 FHWA Oversight

The I-595 corridor project is on the Interstate system and thus is subject to full FHWA oversight in accordance with the agreement between FHWA and FDOT.

1.3.1.2 FDOT D4 / FTE – Turnpike Interchange

As the proposed improvements required at the I-595 / Florida's Turnpike interchange overlap between the jurisdiction of FDOT D4 and Florida's Turnpike Enterprise (FTE), funding and oversight authority for the proposed improvements will be provided by different sources. An agreement was established between FDOT D4 and FTE, detailing the responsibilities of each party. The agreement provides for the following:

- FTE will widen the Turnpike bridge over I-595 and the Turnpike mainline, south of I-595, from 6 to 8 lanes. The Florida's Turnpike mainline, north of I-595, will be widened from 6 to 10 lanes and be designed to accommodate a future direct connection to I-595. As part of the mainline widening, FTE is coordinating with Florida Gas Transmission to relocate a 36 inch gas main to an offset 25 feet off the east right of way line.
- FDOT D4 will construct a new westbound I-595 to northbound Turnpike ramp, eliminating the current weaving section on the I-595 off-ramp.
- FDOT D4 will reconstruct the eastbound I-595 to northbound Turnpike ramp, on structure and at a larger radius.
- FTE will reconstruct the I-595 to southbound Turnpike on-ramp, on structure, and reconstruct the southbound Turnpike off-ramp and bypass lane to Griffin Road.
- FTE will reconstruct the southbound Turnpike to I-595 ramp to provide sufficient horizontal clearance for the proposed I-595 to southbound Turnpike ramp and the proposed southbound Florida's Turnpike off-ramp to Griffin Road.
- FTE will construct a new exclusive northbound Turnpike to eastbound I-595 ramp that is physically separated from the westbound movement, eliminating the current weaving section on the Turnpike off-ramp.
- FTE and FDOT D4 will continue to coordinate the design, funding and contract delivery method for the reversible lanes direct connection between the I-595 and Florida's Turnpike medians, and will establish the jurisdictional responsibilities for the funding, design, construction and operation of the system.

1.3.1.3 Project Commitments

The series of project commitments established during the I-595 study process between FHWA, FDOT D4, and various agencies having jurisdiction over facilities or resources adjacent to the I-595 corridor are described in Section 1.1.4.

1.3.2 Future Agreements

1.3.2.1 FDOT D4 / FTE MOU

FDOT D4 and Florida's Turnpike Enterprise (FTE) are to establish a Memorandum of Understanding (MOU) in regard to the following:

- Funding, sequencing and finalized scope of work for the I-595 and Turnpike improvement projects in the vicinity of the I-595 / Turnpike Interchange.
- Funding, design, construction, maintenance, and operations authority for the reversible lanes system.

1.3.2.2 I-595 / CBE-WTAA MOU

The I-595 and *Central Broward East-West Transit Alternatives Analysis (CBE-WTAA)* project teams are to establish an MOU for the accommodation of the transit alignment within the I-595 corridor to address the following transit design components and criteria:

- Transit envelope requirements for guideway, station and access facilities
- Anticipated station locations
- Median ingress and egress locations and requirements
- Preferred alignment alternatives and I-595 mainline crossings
- Vertical depth, span and pier configuration requirements for transit structures.

1.3.2.3 Shared Use Agreements

FDOT D4 is currently evaluating the feasibility of acquiring permanent drainage rights in exchange for compensation for renovation improvements with the following golf courses along the I-595 corridor:

- Lago Mar Golf Course north of I-595 east of 136th Avenue
- Jacaranda Country Club north of I-595 east of Nob Hill Road
- Pine Island Ridge Golf Course south of I-595 east of Nob Hill
- Arrowhead Country Club south of I-595 east of Pine Island Road.

These shared use agreements will be mutually beneficial to all parties, and will result in substantial cost and schedule reductions for the I-595 projects due to a large reduction in drainage right of way requirements.

1.3.2.4 Wetland Restoration Agreement

An agreement may be established with the Broward County Parks and Recreation Department for partial on-site wetland restoration of the I-595 improvement wetland impacts, should the Parks Department elect to purchase property adjacent to I-595 and the Pond Apple Slough Natural Area for the County Parks Program.

1.3.2.5 Utility Agreements

It is anticipated that Joint Participation Agreements (JPA's) will be required for various utility relocation requirements within the corridor. These agreements will be developed as utility conflicts are identified in the Final Design phase of the individual project segments.

1.3.2.6 FDOT D4 / BCT Maintenance Agreement

It is anticipated that FDOT D4 and Broward County Transit (BCT) will enter into a maintenance agreement for the transit facilities to be located within the I-595 corridor.

1.3.2.7 Landscaping / Lighting Agreements

It is anticipated that landscaping and lighting agreements will be established with Broward County and various municipalities for any required cross-road improvements within the project limits.

1.3.3 Management of Agreements

The management of the agreements will be the responsibility of all agreement parties, unless specified otherwise within the agreements. The Corridor Management Team (CMT) will be responsible for the management of the agreements on behalf of FDOT D4 and I-595 corridor interests. All agreements will be enforced through subsequent phases of the project where applicable, and specific management responsibilities will be addressed at the Hand-off Meetings between the various project phases.

2.0 PROJECT ORGANIZATIONAL STRUCTURE, ROLES, RESPONSIBILITIES, AND STAFFING

2.1 CORRIDOR MANAGEMENT TEAM (CMT)

The project will be managed locally by the I-595 Corridor Management Team (CMT), comprised of integrated FDOT D4 and consultant staff. The CMT will have access to the resources of FDOT D4, FDOT Central Office and the FHWA Florida Division Office as required. The CMT will include the following staff:

<u>Design</u>

- FDOT Corridor Design Manager
- FDOT Design Project Managers
- Corridor Design Consultant (CDC) Project Manager
- CDC Senior Support Staff

Construction

- FDOT Corridor Construction Manager
- CEI Consultant (CCEI) Senior Project Engineers
- CEI FDOT and Consultant Project Engineers

Refer to Exhibit D of the Appendices for the Corridor Management organization chart.

2.1.1 CMT Roles and Responsibilities

The CMT will oversee all administrative and technical activities associated with public involvement, agency coordination/agreements and partnering, as well as the design, right of way, utility relocation, and construction phases of the individual project segments. The roles and responsibilities of the CMT members are described below.

2.1.1.1 Design

Corridor Design Manager (FDOT)

The Corridor Design Manager will function as the FDOT Senior Project Manager and FHWA point of contact through the completion of the design phases of the corridor project segments. The Corridor Design Manager will provide direct oversight of the FDOT Design Project Managers, and will provide administrative and technical management of the Corridor Design Consultant (CDC) contract. During the design phases, the Corridor Design Manager will be the decision making authority on the CMT, will be the liaison to the Executive Oversight Committee (EOC), and will be the lead FDOT representative for all external communication, partnering, coordination and agreements.

Design Project Managers (FDOT)

The corridor final design effort will be managed by several FDOT Design Project Managers, with each manager assigned to specific project segments. Design Project Managers will be responsible for development of the project scope and work plan for their respective corridor project segments. They will provide the day-to-day administrative and technical management of the Segment Design Consultant (SDC) contracts, and will be responsible for assuring the construction documents are completed on time, within budget, and in accordance with FDOT policies and procedures. They will also be responsible for the internal and external coordination and progress reporting for the project; invoicing and payment review and documentation; coordination of all design submittal reviews; coordination and resolution of technical issues; and the coordination, negotiation and execution of any required contract amendments.

Corridor Design Consultant (CDC)

Functioning as an extension of FDOT D4 staff, the CDC will be responsible for the following:

- Developing the Master Design Plan report and plan components as described in Section 3.3
- Developing and monthly updating of the corridor master project schedule in collaboration with the FDOT D4 Scheduling Office
- Maintaining updated construction cost estimates for the project segments prior to Segment Design Consultant (SDC) selection
- Providing full corridor utility management and coordination
- Providing full corridor drainage design management and coordination
- Providing oversight of all permitting activities and full corridor permit management and coordination, including preparing and acquiring the corridor conceptual Environmental Resource Permits (ERP's)
- Developing the corridor right of way Genesis map, and preparing parcel sketches and legal descriptions for the corridor right of way needs
- Developing the corridor Title Search Map and reviewing the Title Search Report
- Establishing and maintaining an electronic project filing system utilizing FDOT's Electronic Document Management System (EDMS) format
- Developing and maintaining the project web site
- Assisting FDOT D4 in the preparation of design segment scope and criteria packages for the procurement of the individual SDC's
- Assisting FDOT D4 in the development and implementation of a community involvement public information program, and providing support for all public involvement activities
- Assisting FDOT D4 in project coordination with the CBE-WTAA, FHWA, state and local agencies, and other stakeholders, and developing/incorporating final recommendations into the corridor design
- Attending and documenting the proceedings of project coordination, field review, technical, workshop, public involvement, progress and hand-off meetings
- Assisting FDOT D4 in the preparation and updating of the PMP and Financial Plan
- Assisting FDOT D4 with environmental studies and re-evaluation documentation as required*
- Assisting FDOT D4 Traffic Management and Operations Group in the development, accommodation, and coordination of proposed Intelligent Transportation Systems (ITS) within the I-595 corridor*
- Reviewing Development of Regional Impact (DRI) and sub-DRI plans that may arise which affect the State Highway System due to access, traffic and right of way need impacts*
- Reviewing SDC cost estimate updates for the individual project segments, and assisting with cost validation and risk analysis procedures as required*
- Providing independent peer / sufficiency reviews prior to SDC phase submittals as directed by FDOT D4*
- Providing phase submittal plans reviews as directed by FDOT D4*
- Providing support to FDOT D4 for any required value engineering analysis and studies for the individual project segments*
- Providing a three-dimensional CADD model and/or a scale model of the existing and proposed corridor features for public information coordination activities*
- Establishing secondary horizontal and vertical survey control points and miscellaneous survey services as required*
- Providing miscellaneous design support, design analysis, plans preparation and management support as directed by FDOT D4*.

* CDC Optional Services

2.1.1.2 Construction

Corridor Construction Manager (FDOT)

As the counterpart to the Corridor Design Manager, the Corridor Construction Manager will function as the FDOT Project Manager and FHWA point of contact for the construction phases of the corridor project segments. The Corridor Construction Manager will be responsible for direct supervision of the CEI Consultant (CCEI) Senior Project Engineers, and will provide the administrative management of the CCEI contracts, with emphasis on quality, performance, and adherence to cost and schedule requirements. During the construction phases, the Corridor Construction Manager will be the decision making authority on the CMT, will be the liaison to the Executive Oversight Committee (EOC), and will be the lead FDOT representative for all external communication, partnering, coordination and agreements.

CEI Consultant Senior Project Engineers (CCEI's)

It is anticipated that FDOT D4 will procure two CCEI firms to manage and administer the construction contracts for the individual project segments. Each CEI firm shall have a project manager to function as the Senior Project Engineer for FDOT for the construction contract administration and oversight of the segment construction contracts assigned to their respective firms. The Senior Project Engineers will also provide the administrative and technical management of their respective CEI contracts, and will be responsible for the internal and external coordination and progress reporting for the project segments, including coordination with the FDOT Design Project Manager and Engineer of Record (Segment Design Consultant) for timely shop drawing reviews and Requests for Information (RFI) response. The Senior Project Engineers will also be responsible for validating the Contractor's Equal Employment Opportunity (EEO), Disadvantaged Business Enterprise (DBE) and On the Job Training (OJT) compliance for the project; claims negotiation and processing of any supplemental agreements; and resolution of outstanding contractual issues and other areas as deemed necessary by the Corridor Construction Manager.

CEI Project Engineers (FDOT and CCEI's)

It is anticipated that both FDOT D4 and CCEI staff will serve as Project Engineers for the day-today administration of the construction contracts for the individual project segments. The Project Engineers will be responsible for a Daily Report of Construction and for ensuring the segment contracts are constructed on time, within budget, with the specified quality, and in reasonable conformance with the contract documents. They will also be responsible for ensuring the Contractor's compliance with environmental permits and commitments, invoicing and payment documentation, coordination of construction-related conflict issues and claims requests, and validation of the Contractor's compliance with the sampling and testing requirements of the Contractor's Quality Control Plan.

2.1.2 Project Office Space/Locations/IT and Communications

The project will be managed from the FDOT D4 headquarters, which is within 20 minutes of the project site. The CDC office is located in close proximity to FDOT D4. The CDC will have virtual private network (VPN) access to the FDOT D4 intranet to ensure seamless and efficient IT communications and project control. For optimal communication, the project web site will enable both internal (project delivery team) and external (public) access.

The CCEI office locations have yet to be determined, but will be adequately equipped to ensure effective communication with the FDOT D4 headquarters and the D4 Ft. Lauderdale Operations Center.

2.2 EXECUTIVE OVERSIGHT COMMITTEE (EOC)

The Executive Oversight Committee (EOC) has been established to provide direction on policy related issues and act as the final appeal authority for conflict resolution on the project. The EOC members include:

- FHWA Area Engineer
- FDOT D4 Secretary
- FDOT D4 Director of Transportation Development
- FDOT D4 Director of Operations.

2.3 FHWA PARTICIPATION

2.3.1 FHWA Roles and Responsibilities

The FHWA project responsibilities will be administered through the FHWA Area Engineer, who will serve on the EOC and be the FHWA point of contact for the CMT. The FHWA Area Engineer will be responsible for project actions and approvals, in coordination with the FHWA Florida Division and Headquarters staff. Each element of the project will be managed as full oversight by FHWA. The FHWA Area Engineer or her designee will:

- Participate as a member of the EOC.
- Participate in reviews and coordinate FHWA reviews, concurrence and approvals with the Division and Headquarters staff. Reviews are to include, but may not be limited to:
 - Project Management Plan
 - Initial Financial Plan and Annual Updates
 - Professional services and bid advertisements and supporting documents
 - Consultant and contractor contracts, supplemental agreements, and contract closeouts
 - Typical Section Package
 - Pavement Design Package
 - Design Exceptions
 - Bridge Development Report
 - Design plans phase reviews
 - Special Provisions
 - Plans, Specifications and Estimate (PS&E) and revisions
 - Construction inspections and Final Acceptance.
- Keep current on project prosecution, progress, and other issues.
- Provide briefings for, and otherwise coordinate with FHWA Division Administrators, the Major Projects Team, and other program offices as necessary.
- Be apprised of, and assist with any changes affecting the NEPA approval and assure mitigation commitments are implemented.
- Coordinate between the CMT, EOC, FHWA and other Federal agencies as necessary for resolution of elevated project issues.

2.3.2 FHWA Approval and Process Participation

In addition to the anticipated FHWA project-specific actions and reviews, concurrence and approvals identified in Section 2.3.1, a comprehensive FHWA Responsibilities Matrix has been included as Exhibit E in the Appendices.

2.3.3 FHWA Staffing

The FHWA Area Engineer may draw from additional FHWA resources as deemed necessary to support the project. **Refer to Exhibit F of the Appendices for the FHWA Florida Division organization chart.**

2.4 FDOT PARTICIPATION

2.4.1 FDOT Roles and Responsibilities

The roles and responsibilities of FDOT D4 as the project administrator have been described in Sections 2.1.1 and 2.2.

The FDOT Central Office will be consulted as required and will be involved in the oversight and review process of the project in accordance with the *FDOT Plans Preparation Manual (PPM)* and the *FDOT Construction Projects Administration Manual (CPAM)*, and will allocate and administer the funding for the corridor improvements.

Florida's Turnpike Enterprise (FTE) will partner with FDOT D4 and will be responsible for the funding, design and construction of on-going Turnpike projects (i.e.- TPK C, D and E; projects 419336-1, 419332-1, and 419338-1, respectively) within the I-595 corridor. FTE and FDOT D4 will also collaborate on the funding, design, construction, operations and maintenance of the reversible lanes projects (Segments 9 and 10), and will establish jurisdictional authority through formal agreement. Refer to Sections 1.3.1.2 and 1.3.2.1 for further information.

2.4.2 FDOT Staffing

FDOT D4 will utilize both in-house and CDC staff for the management of the project. FDOT D4 and CDC support staff will be fully integrated for multi-disciplined technical and functional support of the project. Refer to Exhibits G and H of the Appendices for the FDOT D4 and CDC organization charts.

Staffing requirements for the FDOT Central Office and FTE project involvement will be determined by the respective agencies.

2.5 OTHER STAKEHOLDER ENTITIES

It is important that any publicly-funded transportation project have the support of the public agencies charged with reviewing, approving, constructing, and/or financing it. Due to the extensive coordination effort with state and local government agencies and organizations during the I-595 corridor study phase, the Master Plan Locally Approved Alternative (LPA) was included in the Broward County MPO *2030 Long-Range Transportation Plan*, and numerous project commitments and concept modifications were developed as a result of agency and public input and recommendations (refer to Section 1.1.4).

During the upcoming design and construction phases, FDOT D4 will continue to coordinate with, and solicit input from the following stakeholder entities to:

- keep stakeholders informed on the status of the project and key coordination issues;
- ensure widespread acceptance of the project;
- evaluate any modifications in the planned short and long term local and regional transportation network that could potentially influence the I-595 corridor;
- establish and execute the required utility, partnering and right of way agreements; and
- ensure project commitments are achieved and the required project permits are obtained expeditiously.

Regional

- South Florida Regional Planning Council
- South Florida Regional Transit Authority
- South Florida Regional ITS Coalition

County

- Broward County Public Works Department
- Broward County Traffic Engineering Division
- Broward County Traffic Management Center (TMC)
- Broward County Parks and Recreation Department
- Broward County Transit
- Broward County Metropolitan Planning Organization
- Broward County Technical Coordinating Committee
- Broward County Community Involvement Roundtable
- Broward County Aviation Department
- Broward County Emergency Management Office
- Broward County Fire Rescue
- Broward County Commissioners (Districts 1-9)
- Port Everglades

Municipalities

- City of Ft. Lauderdale
- Town of Davie
- City of Plantation
- City of Sunrise
- City of Weston
- Unincorporated Broward County

Utilities

• Refer to the utilities listing provided in Section 16.1.

Permitting Agencies

- Broward County Environmental Protection Department (BCEPD)
- Florida Department of Environmental Protection (FDEP)
- South Florida Water Management District (SFWMD)
- U.S. Army Corps of Engineers (ACOE)
- Federal Aviation Administration (FAA)
- United States Coast Guard (USCG)
- Central Broward Water Control District (CBWCD)
- Old Plantation Water Control District (OPWCD)
- Plantation Acres Improvement District (PAID)
- Tindall Hammock Irrigation & Soil Conservation District (THISCD)

Homeowners Associations

- The Southwest Coalition of Homeowners Associations
- Broadview Estates
- Hawks Landing
- Everglades Lakes

Others

- Lago Mar Golf Course
- Jacaranda Country Club
- Pine Island Ridge Golf Course
- Arrowhead Country Club
- Freeway Incident Management Team
- I-595 Road Rangers
- Florida Highway Patrol Troop L
- Local law enforcement and fire rescue.

2.5.1 Staffing Impacts

The I-595 project should pose no significant impact to the staffing of other stakeholder organizations. The CMT will work closely with the regulatory and reviewing agencies in establishing review schedule timelines well in advance of all I-595 corridor submittals.

2.6 RULES OF OPERATION

The project decisions rendered by the CMT will be on a consensus basis. If consensus cannot be reached by the CMT, issue resolution will be elevated as follows:

- The Corridor Design and/or Construction Manager will consult with FDOT design and construction advisory staff, which includes the following:
 - D4 Design Engineer
 - D4 Consultant Management Engineer
 - D4 Construction Engineer
 - o D4 Maintenance Engineer
 - Ft. Lauderdale Operations Engineer.
- Issues that cannot be resolved at the advisory staff level will be elevated to the EOC.
- Policy issues that cannot be resolved at the EOC level will be elevated to the FHWA Division Office and/or Headquarters for resolution.

The decisions rendered by the CMT will not supersede current FHWA and FDOT policies and procedures. The CMT will be proactive with regard to scheduling time for resolution of issues to minimize project schedule impacts.

2.7 DISPUTES RESOLUTION AND ELEVATION PROCEDURES

All issues and disputes will be resolved at the appropriate management level, typically initiated at the Design Project Manager / CEI Project Engineer level. If the dispute cannot be resolved at the initial level, the issue will be elevated to the next management level within the CMT. If further elevation is required, the resolution process will follow the procedure outlined in Section 2.6. The Design Project Manager / CEI Project Engineer will document all discussions and proceedings, including the final resolution of the dispute.

For construction contracts over \$15 million, FDOT will also incorporate a special provision in the contracts for a Dispute Review Board (DRB) to assist in resolving construction claim disputes. This is further described in Section 5.13.2.2.

2.8 LEGAL AND AUDIT SERVICES

FHWA and FDOT will coordinate and/or administer all required legal and audit services for the project.

3.0 PROJECT PHASES

3.1 OVERVIEW

The ultimate goal of the CMT is the timely and cost-effective delivery of the corridor improvements in accordance with the established phasing plan for the 14 project segments to be completed as part of the project. The overall project management strategy of the CMT will provide for the phased and integrated design and construction of the project segments, while maintaining the integrity and consistency of the corridor. This will be accomplished through the active participation of FDOT D4 and CDC management, design, construction, maintenance and operations staff throughout all phases of the project.

The following major management milestones have been identified for the project:

Corridor-wide:

- Complete Master Design Plan (MDP)
- Obtain Corridor Conceptual Environmental Resource Permits (ERP's)
- Complete and obtain approval of project re-evaluations to update previous environmental documentation.

Individual Project Segments:

- Contract execution for the Segment Design Consultants (SDC's)
- Right of way and utility clearance
- Secure all project permits
- Contract execution for the CEI Consultants (CCEI's)
- Complete contract documents package for construction letting
- Award of construction contract and notice to proceed
- Final Acceptance of construction
- Project closeout and transfer of authority to maintenance and operations.

Strategy, control, documentation and integration of the various management components to achieve these milestones on a timely and cost-effective basis are described in Sections 3.2 - 17.0.

Sections 3.2 - 3.6 describe the major phases of the project. All phase activities will be subject to full FHWA oversight. The implementation schedule for each of the phases will be independent for each project segment in accordance with the work breakdown structure and segment priorities as described under Section 1.2.14.

3.1.1 Hand-off Meetings

In order to provide for efficient information exchange and a smooth transition between the design and construction phases, Hand-off Meetings will be scheduled by the Design Project Managers after construction letting and prior to execution of each construction contract in accordance with the *D4 Production / Construction Hand-off Meeting Guidelines*. Meeting agenda items will include, but not be limited to:

- Right of way commitments, issues, and impending litigation
- Traffic Control Plan (TCP) specifics and factors associated with the design of the TCP
- Design related decisions and documentation
- Commitments, information, and/or agreements made with local municipalities and agencies
- Utility relocation agreements, adjustments, scheduling and potential conflicts
- Permit conditions and requirements
- Any special conditions associated with innovative contracting methods
• Contact list for key individuals involved in the design process.

A questionnaire will also be distributed to all attendees at the conclusion of the meeting to assist in improving the process and to determine if any additional information needs to be provided.

Similar Hand-off Meetings will be scheduled by the FDOT Design Project Managers between the Master Design Plan and Final Design phases to exchange key design information, enhance team partnering, and ensure the scope, goals and objectives of each project segment are fully comprehended by all parties.

3.2 PLANNING

The *I-595 PD&E Study* has been completed, and Location and Design Concept Approval (LDCA) from FHWA was received on June 29, 2006. Any required re-evaluation of previously approved environmental documentation will be monitored throughout the Master Design Plan and Final Design phases of the project, and will be completed in accordance with the *FDOT PD&E Manual*, Volume 1, Chapter 11 – Re-Evaluations.

3.3 MASTER DESIGN PLAN (MDP)

Prior to the advertisement of final design for the individual project segments, a Master Design Plan (MDP) is to be developed by the CDC for the various design components in sufficient detail to: ensure compliance with PD&E commitments; validate concept design, geometric feasibility, design compatibility, and phasing / project limits for the individual project segments; refine right of way requirements; and identify any required updates to previous environmental documentation. Elements to be completed as part of the MDP include:

- Validation of overall design concept and preparation of associated technical memoranda
- Refined horizontal and vertical geometry (line and grade)
- Cross-section templates at critical locations
- Refined design criteria
- Refined typical sections package
- Pavement design package
- Design exceptions / variations package
- Validation of segment project limits and phasing
- Validation of corridor permitting requirements
- Refined master project schedule
- Validation of noise barrier and retaining wall requirements and locations
- Construction cost estimate updates (LRE's)
- Bridge Development Reports (BDR's)
- Geotechnical Preliminary Roadway and BDR Reports
- Load and Resistance Factor design analysis (bridge widenings)
- Pond Siting Report
- Master Drainage Design Report
- Conceptual Environmental Resource Permit (ERP) documentation
- Master Traffic Control Plan
- Signing / Pavement Marking Master Plan
- Lighting Master Plan (as required)
- Composite utility drawings
- Refinement of right of way requirements
- Documentation of additional project commitments.

The objective of the MDP is to develop a comprehensive corridor plan that incorporates established project commitments, provides a sound geometric alignment and logical phasing plan, and defines right of way, utility and permitting requirements. This will enable the

establishment of a refined, detailed and consistent design scope of services for each of the project segments, with the ultimate goal of reducing project costs, providing corridor quality and continuity, and streamlining the design and construction phases of the project.

An iterative process will be utilized by the CMT in the concurrent evaluation of the various design components of the MDP. Team workshops and progress meetings will be held on a weekly basis during the concept validation stage to coordinate all evaluation efforts, and the CDC will provide all evaluation recommendations in writing (via technical memoranda) to FDOT D4 for review and consideration, which will include all options considered, the advantages and disadvantages of each option, and the recommended course of action. All MDP components will be reviewed and approved by the appropriate FDOT D4 CMT, advisory and functional area design and construction staff, and will be submitted to FHWA for approval as required.

3.3.1 Conceptual Environmental Resource Permits (ERP's)

In compliance with the permitting requirements of the South Florida Water Management District (SFWMD), it is anticipated that two conceptual Environmental Resource Permit (ERP's) packages will be developed for the corridor; one for project Segments 1-10 and one for Segments 11 and 12. This provides for a logical 'breakpoint' in the permitting of the project, with Segments 11 and 12 involving more environmental remediation and mitigation issues, thus allowing to streamline the design and permitting process for the funded segments. Monthly meetings will be held with SFWMD to discuss the project status and recommended course of action for permitting.

The conceptual ERP's are essential in expediting the project schedule in providing for:

- 'Locked in' permitting requirements and agreements for the corridor that ultimately streamlines the final design and permitting process for the individual project segments
- Permitting flexibility for the entire corridor by allowing for permit compliance on a corridorwide basis
- A legal basis for drainage right of way requirements early in the design process, which allows for expedition of the right of way acquisition process.

3.4 FINAL DESIGN

Utilizing scope and criteria components developed as part of the MDP, Segment Design Consultants (SDC's) will be procured for each of the 14 project segments by FDOT D4 in accordance with the policies and procedures described in Section 5.0. The SDC's will serve as the Engineer of Record (EOR) for the project segments and will be responsible for the preparation of plans, reports, specifications and estimates and all associated documentation in accordance with the consultant agreement, *FDOT Plans Preparation Manual (PPM)* and **design standards provided as Exhibit I of the Appendices** to enable the assembly of the complete contract documents package for construction advertisement. Plans phase reviews will be conducted by FDOT D4 at a minimum of four phases throughout the duration of final design; initial (50% complete), constructability (80% complete), final / biddability (95%), and production complete. Phase reviews are described in further detail under Section 4.6.

The Design Project Managers, with the support of the CDC as required, will be responsible for the day-to-day management of the SDC contracts and all final design phase work tasks and coordination (refer to Section 2.1.1.1 for their respective roles and responsibilities). In addition to plans, specifications and estimates, key project components to be completed during the final design phase include development and implementation of the Community Awareness Plan (CAP), joint project agreements, maintenance agreements, permits, right of way, railroad and utility clearances, and all associated inter-agency coordination.

The activities and certifications required to process the contract documents package for each design segment will be in accordance with the FDOT PPM, Volume I, Chapter 20 – Plans

Processing and Revisions and the *D4 Quality Control Plan*. Upon the SDC completion of postdesign services, a Certification of Completion will be prepared for execution by both the Design Project Manager and the SDC, effectively closing the SDC contract.

3.5 RIGHT OF WAY

It is anticipated that Segments 1, 3-8, 11, 11A and 12 will require additional right of way due to roadway improvements and drainage attenuation requirements. Right of way needs will be further refined by the CDC as part of the MDP development. Through the negotiation of shared use agreements with several golf courses adjacent to the corridor, it is anticipated that drainage impacts will be substantially reduced (refer to Section 1.3.2.3).

The Right of Way phase will be active concurrently with the MDP and Final Design phases for each applicable project segment. In collaboration with the CMT, the FDOT D4 Right of Way Office will provide the review and oversight of all right of way activities for the project, including map preparation, appraisals and acquisition. The FDOT D4 Survey Office will provide all required control surveys through existing D4 survey contracts and in-house survey crews. The CDC will prepare the corridor Genesis Map, which depicts the historic baseline, sectional lines, plats, found monuments, calculated corner locations, condominium limits, topography, and researched existing rights of way and easements along the corridor. The CDC will also develop the Title Search Map and Report, and the legal descriptions and parcel sketches for all parcels anticipated to be impacted by the project.

The SDC's will prepare the Initial and Final Right of Way Maps for their respective project segments. The appraisal process will begin upon FDOT D4 review and acceptance of the Initial Right of Way Maps. The acquisition process will be initiated upon D4 review and acceptance of the Final Right of Way Maps, which require the approval of the D4 Right of Way Surveyor. All mapping will be completed in accordance with the checklists and requirements of the *FDOT D4 Right of Way Mapping Guidelines and General Information* and the *FDOT Right of Way Mapping Handbook*.

Right of Way Certification is required prior to construction letting and will be executed by the D4 Right of Way Manager certifying that FDOT title to all right of way has been acquired, all displaced persons, businesses and personal property have been relocated, and all required demolition of structures and improvements have been completed or specified for removal by the Contractor. Refer to Section 15.0 for further right of way information regarding the acquisition and certification process.

3.6 CONSTRUCTION

Construction advertisement preparation will commence upon completion of the contract documents package at the end of the Final Design phase. Contractors will be procured for the project segments by the FDOT Office of Contracts Administration in accordance with the policies and procedures described in Section 5.0. The Contractors will be responsible for furnishing all labor, materials, equipment tools, transportation and supplies required to complete the work in accordance with the contract documents, the Contractor's Quality Control Plan, and the *FDOT Specifications*.

The CEI Consultants (CCEI's) and FDOT CEI Project Engineers will be responsible for the dayto-day management and administration of the segment construction contracts (refer to Section 2.1.1.2 for the CEI roles and responsibilities). It is anticipated that the CCEI's will be procured during the latter stages of the Final Design phase in order to assist with the review and assembly of the contract documents package and to become fully acclimated with the project segments prior to the Contractor's initiation of construction operations.

The SDC's will provide all required post-design services for their respective project segments, including clarification of the contract documents, responses to Requests for Information, and shop drawing reviews. At the 60-70% construction complete stage, a project 'walk-thru' will be scheduled for D4 Construction and Maintenance staff, as well as representatives of the D4, CDC and SDC design team.

The process for obtaining Final Acceptance of the segment construction projects will be in accordance with CPAM, Chapter 12 – Project Closeout.

Upon Final Acceptance of the construction of each project segment, the D4 Final Estimates Office (DFEO) will review the final estimates and administer contract closeout in accordance with the *FDOT Final Estimates Preparation and Documentation Manual* and the *FDOT Final Estimates Review and Administration Manual*. Upon Contractor acceptance of the final estimate and receipt of final payment, the contract will be closed and authority will be transferred to the FDOT D4 Ft. Lauderdale Operations Center for incorporation of assets and administration of maintenance agreements.

4.0 PROJECT QUALITY

4.1 PROGRAM REQUIREMENTS

The overall goal of quality management for the project is to ensure that all labor, services, equipment, materials, and deliverables provided by the I-595 corridor Consultants and Contractors are in compliance with the quality requirements of the contract documents and the associated Federal, state and local laws, rules, standards, policies and procedures. The program requirements for quality management involve quality standards and quality assurance and control plans in accordance with FDOT policies and procedures as defined in Sections 4.2 - 4.5.3.

Adherence to these quality standards and plans relating to scope, schedule and cost control, work products, safety, and public trust and interest will be measured, controlled, and documented through scheduled plans and progress reviews, claims reviews, audits, progress meetings, public meetings, web site feedback, and performance evaluations as further described under Sections 4.6-4.8, 5.8.1.2, 5.12-5.14, 6.2, 6.3, 7.4, 8.1, 9.0-12.0 and 17.0.

4.2 QUALITY RESPONSIBILITY AND AUTHORITY

The CMT will be responsible for the overall quality management of the project. The CMT will also coordinate all required audit and/or oversight reviews that may be conducted by the FHWA, FDOT, or independent consultants.

The Design Project Managers (with assistance from the CDC as required) will be responsible for assuring that the segment design and review process is implemented in accordance with the *FDOT D4 Quality Control Plan*, and that the SDC's are in compliance with their project-specific Quality Control (QC) Plan. The CCEI's will be responsible for monitoring and evaluating the acceptability of the Contractors' product and performance, and that the Contractors are in compliance with their project-specific construction QC Plan.

The CDC and SDC's shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications, and other services furnished by the CDC and SDC's under their respective contracts, and for providing documentation of QC compliance. The Contractors are responsible for furnishing all labor, materials, equipment tools, transportation, and supplies required to complete the work in accordance with the contract documents and the established QC Plan, and for providing documentation of QC compliance.

4.3 QUALITY STANDARDS

The quality monitoring standards to be utilized by the CMT and the project team in the design and construction management of the project include:

- FDOT Project Management Handbook
- FDOT Plans Preparation Manual (PPM)
- FDOT D4 Quality Control Plan
- FDOT Construction Project Administration Manual (CPAM)
- FDOT Standard Specifications for Road and Bridge Construction (Specifications)
- CDC, SDC, and CCEI contract-specific QC Plans.

4.4 SCOPE MANAGEMENT / CONTROL

The work breakdown structure described in Section 1.2.14 (with modifications and supplemental design information to be developed as part of the Master Design Plan) will serve as the basis for defining the scope of work for each design segment. The CMT design and construction staff will

collaborate with all appropriate project stakeholders on the development of the individual segment design scopes of work to ensure the scopes are consistent and comprehensive, enabling more effective control of the work. The scopes of work will completely detail all design standards, design criteria, and all services and deliverables required for each segment design, and will be in accordance with the established budget and schedule. Prior to the conclusion of the design phase, the CMT design and construction staff will again collaborate on the assembly of the construction contract documents to provide a quality and comprehensive package for construction letting.

Management and control of the scope of work for both the design and construction phases will involve continuous review of the work being performed, and monitoring/documenting the conformance with the contractual requirements through procedures described in this section and throughout the PMP. No changes to the scope or payment for work determined to be out of scope will be made without the appropriate supplemental agreement documentation and approval from the CMT as described under Section 5.13. The Design Project Managers and CEI Project Engineers will maintain a scope history report to document all changes to the scope, schedule and budget which will be included in the monthly Project Status Report.

4.5 QUALITY ASSURANCE / QUALITY CONTROL

4.5.1 Design

The SDC's will be required to provide a QC Plan for CMT approval in accordance with the requirements of the SDC contract, *D4 Quality Control Plan*, and *FDOT PPM* that describes the personnel and procedures to be utilized to verify, independently check, and review all maps, design and shop drawings, specifications, and other documentation prepared as a part of the design contract. The QC Plan shall also incorporate the management process for the project and how the checking and review processes are to be documented to verify that the required procedures were followed.

With each phase submittal, the SDC's must submit a marked up set of prints from the Quality Control Review indicating the reviewers for each component and a written resolution of comments on a point-by-point basis. The responsible professional engineer(s) that performed the Quality Control Review must sign and submit a statement certifying that the review was conducted.

The CDC will be required to provide a QC Plan with the same base requirements as the SDC's, and the plan will also include the process for the CDC's permitting and utilities management and coordination effort for the corridor, and the process in support of the management of the individual design segments. The CDC will also prepare an internal Project Management Plan to provide guidance to the CDC team for effective project control of the CDC contract.

4.5.2 Construction

The Contractors will be required to provide a QC Plan for CMT approval in accordance with the requirements of the contract documents and Section 105 of the *FDOT Specifications* to verify, check, and maintain control of key construction processes and materials. The QC Plan is to include designated qualified personnel the Contractor is to provide for sampling, testing and inspection of materials and construction activities, as well as a designated QC Manager to institute any and all actions necessary for the successful implementation of the QC Plan. Under the direction of the QC Manager, the contractor will be responsible for the daily documentation of QC activities.

The FDOT and CCEI Project Engineers will be required to ensure that construction is being performed in accordance with the contract documents through direct observation of construction

operations that are underway, by examination of completed construction, by sampling and testing of materials (in addition to the Contractor's sampling and testing activities), and by review of written and electronic records. It is also the Project Engineers' responsibility to produce the required written record to substantiate the acceptability of the contract work produced by the Contractor, and to substantiate the Contractor's performance evaluation.

4.5.3 Commissioning

FDOT D4 Maintenance and Operations staff will participate in reviews during both the design and construction phases for each project segment. During the design phase, maintenance and operations staff will participate in the phase submittal reviews to ensure maintenance and operations considerations are accommodated in the design. During construction, interim inspections will be performed prior to final inspection to ensure any deficiencies are corrected prior to Final Acceptance.

It is currently anticipated that the reversible lanes (Segments 9 and 10) will operate as an electronically tolled express lanes system. The requirement for any System Operations Plan and/or System Maintenance Plan for the reversible lanes will be evaluated subsequent to the determination of the roadway classification of the reversible lanes and the jurisdictional authority for maintenance and operations. Any required System Operations Plan or Maintenance Plan will be developed concurrently with the final design to ensure compatibility and conformance of all project elements.

4.6 PHASE SUBMITTAL REVIEWS

As referenced in Section 3.4, the SDC plans and supporting documentation for each project segment will be reviewed at a minimum of four phases during the design process, as described in Sections 4.6.1 - 4.6.4. Checklists and requirements for the various phase submittals are provided in Chapter 2, Volume II of the *FDOT PPM* and the *D4 Quality Control Plan*. All phase submittals and the associated review duration will be scheduled for each project segment in the master project schedule.

FDOT D4 functional area offices (and the CDC as required) will review the plans to ensure that procedures in the *FDOT PPM* are followed, Federal, state, and project-specific design criteria are adhered to, and project commitments have been addressed. Construction, maintenance and operations staff will be involved in the review process at every phase to ensure constructability, maintenance, and traffic operations concerns are addressed as early as possible in the design process.

All phase reviews will be completely electronic, and the SDC is to include an updated construction cost estimate (with documentation of cost changes) with each submittal. The Design Project Managers will be responsible for creating and distributing the Electronic Review Comment (ERC) submittal to the appropriate functional area offices in accordance with the checklist provided in the *D4 Quality Control Plan*. Upon receipt of comments, the Design Project Manager will distribute the comments to the SDC for response, and will schedule a comment resolution meeting to address pending comment issues. No phase will be considered complete until all review comments have been resolved and documented.

4.6.1 Initial Review

The Initial Review will occur at approximately 50% plans completion. A detailed description of the initial engineering activities is provided in *FDOT PPM* Volume I, Chapter 13.

4.6.2 Constructability Review

The Constructability Review is a new D4 phase review that will occur at approximately 80% plans completion. This will be the main review for all functional areas, and will include a detailed constructability review to focus on: the feasibility of unique design concepts based on site conditions and equipment/material requirements, accessibility of staging areas, functionality of the traffic control plan (TCP), project commitments and environmental protection safeguards, public access requirements, and specialty construction (e.g.- environmental mitigation, utilities, etc.). A field review meeting will be scheduled by the D4 Construction Office, and subsequently a letter of TCP approval will be issued by the D4 Construction Office once all traffic operation concerns have been addressed.

4.6.3 Biddability / Final Review

The Biddability / Final Review will occur at approximately 95% plans completion. A detailed description of the final engineering activities is provided in *FDOT PPM* Volume I, Chapter 14. The D4 Construction Office will review that the plans, quantities and computation book, and pay items / general notes are correct, consistent, and compatible with the project scope, and will calculate the required construction days as a result of the review. A mandatory field review meeting will also be held to provide a thorough review of the existing conditions and to verify all Constructability Review issues have been addressed.

4.6.4 Production Complete

At the Production Complete stage, the SDC (Engineer of Record) will certify that the plans are complete, all previous review comments have been properly addressed, and that the project production is complete. The D4 Final Plans Office will conduct a quality assurance review of the submitted package, and will provide a quality assurance concern memo to the Design Project Manager. The SDC will then address any required changes to the record plans and identify the changes in a "change memo".

4.7 OTHER REVIEWS

4.7.1 Peer / Sufficiency Reviews

Prior to each SDC phase submittal, the CDC will provide an independent peer review of the submittal documents, focusing on minimizing total project costs through right of way, constructability, biddability and long term maintenance considerations. The CDC will also provide comments on the adequacy of all SDC submittals in accordance with standard D4 checklists, as well as project-specific submittal requirements.

4.7.2 Interface Reviews

In order to ensure design and sequencing compatibility throughout the corridor, all plans reviews will include consideration of corridor continuity and adjacent project temporary and permanent construction interface requirements. The Design Project Managers will also provide a copy of all phase submittals to the SDC's of adjacent project segments for review.

4.7.3 Agency Reviews

The Design Project Managers will be responsible for providing phase submittals to the project stakeholders with adjacent on-going projects and/or jurisdictional interest in the specific project segments, including the FHWA, FDOT Central Office, Florida's Turnpike Enterprise, Broward County, regulatory agencies and municipalities, as directed by the CMT.

4.7.4 Supplemental Agreement Reviews (post-design)

Twice each year on a District-wide basis, the D4 Construction Review Team will evaluate the construction supplemental agreements processed over the previous six months. These reviews will concentrate on contract changes that resulted in cost overruns and construction time increases. The team will perform a detailed review of the issues, and will classify them into major work categories. The team will use this information to produce three charts that illustrate the percentage distribution of problem types:

- Supplemental agreement distribution by codes and dollars
- Cost distribution by frequency of occurrence
- Time extensions.

The results of this analysis will enhance D4's ability to identify training and/or process improvement opportunities. The Final Plans Office will correlate the current plans review comments to the general areas associated with the supplemental agreements and will produce a "Top Ten" list of problem areas. The "Top Ten" list provides valuable insight in helping to reduce future cost overruns and time extensions on current projects. The list will be posted on the D4 intranet and will be distributed to all D4 departments and all Consultants doing work for FDOT D4.

4.8 PERFORMANCE LANGUAGE AND MEASURES

In accordance with FDOT policy, performance standards and requirements will be provided in the Consultant Agreement for all professional services contracts. The performance standards and requirements for construction contracts will be in accordance with Division I of the *FDOT Specifications*, or as amended through Special Provisions.

Due to the high priority of the corridor improvements, it is anticipated that the specifications for each construction contract will include incentive/disincentive and/or 'no excuse' bonus language to expedite the project construction and minimize claims.

Performance evaluations of the Consultants and Contractors will be conducted and reported by the CMT on a regular basis in accordance with *Procedure No. 375-030-007 - Project and Performance Management Professional Services Consultant Work Performance Evaluation*, and the *FDOT CPAM*, Chapters 4 and 13 – Consultant CEI Management and Performance Ratings, respectively.

At the conclusion of the 'Production Complete' plans submittal stage, a Production Complete Quality Delivery Indicator (QDI) will be calculated by the D4 Final Plans Office to establish a quality rating for the plans and pay items submitted. The QDI will be referenced by the Design Project Manager in the preparation of the final SDC performance evaluation. Refer to the D4 *Quality Control Plan* for the QDI calculation procedures.

5.0 PROCUREMENT AND CONTRACT MANAGEMENT

5.1 GENERAL AND INNOVATIVE PROCUREMENT STRATEGIES

The main objective of the contract procurement strategy is to provide for the most efficient utilization of time and available funding to maximize the project benefits to the public. An emphasis will be placed on reducing project costs through maximizing bid competition, minimizing the potential for construction claims, and minimizing temporary 'throwaway' construction between adjacent segments.

The project segments are currently proposed to be constructed utilizing the conventional unit price design-bid-build delivery method with construction incentives/disincentives. As part of the annual work program updates cycle, the CMT will meet with the D4 Programs and Construction Offices to assess the project funding and scheduling status, to discuss the current industry trends and market conditions, and to determine if alternative delivery methods would provide for more cost and time efficient implementation of the corridor improvements. Alternative contracting methods to be considered include: contracts with lane rental fees, contracts with A+B bidding, contracts with no excuse bonus, liquidated savings contracts, lump sum contracts, and design-build contracts. A public-private partnership may also be considered for the design, construction, maintenance and operations of the reversible lanes (Segments 9 and 10). Refer to Section 6.1.4.

5.1.1 Advanced Construction Considerations

The feasibility of advanced construction of the corridor noise barriers and any required utility relocations will also be evaluated. Advanced noise barrier construction would benefit the public by reducing noise impacts during subsequent construction of the project segments, and would likely result in more competitive bidding for the noise barrier contract(s). Advanced construction of utility relocations would provide for expedited utility clearance and reduce the potential for claims due to concurrent and/or interdependent utility and project segment construction activities.

Consideration will also be given to advance the removal of any contaminated and/or hazardous materials and the demolition of any above-ground structures prior to the initiation of construction activities in order to expedite construction operations and minimize delays. This will be achieved through existing FDOT environmental and demolition contracts, or through separate procurements.

5.2 FEDERAL AND STATE PROCUREMENT REQUIREMENTS

In accordance with Sections 287.055 and 337.105 of the *Florida Statutes* and Chapter 14-75 of the *Florida Administrative Code*, all professional services for the I-595 project will be acquired through competitive selection of FDOT pre-qualified consultants, followed by negotiations to establish a fair, competitive and reasonable fee for the contracts. The D4 Procurement Office, in collaboration with the CMT, will be responsible for ensuring the advertisement, selection, negotiation, execution and distribution of each professional services contract is in accordance with *FDOT Procedure No. 375-030-002-i – Acquisition of Professional Services*.

Construction services will be acquired by competitive bid in accordance with Section 337.11 of the *Florida Statutes* and Division I of the *FDOT Specifications*. All prospective bidders are required to be FDOT pre-qualified in accordance with Rule 14-22 of the *Florida Administrative Code*. The FDOT Office of Contracts Administration, in collaboration with the CMT, will be responsible for the advertisement and award of the construction contracts.

In accordance with Title 23 of the *Code of Federal Regulations*, the FHWA will be responsible for full oversight of all contractual procurements, which will be facilitated by the FHWA Area Engineer.

5.3 MANAGEMENT TEAM REVIEW OF PROCUREMENT DOCUMENTS

As indicated in Section 4.4, the CMT design and construction staff will be fully involved in the preparation and review of all scope and criteria documents for professional services contracts and the assembly of construction procurement documents.

The preparation and review of the advertisement notification and the Request for Proposal (RFP) packages for the design and CEI contracts will involve the collaboration of the CMT, D4 Professional Services Unit, D4 Legal Office, D4 Design Engineer, D4 Consultant Management Engineer and D4 Construction Engineer. The RFP packages will include the scope of services and all associated Master Design Plan support documentation, standard professional services agreement, consultant evaluation criteria, and certification forms, and will follow the standard FDOT format for corridor consistency. The final RFP packages will require the approval of the Corridor Design Manager, D4 Design Engineer, D4 Consultant Management Engineer, and the D4 Director of Transportation Development for design procurements, and the Corridor Construction Manager, D4 Construction Engineer, and D4 Director of Operations for CEI procurements.

The assembly of the advertisement for construction bid packages will involve the collaboration of the CMT, FDOT Office of Contracts Administration, and the D4 Final Plans, Specifications and Estimates Offices. The contract documents package will be assembled by D4 and forwarded to the FDOT Central Office for inclusion in the bid package for advertisement, bid opening, and award by the Office of Contracts Administration.

5.4 DECISION-MAKING PROCESS

5.4.1 Design / CEI

The selection process for the design and CEI contracts will involve three stages at a minimum. Interested consultants will initially submit a Letter of Response to the contract advertisement, which will be used in the development of a ranked longlist of responsive firms (10 minimum) by the Technical Review Committee (TRC). The Selection Committee will provide a ranked shortlist (minimum of 3 firms) from the longlist documentation. A pre-proposal meeting will then be held with the shortlisted firms to review the components of the RFP and to answer any questions. The shortlisted firms will then prepare a technical proposal based on the requirements of the RFP, which will be reviewed, scored and ranked by the TRC based on the RFP evaluation criteria, followed by final evaluation and selection by the Selection Committee.

An oral presentation by the shortlisted firms may be required subsequent to the submission of the technical proposals, which will also be scored in accordance with the RFP criteria.

The Selection Committee will consist of the District Secretary, Director of Transportation Development, Director of Operations, and Director of Transportation Support, or their designees. For design procurements, the TRC will consist of the Design Project Manager for the specific project segment and two other CMT Design Project Managers, or their designees. For CEI procurements, the TRC will consist of the Corridor Construction Manager, the D4 Construction Engineer, and an engineer from the Ft. Lauderdale Operations Center, or their designees. The 'at large' members of the TRC will be designated by the appropriate Director based on the nature of the work requested, the complexity of the project, and the availability of personnel for a timely selection.

All Selection and Technical Review Committee members will be required to sign a Conflict of Interest Certification prior to serving on the committee for each contract procurement. All selection processes and procedures will be in accordance with *FDOT Procedure No. 375-030-002-i – Acquisition of Professional Services*.

5.4.2 Construction

A pre-bid meeting will be held with all prospective bidders to review the advertisement package and to answer any questions. Interested bidders will then submit their sealed bids, and the FDOT Office of Contracts Administration will award each segment construction contract to the lowest responsible bidder whose proposal complies with all the bid advertisement package requirements. For the purpose of contract award, FDOT will consider as the bid the correct summation of each unit price bid price multiplied by the estimated quantities shown in the proposal. On this basis, FDOT will compare the amounts of each bid and make the results of the comparison available to the public.

Until the actual contract award, FDOT will reserve the right to reject any or all proposals and to waive technical errors that are deemed in the best interest of the State. FDOT may reject any irregular proposal, defined as containing omissions, alterations of form, additions not specified or required, conditional or unauthorized alternate bids, unit prices that are obviously unbalanced, or the bid cost is in excess of or below the reasonable cost analysis values.

All bid advertisement, bid opening, and award procedures will be in accordance with Division I, Sections 2 and 3 of the *FDOT Specifications*.

5.5 FHWA PROCEDURES FOR CONTRACT APPROVALS

The CMT will be responsible for providing the FHWA Area Engineer with all professional services and construction procurement documents for review, concurrence and/or acceptance prior to proceeding to the subsequent procurement phase, including advertisement notifications, draft and refined scopes of services, requests for proposals, consultant agreements and negotiation documentation, bid advertisements, bid opening results and tabulations, and contract agreements. All FHWA oversight procedural requirements will be in accordance with *FDOT Procedure No. 375-030-002-i – Acquisition of Professional Services* and Chapter 5.7 of the *FDOT CPAM* – Federal-Aid Project Requirements.

5.6 PROTEST PROCEDURES

Any protests that arise during the contract procurement process shall be submitted and processed in accordance with the policies and procedures of Sections 120.57(3) and 337.11 of the *Florida Statutes* and Chapters 14-25 and 28-110 of the *Florida Administrative Code*.

5.7 PROFESSIONAL SERVICES CONTRACTS

In addition to the CDC contract executed in July 2006, the following professional services contracts will be required for the project:

- Segment Design Consultants (SDC's) final design and post-design for the individual project segments (14 SDC contracts)
- CEI Consultants (CCEI's) administration of the individual project segment construction contracts (2 CCEI contracts).

The CDC will be precluded from pursuing final design and CEI contracts. The SDC's will be precluded from pursuing CEI contracts unless written approval is obtained from FHWA and the Assistant Secretary for Transportation Policy, or it is determined that the Consultant is prequalified for CEI services as a separate entity from the Engineer of Record.

It is anticipated that SDC contracts will be required for each of the 14 corridor project segments currently identified within the I-595 work program. However, refinement of the construction sequencing and scheduling during the Master Design Plan development, coupled with funding availability and timelines, may dictate the need to 'bundle' several of the segments into one design contract.

Pending finalized sequencing and funding for the corridor, each CCEI will be responsible for the administration of multiple construction contracts.

It is anticipated that all other professional services required for the project will be provided under existing FDOT contracts, where contractually appropriate. However, as identified in Section 5.1, the requirements for alternative delivery methods may alter the current professional services procurement plan as the project progresses.

5.7.1 Errors and Omissions

Throughout the plans preparation and post-design phases of the project, the SDC's shall be required, without additional compensation, to correct all errors or deficiencies in the surveys, designs, drawings, specifications and/or other services. Similarly, the CCEI's will also be required to correct all deficiencies in their work product, staffing, equipment, or contract administration without additional compensation.

During the construction phase, issues may arise that require clarification of the construction documents, which may lead to design revisions and/or contract modifications. Through the administration of the construction contract changes process described in Section 5.13, the CEI Project Engineers and Design Project Managers will evaluate the possibility of SDC liability associated with the change in order to recover costs through the errors and omissions process. Early written notification of potential errors and omissions will offer the SDC an opportunity to mitigate, and possibly prevent future Contractor claims against the FDOT.

The initial identification of CCEI errors, omissions or contractual lapses will be the responsibility of the Corridor Construction Manager. This will be accomplished through review of Contractor supplemental agreement requests to assess any CCEI liability, and routine project and quality assurance reviews of the CCEI's work product, records, performance grades, and personnel.

As project partners, the Corridor Design and Construction Managers, SDC's and CCEI's will determine the appropriate course of action to resolve project issues. When the SDC's or CCEI's dispute the CMT's errors and omissions assessment, the Consultant Evaluation Committee (CEC) will make the final determination regarding further recovery efforts. This committee shall consist of five members: three voting members (the D4 Operations and Transportation Development Directors and the District Design or Construction Engineer), and two non-voting members (legal counsel representative and the Cerridor Design or Construction Manager). The SDC's or CCEI's may elect to accept the CEC's determination, request a review of the determination by a Consultant Claims Review Committee, or proceed with litigation.

The procedure to: identify, investigate, and document SDC and CCEI errors, omissions and contractual breaches; determine and document the extent of responsibility and cost; establish the recommendation to pursue recovery through settlement or litigation; and collect and report recovered costs will be in accordance with *FDOT Procedure No. 375-020-010-c – Identifying and Assigning Responsibilities for Errors, Omissions, and Contractual Breaches by Professional Engineers.*

Premium costs for 'non-value' added work associated with SDC and CCEI errors and omissions shall be Federal-Aid Non-Participating.

5.8 CONSTRUCTION CONTRACTS

Currently, 12 individual construction contracts are anticipated to be awarded for the project segments. Segments 4 and 5, as well as Segments 9 and 10, are anticipated to be let as joint construction contracts. However, as indicated in Section 5.7, refinement of the construction sequencing and scheduling, updates to funding availability and timelines, and alternative delivery methods may require alteration of the current construction procurement plan. In addition to the project segments, additional construction contracts may need to be procured as the project progresses (refer to Section 5.1).

Upon determination of operational authority for the elevated reversible lanes, a separate contract may also be required to procure a systems integrator for the installation and testing of tolling equipment for the reversible lanes.

5.8.1 Incentives and Penalties

It is anticipated that all 12 segment construction contract specifications will contain incentives/disincentives language in an effort to reduce the overall contract time. The Contractor will be paid a per diem amount for every day that the contract is completed early, and conversely the same per diem penalty will be assessed for every day the contract is late. Section 8-10 of the *FDOT Specifications* relating to liquidated damages will remain in effect.

5.9 DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROCUREMENTS

Contract specific Disadvantaged Business Enterprise (DBE) participation goals are not placed on Federal and state contracts; however, the FDOT has an overall 7.9% DBE race neutral goal it must achieve. FDOT D4 will encourage DBE's to compete for professional services and construction contracts under the I-595 project, and will encourage non-DBE Consultants and Contractors to utilize DBE's as sub-consultants and sub-contractors. However, the use of DBE-sub-consultants will not be mandatory and no preference points will be given for DBE participation in the professional services selection process. Refer to Section 13.2 for the Consultant and Contractor DBE documentation requirements during the proposal and bid processes.

5.10 SPECIAL MATERIALS AND EQUIPMENT PROCUREMENTS

It will be the responsibility of the Consultants and Contractors to acquire all necessary materials and equipment to perform the required contractual services, unless otherwise directed by the CMT. Any special materials and equipment procurement requirements will be identified during the Final Design phase of the individual project segments. The CMT and SDC's will evaluate the feasibility and practicality of entering into material and equipment procurement contracts with vendors in order to better control the cost of materials and equipment. The risks associated with acquiring and storing the materials and equipment to be provided to the Contractors for installation will be included in the evaluation.

5.11 UTILITY AND PUBLIC AGENCY AGREEMENTS

Anticipated utility and public agency agreements for the project are described in Section 1.3. The CMT will be responsible for the coordination, negotiation, and execution of any third party and/or joint participation agreements required for the project.

5.12 CONTRACT MANAGEMENT

5.12.1 Professional Services – Contract Execution

Upon SDC and CCEI selection, the Design Project Managers (SDC contracts) and Corridor Construction Manager (CCEI contracts), in collaboration with the Professional Services Unit, will be responsible for the preparation of independent estimates, negotiation of hours, labor rates and fees, review and refinement of the automated fee proposals, and the coordination of the execution of the professional services agreements in accordance with Chapters 8 and 9 of *FDOT Procedure No. 375-030-002-i – Acquisition of Professional Services* and the *FDOT Negotiation Handbook*. Optional services will be established in the scope of services during negotiations in order to more accurately forecast contingency scope and cost requirements. The final contract agreements will require the approval of the Corridor Design or Construction Manager and the associated D4 Design and Construction Directors.

Prior to the execution of contract agreements, funding approval will be obtained through the Office of Comptroller Contract Funds Management System, which checks for available budget, that projects are programmed for the appropriate amount and year in the adopted work program, and that all FHWA authorizations have been obtained.

5.12.2 Design Contract Administration

The Corridor Design Manager will be responsible for the administrative and technical oversight of the CDC contract. The Design Project Managers will provide the day-to-day administrative and technical management of the SDC contracts, and will develop a Project Work Plan in accordance with the guidelines of the *FDOT Project Management Handbook* to assure the contract documents are completed on time, within budget, and in accordance with all contractual policies and procedures.

The Design Project Managers will also be responsible for internal and external coordination and progress reporting; conducting monthly progress meetings to discuss completed and upcoming action items, resolve pending project issues, staffing requirements, and validate SDC payment requests; preparing and updating a scope history report to document contract changes; coordinating, negotiating and executing contract amendments (refer to Section 5.13); coordinating partial payment and project closeout processing and documentation (refer to Section 6.2.5.2); preparing periodic SDC performance evaluations (refer to Section 4.8); and management of contractual records in collaboration with the D4 Professional Services Unit.

5.12.3 Construction Contract Administration

The Corridor Construction Manager will be responsible for the administrative management of the CCEI contracts in accordance with Chapter 4 of the *FDOT CPAM*. The CCEI's will provide the day-to-day contract inspection reporting, administration and oversight of the segment construction contracts in accordance with the procedures of the *FDOT CPAM* to assure the project segments are constructed on time, within budget, with the specified quality, and in reasonable conformance with the contract documents.

The CCEI's will also be responsible for internal and external coordination and progress reporting; conducting progress meetings to discuss project status and schedule, staffing requirements, and pending contractual, construction, and coordination issues; coordinating shop drawing reviews and responses to Requests for Information; validating the Contractors' compliance with EEO, DBE, OJT, sampling and testing, environmental permitting, and project commitment requirements; coordinating, negotiating, processing, and documenting claims and supplemental agreements (refer to Section 5.13); coordinating partial payment and project closeout processing

and documentation (refer to Section 6.2.5.3); preparing periodic Contractor performance evaluations (refer to Section 4.8); and management of contractual records.

5.13 CHANGE MANAGEMENT

5.13.1 Objectives

Required changes in the project scope, schedule and/or cost will be authorized as amendments (supplemental agreements) to the consultant and construction contracts for all project directives not included in the existing contractual terms. The effective control of these changes will minimize impacts to the budget and schedule baselines, ensure that the changes are substantiated and costs and time allocated are proportional to the required work effort, ensure that the changes are in accordance with the project objectives.

5.13.2 Administration of Contract Changes

The change management administration process for the project will be in accordance with standard FDOT procedures referenced in Section 5.13.5, and will include:

- Identification of the full scope and magnitude of the change as soon as possible, and verification of the need for the change through evaluation of the current contract documents
- Consideration of viable alternatives, with the goal of minimizing the time and/or cost impact of the change
- For construction changes, evaluation of the possibility of SDC or CCEI liability associated with the change to recover costs through the errors and omissions process
- Preparation of independent estimates (as required by policy) to verify the estimate provided by the Consultant or Contractor and to serve as the basis for negotiations
- Confirmation of funding availability for the change
- Timely processing of the change in accordance with the procedural timetable requirements
- Detailed documentation of the change process, from initial receipt of the change request through execution of the supplemental agreement.

The Design Project Managers and FDOT/CCEI Project Engineers will be responsible for receipt and initial review of Consultant/Contractor change/claim requests, verifying requests are complete and in accordance with procedural requirements, determining validity of the requests, preparing independent estimates, organizing and participating in negotiation meetings, and documentation of the entire change process.

The CMT and D4 Professional Services Unit will participate in negotiations, ensure funding for the change is available, ensure that the contractual amendment documentation is complete and is reviewed by the D4 Legal Office, and ensure that the supplemental agreement is distributed to the appropriate management level for approval (refer to Section 5.13.4).

5.13.2.1 Claims Review Teams

Depending on the scope and magnitude of a change, a claims review team may be assembled to review the change request prior to negotiations. The review may involve the determination of the validity of the claim, the evaluation of alternatives to avoid or minimize the claim, consideration of any SDC or CCEI liability associated with the claim that could possibly be recovered, and discussion and preparation of the independent estimate. The claims review team may consist of:

- Corridor Design Manager and/or Design Project Manager
- CDC representative
- CEI representative
- Corridor Construction Manager
- District Construction Engineer

• D4 Legal Office representative.

5.13.2.2 Disputes Review Board (DRB)

For construction contracts over \$15 million, FDOT will also incorporate a special provision in the contracts for a Disputes Review Board (DRB) to assist in resolving construction claim disputes (refer to Section 3.4 of the *FDOT CPAM*). The DRB will consist of three members: one appointed by the Corridor Construction Manager from the FDOT's list of candidate members, one appointed by the Contractor, and one to be appointed by the other two members as the chairperson. All three appointments are to be reviewed by the District Construction Engineer.

The DRB will attend meetings on a monthly basis for the first six months to get acclimated to the project. After the first six months, the meeting frequency will be determined on a project-by-project basis. When possible, DRB meetings will be scheduled to coincide with regular progress meetings.

Issues can be brought to the DRB by either the Contractor or the CMT. Once the CMT recognizes that a dispute resolution cannot be mutually agreed upon, the issue will be brought to the DRB. The District Construction Engineer will be consulted prior to requesting an initial hearing. Consultation with the State Construction Office and Central Office Litigation Section will be necessary before the CMT decides to reject any recommended resolution by the DRB.

5.13.3 Baseline Change Control

Upon the approval and execution of any supplemental agreements, the CMT will be responsible for coordinating and administering the required modifications will all affected project segments and ensuring that the project cost and schedule baselines are properly updated to reflect the changed conditions. The CMT will consult with FDOT advisory staff and/or the EOC as deemed necessary.

5.13.4 Change Control Levels

5.13.4.1 Design

All schedule, scope and/or estimate changes requiring supplemental agreements will require the approval of the following FDOT D4 staff prior to execution:

- Corridor Design Manager
- District Design Engineer
- District Consultant Management Engineer
- District Director of Transportation Development.

FHWA approval will be obtained in accordance with Section 1.3 of FDOT Procedure No. 375-030-010-d – Amendments and Task Work Orders for Professional Service Agreements.

5.13.4.2 CEI

All schedule, scope and/or estimate changes requiring supplemental agreements will require the approval of the following FDOT D4 staff prior to execution:

- Corridor Construction Manager
- District Construction Engineer
- District Director of Operations.

FHWA approval will be obtained in accordance with Section 1.3 of FDOT Procedure No. 375-030-010-d – Amendments and Task Work Orders for Professional Service Agreements.

5.13.4.3 Construction

The FDOT approval process for construction supplemental agreements will be in accordance with Section 7.3.14 of the *FDOT CPAM*:

- Contract changes up to \$100,000 may be approved and executed by the Corridor Construction Manager
- Contract changes more than \$100,000 but less than \$500,000 may be approved and executed by the District Construction Engineer
- Contract changes more than \$500,000 may be approved and executed by the District Director of Operations.

FHWA approval will be obtained in accordance with Section 7.3.11.2 of the FDOT CPAM.

5.13.5 Change Process and Documentation

FDOT maintains a very structured procedure and timeline for the request, evaluation, negotiation, processing, documentation, execution and distribution of supplemental agreements for changes in the contract scope, schedule, and/or cost. The procedures for professional services (Consultant) contracts are detailed in *FDOT Procedure No. 375-03-010-d – Amendments and Task Work Orders for Professional Service Agreements* and *Procedure No. 375-030-002-i – Acquisition of Professional Services*. The procedures for construction contracts are provided in Article 5-12 Division I of the *FDOT Specifications*, and Chapter 7 of the *FDOT CPAM*.

5.14 WARRANTY MANAGEMENT

Supplemental Specifications may be included in the construction contract documents that will require the Contractor to warrant and guarantee certain materials used in the construction of the project to meet all specification requirements for a designated time period. Criteria, measurable standards, and remedial work plan requirements will be specified for each designated material in accordance with the FDOT Specifications Office guidelines on *Performance Based, Warranty and Guarantee Specifications*.

The warranties will be initiated upon Final Acceptance of the construction and will be transferred to the D4 Warranty Coordinator for administration and monitoring oversight. All inspection and remedial work required will remain the responsibility of the Contractor in accordance with the specifications until expiration of the warranty. The Contractor will notify the D4 Ft. Lauderdale Operations Center prior to all inspections and remedial work.

6.0 COST, BUDGET AND SCHEDULE

6.1 FINANCIAL PLAN

6.1.1 FHWA Requirement

In accordance with Section 1904(a) of the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), Initial Financial Plans and Annual Updates are required for all projects designated as Major Projects. The Financial Plan and Annual Updates will be an integral part of the PMP in the formal documentation of the I-595 project cost and funding requirements and subsequent financial progress of the project.

6.1.2 Design and Construction Financing

FDOT D4 is in the process of developing a draft Initial Financial Plan (IFP) for FHWA review. In accordance with FHWA requirements, the IFP will be submitted for FHWA acceptance prior to the authorization of any Federal Aid funding for project construction.

On November 2, 2005, the Executive Office of the Governor announced the Strategic Intermodal System (SIS) Growth Management projects proposed for funding between fiscal years 2005/2006 and 2010/2011, which included nine of the I-595 corridor projects identified in the *I-595 PD&E Study*. FDOT D4 is actively pursuing additional funding for the remainder of the corridor needs. The request for funding for the FY 2011/2012 - 2015/2016 Florida Growth Management Program initiative was recently submitted to the FDOT Central Office, and additional State and District Managed funds will also be pursued for the corridor. As another potential funding source, FDOT D4 is working jointly with Florida's Turnpike Enterprise in establishing the anticipated bonding capacity of the elevated reversible lanes as a tolled express lane facility.

Concurrently with the funding pursuit, FDOT D4 is currently in the gaming process in establishing the FY 2008/2009 - 2011/2012 Work Program, which will reflect cost estimate and schedule updates for the various phases of the I-595 corridor projects. Project priorities for the second five year cycle (FY 2012/13 – 2016/2017) have also been submitted to the Central Office for review and approval. The updated funding status and phased financial approach will be described in detail in the IFP.

6.1.3 Operations and Maintenance Financing

Approximately one year in advance of construction Final Acceptance for the individual project segments, FDOT D4 Maintenance staff will be provided with the necessary plans information to enter assets into the FDOT's Roadway Characteristics Inventory (RCI) and establish updated operations and maintenance budgets within the current corridor maintenance agreement(s). Through maintenance agreements to be established with Florida's Turnpike Enterprise and Broward County Transit, maintenance jurisdictions (and subsequently maintenance and operations budgets) will be delineated for the reversible lanes and transit facilities within the I-595 corridor right of way. Funding will be appropriated by the agency(s) of authority and will be incorporated into the appropriate traffic management system.

6.1.4 Other Financing Options

As an option to generating toll revenue on the reversible lanes corridor (Segments 9 and 10) under the operational authority of FDOT D4 or Florida's Turnpike Enterprise, FDOT D4 may consider the creation of a public-private partnership (P3) agreement, where a private consortium would finance the construction of the reversible lanes in exchange for the right to lease, operate and maintain the reversible lanes as a toll facility. This would enhance the potential to accelerate

the construction of the reversible lanes, which would provide expedited congestion relief to the I-595 corridor.

As another financing option, FDOT D4 may consider a partnering agreement with Broward County Transit to enable free County public transportation passage on the tolled reversible lanes in exchange for funding participation on the project.

Further discussion of financing options will be provided in the IFP.

6.2 COST MANAGEMENT

6.2.1 Cost Management Strategies

The CMT will be responsible for monitoring and controlling project costs. The budget and cost structure will be continually managed to ensure that all project participants are operating within the latest budgets assigned for each segment and phase of the project, and that all changes in cost are fully communicated, documented, reviewed, approved and implemented in accordance with FHWA and FDOT policies and procedures. The cost management strategies and collaborative effort of the CMT, EOC, FDOT Central Office, D4 Programs, Estimates, Professional Services, and Financial Services staff, and the Consultants and Contractors to ensure proper cost control are identified in Sections 5.12, 5.13, 6.2.2 – 6.2.11, 7.0, 8.0, and 17.0.

6.2.2 Cost Estimating

The CDC has recently updated the PD&E direct construction cost estimates for each of the project segments in accordance with the *FDOT Long Range Estimates (LRE's) User's Handbook*. **Refer to Exhibit J of the Appendices for the preliminary cost estimates summary for each project segment**. The cost for the various estimate components is in accordance with standard FDOT D4 cost methodology as follows:

- LRE direct construction cost includes 15% contingency to allow for scope creep
- Incentives construction bonus incentives, typically estimated as 5% of direct construction cost
- Construction contingency allotment for construction overruns, typically estimated as 10% of direct construction cost
- ROW cost provided by D4 Right of Way Office, updated annually at a minimum
- Railroad Coordination / Utility Relocation based on project-specific requirements
- Environmental Mitigation based on project-specific requirements
- Final Design includes cost for post-design services, typically estimated as 10% of direct construction cost
- CDC based on negotiated contract amount and includes contingency for anticipated cost of potential optional services
- CEI typically estimated as 12% of direct construction cost.

The CDC will be responsible for keeping the cost estimates current prior to final design advertisement for the individual project segments. The SDC's will be responsible for the estimate updates during the final design phase. All calculation and documentation of quantities for construction pay items will be in accordance with the *FDOT Basis of Estimates Handbook*. As a minimum, the construction cost estimate and scope history report will be reviewed every six months, updated during the yearly FDOT D4 Work Program review cycle, and submitted at each project phase review submittal. Updates to the estimates will be documented by the SDC and will require approval by the CMT.

Prior to the Biddability/Final phase review, the SDC will input quantities into the FDOT's cost estimating system (Trns*Port). The SDC will properly separate Federal-Aid Non-Participating pay

items and/or quantities from Federal-Aid Participating items, where appropriate. The FDOT Design Project Manager will request the Engineer's Estimate from the SDC, which will be used for verification of the existing work program estimate, as well as any required over-rides to the Trns*Port unit prices. Upon CDC and D4 Estimates Office review, the Estimates Office will over-ride the unit prices as appropriate and provide an updated cost estimate to the Design Project Manager and D4 Programs Office.

Comprehensive right of way cost estimates for the project will be provided by the D4 Right of Way Office and will be updated annually at a minimum.

All estimate preparation and reviews will be conducted by experienced, interdisciplinary teams versed in FDOT policies and procedures for design, construction, maintenance and operations.

6.2.2.1 Independent Cost Estimates

As part of the cost-risk analysis (refer to Section 6.2.7), the project segment cost estimates will be reviewed by an independent cost-risk consultant to establish a differentiation between base cost and the probable cost of risk and opportunity events. Approved recommendations from the cost-risk analysis summary report will be used to refine the established baseline and contingency budgets.

During the Final Design phase, the CDC and D4 Estimates Office will be responsible for reviewing the SDC construction cost estimates to ensure the proper detail, quantities, unit pricing and corridor consistency has been provided. The CDC may also provide independent cost estimates as directed by the Corridor Design Manager.

In addition to establishing the final estimated cost prior to the construction letting of the project segments, the SDC Engineer's Estimate will serve as a control estimate in the review of unbalanced bids prior to award of construction contracts.

Independent estimates will also be prepared prior to the negotiation of all Consultant contracts and all Consultant / Contractor supplemental agreement requests.

6.2.3 Economic Analysis / Market Cost Factors

During the cost-risk analysis and throughout the design process, current market cost factors will be evaluated in order to assess the influence of regional industry trends (e.g.- oil/steel prices, interest rates, construction volume, risks, material supply and demand, labor availability, etc.) on the estimated construction costs for the project segments. Recommended modifications to the established unit prices will be coordinated with the D4 Estimates Office to ensure all estimates are kept current.

6.2.4 Reference Databases

FDOT's cost estimating system (Trns*Port) is frequently updated to reflect recent bid prices and will be a valuable resource for querying up-to-date cost information for similar FDOT projects on a local and regional basis. Construction material price indices will also be utilized in evaluating recent industry trends. Other references may be identified as part of the cost-risk analysis.

FDOT's Consultant Invoice Transmittal System (CITS) and SiteManager programs will house all billing, tracking and payment records for effective cost control of the Consultant and Contractor budgets and expenditures.

6.2.5 Budgets/Cost Control

6.2.5.1 Baseline Budget

As part of the Master Design Plan development and cost-risk analysis, the preliminary cost estimates (Exhibit J) will be further refined to establish the baseline project cost requirements in year-of-expenditure dollars to be identified in the Initial Financial Plan.

6.2.5.2 Consultants

The FDOT Design Project Managers will be responsible for budget and cost control of the project segments during the Final Design phase.

Upon notice to proceed, the SDC's will be required to submit anticipated payout and fiscal progress curves to be used as the baseline in evaluating project progress. Concurrently with the monthly invoice, the SDC's will submit progress reports to substantiate the expenditures being invoiced, which will be discussed as part of the agenda for the monthly progress meetings. Upon the Design Project Manager's verbal approval, the SDC will enter the invoice information into the Consultant Invoice Transmittal System (CITS) for formal approval by the Design Project Manager and payment by D4 Financial Services.

At the conclusion of the contract, a Certificate of Completion will be prepared for execution by both parties, stipulating final payment requirements by the appropriate party.

Similar procedures are to be followed for the Corridor Design Consultant (CDC) and CEI Consultant (CCEI) contracts, under the management of the Corridor Design and Construction Managers, respectively.

6.2.5.3 Contractors

The FDOT and CCEI Project Engineers will be responsible for budget and cost control of the project segments during construction.

The Contractors will be required to submit a work progress schedule that reflects a beginning date, duration, and monetary value for each work activity, which will be used as the baseline for the Project Engineers to monitor project progress. As part of the daily construction log, the Project Engineers will record quantities installed and will input the quantities into FDOT's SiteManager database to generate a monthly estimate based on the contractual unit prices. The estimate will then be sent to the Contractor for validation, and subsequently to the FDOT Comptrollers Office for release of payment.

Upon Final Acceptance of the construction of each project segment, the District Final Estimates Office (DFEO) will review the final estimates and administer contract closeout in accordance with the *FDOT Final Estimates Preparation and Documentation Manual* and the *FDOT Final Estimates Review and Administration Manual*. Upon Contractor acceptance of the final estimate and receipt of final payment, the contract will be closed.

6.2.5.4 Supplemental Agreements

No changes to the scope or payment for work determined to be out of scope will be made without the appropriate supplemental agreement documentation and approval from the CMT as described under Section 5.13.

6.2.5.5 Reporting

The budget and expenditures status of each project segment and supporting documentation will be provided as part of the monthly Project Status Report as described in Section 7.4.1.

6.2.6 Application of Earned Value Methodology

The CMT is considering the utilization of earned value management (EVM) procedures to assess project performance by more accurately comparing actual project expenditures versus baseline costs through the integration of scope, cost, schedule and risk factors, and establishing an action plan to correct any variances from the cost and schedule baseline. This will encourage both Consultants and Contractors to use effective internal cost and schedule management control systems, will enable the CMT to provide more meaningful and accurate monthly progress reporting, and will provide for better forecasting of future performance based on cost trends to date. The EVM procedures to be considered will be established by the CMT and will be in accordance with industry standards.

6.2.7 Cost-Risk Analysis

The CMT is also considering the utilization of a Cost-Risk Analysis team to evaluate risk and opportunity events relating to cost and schedule for each project segment, with the goal of:

- Developing consensus of the project uncertainties and cost estimates
- Identifying key project risk factors and developing risk mitigation strategies
- Establishing better information for budgeting and scheduling
- Increasing the likelihood of delivering the project within the established budget and schedule
- Providing a basis for better communication with political decision-makers and the public regarding realistic cost ranges for the project.

A kickoff meeting will be held between the CMT and the cost-risk consultant to discuss the project scope, schedule and estimates. The outcome of the meeting will be the development of refined based cost estimates for each segment, removing all contingency costs.

A cost-risk workshop will then be held to:

- Develop a project flowchart considering durations, linked tasks, and constraints
- Develop the initial risk and opportunity uncertainties (risk and opportunities register) and probability of occurrence
- Quantify the risks and opportunities and where they occur in the flowchart.

A cost-risk model will then be developed to establish the initial range of probable costs for the project, and subsequently a summary report will be prepared for presentation to the EOC. The results of the study will be evaluated, approved recommendations will be incorporated into the established budget and schedule, and adjustments will be made to the project financial plan in conjunction with the work program update cycle. Updates to the cost-risk analysis may be required as the project progresses.

6.2.8 Charts of Accounts and Allocations

Funding allocations per financial phase will be provided and updated as appropriate by the D4 Programs Office in the development of the Initial Financial Plan and subsequent Annual Updates.

6.2.9 Construction Cost Targets

FDOT has established a target of approximately 10% above the awarded bid price for final construction cost.

6.2.10 Contingency Management

The cost methodology described in Section 6.2.2 includes contingencies for all the various cost estimate components. As part of the of the cost-risk analysis, contingency needs will be re-

evaluated to ensure that the potential known project risks, as well as the unknown, unanticipated risks are adequately covered in the baseline budget.

Construction contingency budgets will be maintained by the Central Office as a statewide managed program. A budget in the amount of approximately 10% of the programmed construction budget for any given fiscal year is set aside to cover construction overruns. The construction incentives budget (typically 3-5% of the awarded bid price) will be programmed by FDOT D4 in the year of contract award for the individual project segments.

As the project progresses, cost deviations from the baseline budget will first be mitigated through reallocation of available funding from completed project segment phases, where appropriate. Any required reallocations or use of contingency budgets will be fully documented and elevated to the appropriate CMT, FDOT or FHWA management level for approval prior to implementation.

6.2.11 Cash Flow Management

The FDOT Comptrollers Office will derive cash flow projections for the project based on payout curves established for the various project phases, and will allocate funds accordingly to FDOT D4. FDOT D4 Programs staff, in collaboration with the CMT, will monitor actual expenditures versus projected cash flows and suggest any programmatic adjustments to optimize the project schedule. Cash flow management will be further described in the Initial Financial Plan.

6.3 SCHEDULE MANAGEMENT

6.3.1 Schedule Management Plan

The CDC, in collaboration with the D4 Scheduling Office, will be responsible for the development and maintenance of the master project schedule. Continual maintenance of the master project schedule will be a critical project control element in accurately tracking, reporting and forecasting project progress.

A preliminary corridor schedule has been developed in accordance with the current work breakdown structure and funding availability. The CDC and D4 Scheduling Office are currently standardizing and refining the elements, interdependence of activities, and timeline of the Master Design Plan and the project segment major milestones. Further refinements, flexibility and detail will be incorporated into the schedule as part of the Master Design Plan development and costrisk analysis to establish the master baseline schedule.

The Master Design Plan development will provide for further definition of the project segment limits and priorities and the specific design components and critical path elements of each project segment. Schedule refinements will take into account both corridor-wide and segment-specific considerations. Corridor-wide considerations will include evaluating overall traffic control phasing and constructability, 'grouping' of projects to maximize the benefit of available funding and minimize 'throwaway' construction, and balanced construction lettings to optimize bid competition and minimize costs. Segment-specific considerations will include early identification of critical path design and construction elements, maximizing schedule 'float' in achieving milestones to allow for recovery from potential delays, evaluating critical path elements for adjacent segments and other concurrent projects influencing the corridor to avoid contractor 'overlap', and balancing schedule phase reviews to avoid overburden to review staff.

The cost-risk analysis will evaluate schedule-related risks associated with design complexity, multiple agency coordination and plans review requirements, right-of-way, utility and permitting requirements, funding restrictions, segment interrelationships, third party coordination requirements, etc. to verify the amount of schedule flexibility to allow for project uncertainties.

The master schedule will be updated on a monthly basis by the CDC and D4 Scheduling Office utilizing approved segment design schedule updates from the Design Project Managers and construction segment schedule milestone updates provided by the CCEI Senior Project Engineers. Master Design Plan and segment design and construction progress will be tracked in relation to the schedule baseline, and schedule recovery plans (i.e.- alternate approach solutions, resource allocation adjustments, etc.) for activities varying from the baseline will be documented as part of the monthly Project Status Report.

6.3.1.1 Integrated Updating

The master schedule will fully integrate the individual project segment activities, such that any change to one activity will be reflected in interdependent activities throughout the entire project schedule. Common segment activities and phases will also be linked to allow for efficient 'roll-up' of data for streamlined corridor-wide progress reporting of key milestone activities within each project phase. The schedules will be housed on the D4 intranet with secured access rights by the D4 Scheduling Office and the CMT, allowing for coordinated, accurate and efficient monthly updates to the master schedule.

6.3.2 Segment Design Consultant Schedule Management

Within 10 days after notice to proceed, the SDC's will provide a detailed project activity / event schedule and an anticipated payout and fiscal progress curve based on the master schedule template and the negotiated final design scope of each project segment. Schedule activities are to be included for FDOT and third party submittal reviews and coordination, and permitting, railroad and utility coordination and agreement tasks. Upon CMT acceptance, the schedule and progress curve will be incorporated into the master project schedule and will become the baseline upon which to measure progress.

As part of the monthly progress meetings, the SDC's will provide schedule updates and documentation in the status report to the Design Project Managers for approval.

6.3.3 Construction and Supplier Schedule Management

Within 21 days after contract award, the Contractors will be required to submit a detailed work progress schedule and construction plan narrative for each project segment that reflects the interdependence of construction activities and the sequence of work in sufficient detail for the CCEI's to monitor and measure the progress of each activity. Activities are to be included for procurement fabrication, delivery of materials and equipment, review time for shop drawings and submittals, any required utility adjustment schedules, and permitting. Each activity will include a begin work date, duration, and a monetary value. Upon CMT acceptance, the schedule milestones will be incorporated into the master project schedule and will become the baseline upon which to measure progress.

The schedule will be reviewed and updated on a monthly basis by the Contractor and the FDOT and CCEI Project Engineers to coincide with the progress payment period and monthly progress meetings. Significant revisions in logic or duration from the baseline schedule must be addressed in writing by the Contractors. Progress payments may be withheld by the Project Engineers if the Contractors fail to provide schedule updates within the time frame allotted in the specifications.

6.3.4 Schedule Assumptions

A preliminary corridor schedule has been developed in accordance with the current work breakdown structure milestones and funding availability. Schedule activities and duration assumptions for the various project uncertainties will be developed and documented as part of the Master Design Plan development and cost-risk analysis. As the project progresses and uncertainties become more defined, the schedule will be adjusted accordingly.

6.3.5 Baseline Schedule

The preliminary corridor schedule is provided as Exhibit K in the Appendices. As part of the Master Design Plan development and cost-risk analysis, the preliminary master schedule will be further defined and detailed to establish the master baseline project schedule to be identified in the Initial Financial Plan.

7.0 PROJECT REPORTING AND TRACKING

7.1 STRATEGY

The project reporting and tracking procedures outlined throughout Section 7.0 are the key components in ensuring that the project budget and schedule will be maintained to the maximum extent possible, the project will be completed to the highest level of quality, and that Federal and state policy and procedures will be enforced and complied with.

The reporting of these procedures will be coordinated, consolidated and documented as part of the Project Status Report (PSR) to be prepared on a monthly basis for the project. Monthly project activities involving scope, cost and schedule changes, quality reviews, cost and schedule progress, EEO compliance, and contract performance components will be documented by the applicable CMT managers for all active phases of each of the project segments. Any cost increases, schedule changes, and deficient quality and performance issues will include proposed measures to mitigate these issues, and will be used to identify trends and forecast project performance to minimize future occurrences. Key upcoming project activities, issues and milestones will also be reported.

Project tracking and reporting activities will be integrated through FDOT D4's Project Suite, the Electronic Document Management System (EDMS), Electronic Review Comments (ERC), Primavera master project schedule, Consultant Invoice Transmittal System (CITS), SiteManager, Equal Opportunity Report (EOR) System, and the project web site to allow for efficient, up to date and consistent progress reporting.

7.2 PROJECT SUITE

Project Suite is a composite database on the D4 Transportation Development intranet site that currently houses the following project information:

- Identification numbers, project manager, consultants
- Location
- Political districts / representatives
- Description and history
- Funding status
- Scope changes
- Schedule milestones
- Exceptions, variations, and typical section events
- Survey work orders
- Permits and milestones
- Commitments
- Status activities (current and upcoming) and issues
- Contacts (internal and external)
- Project Status Reports.

Project Suite provides for controlled access and update authority to various fields by the appropriate D4 office to ensure the integrity of sensitive project data.

To enhance monthly progress reporting for the I-595 project, it is the intent of the CMT to supplement current Project Suite input fields to include additional design and construction components for the integration of project cost and schedule performance status utilizing earned value methodologies.

7.3 WEB SITE

The CDC will be responsible for upgrading and maintaining the current I-595 project web site, <u>www.i-595.com</u>. The project web site will provide for secured project team and public access for the purpose of disseminating up to date project information and enhancing both internal and external communication. The web site will house:

Internal and external access:

- General project and contact information
- Newsletters, announcements, etc. for current and upcoming public meetings and events
- Frequently asked questions about the project (FAQ's)
- Traffic advisories and safety messages
- Archives of official record documents
- Public requests for information and feedback on information disseminated by FDOT
- Description and status of corridor and individual project segments
- Schedule milestones
- Upcoming procurements and associated project information
- Video clips and renderings of proposed and completed project improvements.

Internal access only:

- Project team organizational structure, contacts, roles and responsibilities
- Contractual agreements and project commitments
- Templates, meeting logs, and documentation for project correspondence
- Upcoming internal project meetings / events, action items, announcements and associated reference materials sorted by functional area
- Project team e-mail correspondence and links to all pertinent project reports, records, documentation and D4 databases.

7.4 REPORTS

7.4.1 Project Status Report (PSR)

The Project Status Report (PSR) will be derived from the D4 Project Suite database to provide a concise, but comprehensive overview of the project status from both a corridor-wide and segment-specific perspective. The PSR will also provide the basis of information required to develop the Annual Updates to the Financial Plan. The PSR will contain:

7.4.1.1 General Information (corridor and segment-specific)

- Project identification, location and description
- Project management and consultant / contractor team
- Third party stakeholders and roles.

7.4.1.2 Activities and Deliverables

- Significant activities and deliverables completed during the reporting period, including meetings; public involvement activities; design and permitting packages submitted; QA/QC, design phase, VE, constructability, performance, compliance, and third-party reviews; advertisements and awards; claims requests, contract / supplemental agreement / third party agreement negotiations, and executions; and design, right of way, utility, and construction milestones achieved
- Significant activities and deliverables anticipated for the next two reporting periods.

7.4.1.3 Action Items / Outstanding Issues

• Identification and explanation of significant or sensitive issues requiring action and/or direction in order to resolve, including delays or potential impacts to project commitment,

milestone and/or final completion dates; deviations from approved scopes and budgets; quality and safety deficiencies; and contractual non-compliance issues

- Status of issues, recommended course(s) of action to resolve and recover, responsible parties, and due dates
- Remedial action taken and cumulative impacts to baseline scope, schedule and budget.

7.4.1.4 Schedule

- Latest approved schedule baseline for major project segment design, construction, permitting, utility and right of way activities, phases and/or milestones
- Current overall project segment completion percentage versus latest approved schedule baseline completion percentage
- Completion percentages versus latest approved schedule baseline completion percentages for major project segment activities, phases and/or milestones
- Explanation for any schedule delays, and initiatives being analyzed or implemented for schedule recovery (unless previously documented under 'Action Items / Outstanding Issues').

7.4.1.5 Cost

- Funding status and planned funding obligations and disbursements
- Latest approved budget baseline for major project segment activities and/or phases and contingencies
- Accrued expenditures to date
- Current forecasted cost
- Variance between current forecasted cost and latest approved budget
- Explanation for any cost deviations from the approved budget, and initiatives being analyzed or implemented for recovery from cost overruns (unless previously documented under 'Action Items / Outstanding Issues')
- Any speculative cost changes, status and estimated magnitude of the cost changes, and evaluation of the adequacy of remaining contingencies to keep the project within the latest approved budget.

7.4.2 Other Internal Reports

Internal reports will also include standard reports in accordance with the Consultant and Contractor scopes of work, including monthly progress reports that will be used as a basis for monthly progress payments and development of the PSR.

7.4.3 External Reports

Any required external project reports will be developed and updated as necessary by the CMT as directed by the EOC and/or FHWA. Various project reports and status information will be posted on the project web site for public and agency access, as appropriate.

7.4.4 FHWA / EOC Reports

The PMP and Financial Plan and the associated updates will be developed and submitted in accordance with FHWA requirements. The PSR will be submitted to the FHWA Area Engineer on a monthly basis. Regular meetings will be scheduled with the EOC, anticipated to coincide with the quarterly D4 Directors' PSR meetings, to discuss the project status and address any issues requiring EOC review, direction and/or approval.

The Corridor Design and Construction Managers will also schedule I-595 meetings with the FHWA Area Engineer to coincide with the Area Engineer's regular meetings with D4 management staff. Additional meetings will be scheduled as required for major milestone events or significant and sensitive issues requiring immediate elevation to the EOC and FHWA.

8.0 PROJECT MANAGEMENT CONTROLS

As described in the previous sections of the PMP, an integrated team of FDOT D4, FDOT Central Office, CDC and CCEI staff will ensure efficient and effective management of the project quality, cost, schedule and reporting to meet the goals and objectives of the project. The following sections include additional project control measures to be utilized by the CMT.

8.1 RISK MANAGEMENT PLAN

At the conclusion of the cost-risk analysis (refer to Section 6.2.7), the CMT will establish a risk management plan outlining the key risk factors for the project and a risk mitigation strategy to identify, analyze and respond to project risk throughout the design and construction phases to better control project costs and schedule.

8.2 SCHEDULING SOFTWARE

All project schedules will be developed and maintained using Primavera software to ensure uniformity and compatibility in tracking, assessing and reporting on project status through construction completion.

8.3 COST TRACKING SOFTWARE

Existing FDOT accounting systems will be utilized for the project. The Consultant Invoice Transmittal System (CITS) will be used for billing, tracking and payment for all Consultant contracts, and SiteManager will be used for all billing, tracking and payment for the construction contracts. The Consultants and Contractors will also be required to maintain an internal job cost accounting system that is acceptable to FDOT.

8.4 PROJECT METRICS

A variety of metrics will be utilized by the CMT to measure and improve project cost and schedule control, quality and performance, and to minimize the likelihood of unanticipated project events, cost overruns and schedule delays.

It is anticipated that earned value management (EVM) procedures will be utilized to assess monthly project performance, establish an action plan to correct any variances from the established cost and schedule parameters, and to better forecast future performance based on cost and schedule trends to date. EVM results and recommendations will be documented in the monthly Project Status Report (refer to Section 6.2.6 for further information).

Quality assurance, quality control, peer, sufficiency and phase submittal reviews will be conducted by the CMT and D4 functional area staff to ensure project quality, validate constructability and biddability of the design, and that all project deliverables and work products are in accordance with project design and construction criteria and standards (refer to Section 4.0).

Design and construction progress meetings will be held on a regular basis (monthly as a minimum) to monitor the status of task budgets and deliverables and to review action item activities. Detailed action item reports will be continually updated to track project activities and third-party coordination efforts, with a responsible party and schedule assigned for each activity.

Performance evaluations of all Consultants and Contractors will be conducted by the CMT on a regular basis to identify any areas where corrective action may be required.

Public opinion of the project and information provided by FDOT and the project team will be solicited through public meetings and events, as well as the project web site. Public feedback will be evaluated to enhance communication and information exchange procedures.

8.5 VALUE ENGINEERING, VALUE ANALYSIS

8.5.1 Value Engineering (VE)

As part of the PD&E phase of the project, a series of week-long VE sessions were conducted by a comprehensive Value Engineering / Design Review (VE/DR) team consisting of staff from FDOT D4, Broward County, Florida's Turnpike Enterprise, and specialty consultants. Refer to the *PD&E Value Engineering / Design Review Documentation Report* for more information on the significant VE refinement recommendations for the Master Plan LPA that were incorporated into the PD&E concept alternatives.

VE philosophy and procedures will continue to be utilized in the development of the Master Design Plan, which will provide further refinement and validation of the project concept approved under the PD&E phase. The VE team will be assembled for review of the refined line and grade geometry and segment limits prior to Master Design Plan approval to ensure that the most cost effective design and advertisement packaging will be carried forward into final design.

Early in the Final Design phase of the project segments, additional VE studies may be performed and will focus on drainage requirements, minor geometric refinements, structures and utilities. The VE team will remain consistent, ensuring continuity of recommended cost-effective improvements for each of the project segments.

All VE reporting, recommendation approvals, and implementation documentation will be in accordance with *FDOT Procedure No. 625-030-002-f – Value Engineering Program*.

8.5.2 Value Engineering Change Proposals (VECP's)

FDOT encourages Contractor-initiated Value Engineering Change Proposals (VECP's) during the construction process that may reduce the project cost, increase cost effectiveness, or significantly improve project quality without degrading performance, maintainability, or safety. The VECP requirements, review, processing, and shared collateral cost savings provisions will be in accordance with Article 4-3.9.5 Division I of the *FDOT Specifications*, and *FDOT Procedure No.* 625-030-005-c – Value Engineering Change Proposal. The CMT will be responsible for all documentation and reporting of the VECP process, and for incorporating the approved changes into the project schedule and cost baselines.

8.6 SUBSURFACE INVESTIGATIONS

Geotechnical, contamination, and utility subsurface investigations will be initiated early in the project design phase to identify in situ soil properties, any potential utility conflicts, contaminated or unsuitable material, and to establish the feasibility of proposed bridge and wall substructure alternatives. As a result of these investigations, it is anticipated that utility relocations and contaminated material removal will be completed under separate contracts prior to the construction of the individual project segments, where feasible.

8.6.1 Geotechnical

All geotechnical investigations for the project will be in accordance with the *FDOT Soils and Foundations Handbook*, unless otherwise directed by the D4 Geotechnical Engineer.

The CDC will provide permeability tests for the design of exfiltration trenches as part of the Master Design Plan drainage analysis, and will utilize existing geotechnical information and provide one standard penetration boring per proposed structure to determine feasible bridge foundation types for the Bridge Development Report.

The SDC's will provide a full geotechnical investigation for each project segment, including the development of Final Roadway, Bridge/Walls and Miscellaneous Structures Geotechnical Reports to:

- Provide soil and rock classifications
- Summarize laboratory testing results
- Delineate the horizontal/vertical limits of unsuitable and/or contaminated material
- Provide geotechnical recommendations for standard and special design considerations
- Document the analysis of foundation alternatives and provide recommendations.

8.6.2 Contamination

A comprehensive Level 1 contamination evaluation was completed for the corridor as part of the *I-595 PD&E Study*. Results of the evaluation are provided in the *PD&E Contamination Screening Evaluation Report (CSER)*.

Upon the completion of the Initial Plans in the Final Design phase of each project segment, a Level 2 contamination assessment will be conducted by the D4 Contamination, Assessment, and Remediation (CAR) contractors for all sites that were ranked as medium or high risk in the Level 1 assessment, and a detailed scope of work and sampling strategy will be developed for each site to address potential contaminants in the subsurface. A Level 3 assessment will likely be developed for any contaminated parcels to be acquired by FDOT. All assessments will be performed in accordance with Volume 2, Chapter 22 of the *FDOT PD&E Manual* – Contamination Impacts. Asbestos and lead base paint testing will also be performed on existing bridges during the Final Design phase.

8.6.3 Utilities

The CDC will be responsible for providing full corridor utility management and coordination for the project. During the Master Design Plan phase, the CDC will initiate contact with the Utility Agency Owners (UAO's) provided in Section 16.1 and request utility markup plans and as-builts to develop the composite utility drawings for the corridor. Potential utility impacts will be evaluated and coordinated with the UAO's to establish preliminary utility exceptions and conceptual relocation and subordination agreements (including compensable costs), as required. Further definition and refinement of the utility impacts, costs, relocation requirements, exceptions and agreements will be developed and finalized by the SDC's, with the oversight of the CDC during the Final Design phase of the project segments.

8.7 CONTRACTOR OUTREACH MEETINGS

Due to potential conflicts of interest in pursuing the construction contracts, it is not anticipated that Contractor outreach meetings will be held early in the project development phase. FDOT D4 and the CDC are adequately staffed with experienced construction personnel that will provide constructability input throughout the Master Design Plan and final design phases of the project segments.

However, well in advance of construction lettings, the Contractors will have access to the procurement schedule and contract documents via the project web site in order to become familiar with the individual segments scope of work, supplemental specifications, and design details. The Contractors will also be encouraged to meet with the appropriate CMT staff to address any questions they have prior to construction advertisement.

8.8 PARTNERING

To achieve the highest level of project synergy and success, the CMT will facilitate partnering initiatives with the internal and external design, construction and operations staff, state and local transportation and permitting agencies, local and area governing bodies and elected officials, and other project stakeholders as early as possible, and throughout the project duration. This will be achieved through formal agreements (refer to Section 1.3), informal agreements and commitments through technical and informational coordination, workshop, hand-off and progress meetings, and dissemination of project information and solicitation of public feedback via the project web site, with the ultimate goal of providing:

- The best possible quality in the design and construction product.
- Recommendations that meet the greatest number of reciprocal project objectives.
- Recommendations that generate high levels of community support.
- Recommendations that strive to minimize negative impacts to the community's socioeconomic structure.
- A project that strives to minimize negative impacts to the environment.
- A 'best value' project that can be implemented for a reasonable cost.

8.9 OWNER CONTROLLED INSURANCE PROGRAM (OCIP)

An OCIP will not be utilized for this project. All Consultants and Contractors will be required to meet minimum insurance and bonding requirements in accordance with FDOT policy and/or the project-specific contractual requirements.

9.0 ENVIRONMENTAL MONITORING

9.1 ENVIRONMENTAL COMMITMENTS

The *PD&E Type 2 Categorical Exclusion* document prepared for the I-595 corridor improvements summarizes the process and findings of the environmental impacts evaluation associated with social, cultural, natural environment and physical components, and documents the project commitments established as a result of the evaluation. These commitments (detailed in Section 1.1.4 of the PMP) include the environmental commitments to be implemented and monitored by the CMT and the FDOT D4 Environmental Management Office (EMO), which are summarized in the Environmental Commitments Matrix **included as Exhibit L of the Appendices**. These commitments will be reviewed as part of the re-evaluation and permitting processes and will be incorporated during the appropriate phase(s) of the project.

9.2 PERMITTING REQUIREMENTS

The proposed project improvements will require several different types of permits from the jurisdictional regulatory agencies, including the Broward County Environmental Protection Department (BCEPD), Florida Department of Environmental Protection (FDEP), South Florida Water Management District (SFWMD), US Army Corps of Engineers (ACOE), and United States Coast Guard (USCG). The anticipated permits for the proposed improvements include the following:

- BCEPD Environmental General Resource License
- BCEPD Surface Water Management License
- BCEPD Tree Removal License
- FDEP NPDES (Stormwater Pollution Prevention Plan)
- SFWMD Environmental Resource Permits (corridor conceptual and individual segments)
- SFWMD Right of Way Occupancy Permit
- SFWMD Water Use Permit
- ACOE Dredge/Fill Permit
- USCG Bridge Permit.

In addition to obtaining the permits from the regulatory agencies listed above, the proposed project improvements will require coordination and/or permits with several local drainage districts. The local drainage districts along the project corridor include:

- Central Broward Water Control District (CBWCD)
- Old Plantation Water Control District (OPWCD)
- Plantation Acres Improvement District (PAID)
- Tindall Hammock Irrigation & Soil Conservation District (THISCD).

During the Master Design Plan phase, the CDC will complete the FDOT's Permit Involvement Form to confirm the project permitting requirements.

9.3 ENVIRONMENTAL MONITORING PLAN

The CMT, in collaboration with the D4 EMO, will be responsible for the overall management of environmental compliance for the project. The CDC will provide full corridor permit management and coordination, including corridor-wide and segment-specific permitting initiatives. The CCEI's will be responsible for monitoring the Contractors' compliance with environmental commitments during the construction of the individual project segments. The project web site and D4 Electronic Data Management System (EDMS) will be utilized for records management to enable efficient updating and retrieval of environmental documentation, commitments, permits, and tracking and reporting mechanisms. All monitoring status and activities will be summarized in the monthly Project Status Report.

9.3.1 Design

The CDC will be responsible for permit research and the initial coordination for all required project permits. Early and continual communication with the regulatory agencies will expedite the resolution of permitting issues and the preparation of the required permit applications. The CDC will prepare the conceptual SFWMD Environmental Resource Permit (ERP) applications for the corridor, which will include right of way occupancy, dredge/fill, wetland jurisdiction, and mitigation plan documentation. The conceptual ERP's will be used as the basis for the individual segment ERP's to be developed by the SDC's during the Final Design phase.

The CDC will also be responsible for the analysis of all required project re-evaluations, agency coordination and guidance to the SDC's during the project segments permit application and compliance review process, and ensuring that project commitments are incorporated into the permit applications and contract documents through scheduled application, report and phase submittal reviews.

Monitoring of the permitting processes and environmental commitments compliance during design will be enhanced through utilization of the Commitments Matrix (Exhibit L) and the D4 Drainage Database. The Commitment Matrix provides the complete listing of environmental commitments associated with the individual segments, the associated regulatory agencies for each commitment, and the individual segment re-evaluation schedule per project phase. The D4 Drainage Database will be utilized to:

- Document design and construction permitting requirements for the project
- Identify the responsible parties for application preparation and the associated regulatory agency
- Monitor permit application schedules and status
- Document permit issuance and expiration dates
- Provide links to permit application packages and issued permits.

9.3.2 Construction

The CCEI's will be responsible for enforcement of good environmental practices during construction, for assuring that all provisions of the contract related to environmental protection are followed, and all permit conditions are met by the Contractor. All environmental monitoring activities will be in accordance with Section 8.2 of the *FDOT CPAM* – Environmental Commitment Compliance. As an additional level of environmental oversight, the D4 Construction Environmental Coordinator (DCEC) will monitor permit conditions and environmental commitment compliance during construction.

As part of the pre-construction conference, a comprehensive review of all permits and specific stipulations will be conducted, and a list of environmentally sensitive areas and special project features and permits will be provided to the Contractor.

As part of the environmental monitoring activities, the CCEI will:

- Notify the regulatory agencies and the DCEC of the permitted activity start and completion dates, and any required modification to permit procedures and/or schedule
- Prior to initiation of earth moving activities, ensure that the Contractor has provided a certification statement for compliance with all provisions of the approved Stormwater Pollution Prevention Plan (SWPPP) for the project
- Inspect, document deficiencies, and ensure corrective action by the Contractor in enforcing the provisions of the Contractor's erosion control plan and the project SWPPP
- Ensure Contractor compliance with the following provisions of the *FDOT Specifications*:
 - Section 110-6 Removal of Existing Structures
 - Section 110-6.5 Asbestos Containing Materials Not Identified Prior to the Work

- o Section 560-16 Lead Abatement
- Section 110-9.5 Hazardous Materials / Waste
- Section 7-1.6 Discovery of an Unmarked Human Burial
- Section 7-1.4 Compliance with the Federal Endangered Species Act
- Section 7-1.8 Compliance with Section 4(f) of the USDOT Act
- Section 7-2.2 Work or Structures in Navigable Waters of the U.S., Waters of the U.S., and Waters of the State
- Monitor all permit expiration dates and advise the DCEC at least six months in advance if the permit will expire prior to the permitted activity being completed
- Survey the structure and treatment area elevations of stormwater treatment facilities and verify that the information is included in the project as-built plans
- Notify the Corridor Construction Manager and DCEC and enforce violation procedures, including issuance of stop work orders as necessary, for environmental non-compliance conditions that are not immediately resolved by the Contractor
- At the significant completion stage, document exceptional environmental compliance issues or compliance procedures that were particularly effective or ineffective for distribution to D4 Construction and Environmental management staff.

The appropriate regulatory agencies, in coordination with the D4 EMO and Ft. Lauderdale Operations Center, will be responsible for monitoring all-post construction environmental performance associated with wetland mitigation sites and vegetation, endangered species, essential fish habitat, etc.
10.0 SAFETY AND SECURITY

10.1 DESIGN

The standards, codes, criteria and specifications to be utilized for the project design have been developed with safety considerations as an utmost priority. The work products to be provided during the design phase will be reviewed by the CMT and the FDOT D4 functional area offices to insure that the project elements can be constructed and operated in a safe manner. Construction, maintenance, and operations staff will be involved in the review process during every project phase to ensure safety considerations relating to constructability, maintenance, and traffic operations are addressed as early as possible in the design process.

Of utmost importance is the proper design of the geometry, signing, traffic control devices and Intelligent Transportation Systems (ITS) components to ensure the safe operation of the reversible lanes system. The ITS components required for the safe operation of the reversible lanes are comprised of individual elements that will be integrated for the reversible lanes system operation, which include: access control gates and barriers, automated security gates, dynamic message signs, lane control signals, variable speed limit signs, and weather monitoring stations (refer to Section 16.2 of the PMP and Section 9.25 of the *Preliminary Engineering Report* for further ITS component information).

It is currently anticipated that the reversible lanes (Segments 9 and 10) will operate as an electronically tolled express lanes system. Any System Operations Plan or System Maintenance Plan for the reversible lanes will be developed concurrently with the final design to ensure compatibility, safety and conformance of all project elements.

10.2 CONSTRUCTION

The Contractors will be required to provide a safe and secure environment for the traveling public and all project personnel in accordance with the regulations promulgated by the U.S. Dept. of Labor, Occupational Safety and Health Administration (OSHA), and all safety requirements stipulated in the *FDOT Specifications* and project segment-specific contract documents. This will include properly designed and implemented maintenance of traffic plans, safe and secure work zones, and adequate areas for field offices, stockpiling materials and storing equipment. The Contractors will be responsible for providing a safety plan for their personnel that at a minimum should include:

- Roles and responsibilities of safety / security staff
- Content and frequency of on-site safety meetings, training, inspections, reviews, and reports
- Procedures for daily work zone clean-up
- Site security plan.

The Contractors will also be responsible for providing an approved Incident Response Plan, which is to include:

- Details on public / emergency response agency notifications and coordination procedures
- Incident management and reporting procedures
- Safety provisions for the traveling public
- Handling of hazardous waste
- Traffic control and establishment / maintenance of detour routes when required for emergency closure of interstate and primary roads
- Emergency repairs and debris removal procedures
- Evacuation response.

A Security / Emergency Preparedness Plan is to be developed by the FDOT D4 Construction Office prior to construction letting and will be monitored by the CCEI's during construction. The

plan will be coordinated with all emergency response agencies and personnel, and will be in compliance with the State of Florida Emergency Response Procedures.

Homeland Security personnel may be consulted for any threat and/or vulnerability assessments that may be performed for the project infrastructure, and in particular, the elevated reversible lanes system. The assessment will consider first responder requirements for natural and manmade disasters, and response for system failures due to emergency situations.

11.0 TRAFFIC MANAGEMENT

11.1 DESIGN

As part of the Master Design Plan development, the CDC will be responsible for preparing a Master Traffic Control Plan (TCP) to reflect the overall construction phasing of the corridor, as well as the phasing for the interface of the individual project segments. The Master TCP will serve as an additional validation of the operability and constructability of the proposed PD&E phasing concept. Refined project limits will be established based on detailed conceptual traffic control and construction analysis to minimize phasing conflicts between project segments.

The SDC's will utilize the Master TCP to develop the TCP notes, sheets, cross-sections, and details for the individual project segments in accordance with the *FHWA Manual on Uniform Traffic Control Devices, Part VI (MUTCD)*; *FDOT PPM*, Volume I, Chapter 10 and Volume II, Chapter 19 – Work Zone Traffic Control, and the *FDOT Design Standards*, Series 600. Measures to be considered for the TCP design include:

- Maintaining the existing number of lanes in each direction during the peak traffic hours for the duration of the project
- Maintaining at least one access to all adjacent properties and businesses
- Maximizing construction operations during off-peak hours
- Minimizing the need for detours, temporary bridges, and lane closures
- Phasing requirements and construction activities of adjacent I-595 project segments and ongoing projects by others within the corridor limits
- Permanent and temporary drainage requirements of adjacent projects to maintain positive drainage at all times
- Coordinating with agencies having jurisdiction regarding the crossing, closing and/or relocation of expressway ramps and cross-roads and establishing the necessary agreements for the required closings or relocations
- Proper and efficient sequencing to minimize continual or repeated impacts to existing roadways and adjacent businesses
- Permanent and temporary advanced guide sign requirements to ensure proper signage through adjacent project segments during all phases of construction
- Maintaining existing Intelligent Transportation System (ITS) and lighting operations
- Strategic placement of detour, warning, and dynamic message signing and markings in coordination with jurisdictional authorities as necessary.

The TCP will be reviewed at all submittal phases by D4 design and construction staff to ensure that the plan is safe, cost-effective, constructible, in conformance with standard practices and procedures, and minimizes impacts to the traveling public and adjacent properties. The TCP will be formally approved by the D4 Construction Office upon the conclusion of the Constructability Review phase.

11.2 CONSTRUCTION

The Contractors will be required to construct the project and maintain traffic and access in accordance with the TCP contained in the contract documents, and the *FDOT Specifications*, Division I, Section 8 – Prosecution and Progress, and Section 102 – Maintenance of Traffic. The Contractor may propose an alternative TCP to the plan provided in the contract documents, which must be signed and sealed by the Contractor's Engineer of Record and will require the approval of the CMT and the D4 Construction Office prior to initiating work. FDOT approval of the alternate TCP does not relieve the Contractors of sole responsibility for all utility impacts, costs, delays or damages, whether direct or indirect, resulting from Contractor initiated changes in the design or construction activities from those included in the original contract documents. The CCEI's will be required to approve all changes to the TCP throughout the construction duration.

The Contractors will be required to provide a qualified Worksite Traffic Supervisor (WTS) as part of the Contractors' Quality Control Plan. The Contractors will be responsible for ensuring the WTS:

- Will be available 24 hours a day to review the project and participate in all changes to traffic control
- Will be present to direct the initial TCP setup and any changes
- Will promptly correct all safety deficiencies
- Will be available within 45 minutes after notification of an emergency situation to direct the repair of the work zone traffic control or provide alternate traffic arrangements
- Will perform a drive-thru inspection and observe traffic flow as soon as the work zone is activated and in subsequent phases of work as they are opened to traffic
- Will conduct daily inspections of all traffic control devices, traffic flow, and pedestrian, bicyclist, and business accommodations
- Will provide a signed and certified comprehensive weekly MOT Review Report to the CCEI's to include the condition of all traffic control devices, assurance that pedestrians and bicyclists are accommodated with a safe travel path separated from mainline traffic (where appropriate), assurance that existing businesses are provided with adequate entrances during business hours, and a listing of deficiencies and proposed corrective actions
- Will photograph or videotape each finalized TCP phase for submittal to the CCEI's.

The Contractors will also be responsible for providing an approved Incident Response Plan (refer to Section 10.2). The Contractors will be responsible for all aspects of traffic control within the project limits related to an incident, including but not limited to the extremes of opening all lanes to traffic, or the detour of the entire I-595 mainline onto adjacent roadways.

The CCEI's will be responsible for the oversight of the Contractors' traffic control efforts in accordance with the *FDOT CPAM*, Section 9.1 – Maintenance of Traffic. The TCP will be reviewed and discussed in detail at the pre-construction conference, which will include discussion of all inspections to be performed by the Contractors, responsibilities of the WTS, quality control, reporting, device installation and maintenance, variable message boards, speed restrictions, and the proper use of speed / traffic control law enforcement officers. The CCEI's will review and confirm the WTS' weekly MOT Review Report by conducting field inspections of the work zone. Any MOT deficiency noted by the CCEI's that is considered a severe hazard and life threatening will require immediate corrective action by the Contractors. Failure to correct the hazard immediately will serve as a basis to shut the project down and obtain other means to correct the hazard. The CCEI's will document traffic crashes that occur within the work zone, assess the relationship of the crash to the existing work zone traffic controls, and document recommended corrective measures for approval by the CCEI Senior Project Engineer and/or the Corridor Construction Manager.

In providing for effective traffic management, a collaborative effort between the CCEI's and the Contractors will be required to:

- Coordinate with local agencies regarding any restrictions and management of special events
- Coordinate with local emergency agencies to ensure safe and adequate passage of emergency vehicles through the work zones
- Coordinate traffic maintenance with other contractors (I-595 and others) to integrate temporary signing and traffic control devices between the various construction contracts
- Coordinate with, and assist the Public Information Officer (PIO) in the disbursement of project information to the media and the public, including status of construction, traffic pattern changes, periods of lane closures, traffic delays, alternate routes, incidents, and emergency procedures.

12.0 PROJECT EXTERNAL COMMUNICATIONS

12.1 COMMUNICATIONS PROGRAM OVERVIEW

The CMT, in collaboration with the FDOT D4 Public Information (PI) Office, will build on the successes of the I-595 PD&E Public Involvement Program (PIP) to establish a comprehensive I-595 external communications program with the key objective of maintaining the trust, support, and confidence of the project stakeholders, the public, and the media throughout the life of the project. The program will be structured to develop and maintain clear and continuous lines of communication with all interested and affected agencies, communities, and organizations, and to generate a broad understanding and support for the goals and objectives of the project. An effective partnership with the various stakeholders and the general public will be critical in developing a successful project responsive to the needs of affected entities and potential users. The Public Information Team will endeavor to provide consistent messages and themes to avoid public confusion and misinterpretation. Through external feedback, the functionality and efficiency of all communication procedures will be continually reviewed and modified to better serve the intended audiences. The key strategies that will be implemented in the program will include:

- Establishing a proactive Public Information Team consisting of experienced FDOT D4 and CMT staff that will be responsible for all media and public information efforts for the project. Under the direct oversight of the D4 PI Office, the Public Information Officer (PIO) will serve as the central point of contact for all public information activities to ensure the consistency of communications with all external parties.
- Establishing effective communication and coordination structure between the project technical and public information staff to enable the timely distribution of accurate, current and concise project information that is developed, presented, and/or requested.
- Collaborating with other state and local agencies with concurrent and adjacent projects to ensure that media and public inquiries and issues common to all projects are properly routed to the PIO, and that sufficient and accurate information is provided in return, and on a timely basis.
- Soliciting community input on the implementation and aesthetics of proposed noise barriers, as well as feedback on the effectiveness of the project communications program.
- Providing current project status information to the media and the public on a regular basis, including schedule milestone completion dates; significant contract advertisements, awards, or completions; projected costs; project events; and significant project modifications.
- Continually conveying updated commuter and traffic information, including traffic pattern changes, periods of lane closures, traffic delays and incidents, and available alternate routes or detours (during construction).
- Conveying, and mitigating to the maximum extent possible, construction impacts to the local residents and businesses (during construction).
- Responding to media and public questions and requests for information on a timely basis.
- Developing and enhancing stakeholder and community ownership and pride in the project through thorough communication of the project goals and benefits to the local and regional community.

12.2 PUBLIC INVOLVEMENT AND COMMUNICATIONS PLAN

12.2.1 Public Involvement Program (PIP)

The public involvement effort for the project was initiated during the original *I-95/I-595 Master Plan Study* and continued through the *I-595 PD&E Study*. An extensive Public Involvement Program (PIP), in compliance with the *FDOT PD&E Manual*; Section 339.155 of the Florida Statutes; Executive Orders 11990 and 11988; CEQ Regulations for Implementing the Procedural

Provisions of the National Environmental Policy Act (NEPA); and 23 CFR 771, was prepared for the *I-595 PD&E Study* in October 2003. In November 2003, an Advanced Notification (AN) Package was mailed to the State Clearinghouse and local, state, and federal agencies to begin the early communication and coordination process with governmental agencies.

In March 2004, several public involvement activities took place, including the launch of the project website; the distribution of the first project newsletter; and the holding of the project kickoff meetings. The website, <u>www.i-595.com</u>, was updated on a routine basis to include project newsletters, documents, and important announcements such as meeting dates and locations. The newsletters were distributed to residents, business owners, and other interested parties who attended the kickoff meetings or other project events. The project kickoff meetings were held to inform the public about the project and to give the public an opportunity to comment on the project.

On April 13, 2005 and April 14, 2005, public workshops were conducted to present the project alternatives to the public and to give the public an opportunity to comment on the project. In addition, the second project newsletter was distributed to the meetings attendees.

Between April and November 2005, several public involvement coordination meetings were held with local, state, and federal agencies, as well as local politicians and citizens. These meetings included, but were not limited to: Broward County Metropolitan Planning Organization (MPO), Broward County Community Involvement Roundtable, Broward County Technical Coordinating Committee, City of Plantation, City of Weston, Town of Davie, South Florida Water Management District, United States Coast Guard, South Florida Regional Planning Council, South Florida Regional Transit Authority, Hawks Landing Property Owners Association, Everglades Lakes, and Broadview Estates.

In November 2006, several key public involvement activities took place, including the distribution of over 1800 Public Hearing invitation letters; the display of four Public Hearing advertisements in the local Sun-Sentinel newspaper; the distribution of the third project newsletter; and the holding of the Public Hearing. The Public Hearing was conducted on November 29, 2005 to provide a third opportunity to publicly comment on the project and the evolving alternatives.

The main focus of the PIP was the early and continuous dissemination of information to government and regulatory agencies, local municipalities, county officials and staff, legislators, and communities to solicit feedback and concerns with the project objectives. This feedback was used as input into the transportation decision-making process and the establishment of project commitments (refer to Section 1.1.4) throughout the project development phase. The I-595 public involvement activities were also coordinated with the public involvement activities for the I-595 Rehabilitation, Resurfacing and Restoration (RRR) Project recently completed, and the Central Broward East-West Transit Study.

A *Public Involvement Report (PIR)* was prepared to summarize all of the public involvement activities that took place during the *I-595 PD&E Study*, and was included as Appendix A to the *Preliminary Engineering Report*.

12.2.2 Community Awareness Plan (CAP)

As a continuation of the successful PD&E PIP, the Public Information Team will develop the initial Level 4 Community Awareness Plan (CAP) for the project corridor during the Master Design Plan phase in accordance with the format and content requirements of the *FDOT D4 Community Awareness Plan Guidelines*, the *D4 Public Notification Process*, and the *D4 Local Government Input in Design Process*. The CAP will be refined as the project progresses toward the construction phase of the initial project segments. The objective of the CAP is to identify the means of notifying local governments, affected property owners, tenants, and the public of FDOT

D4's proposed construction and the anticipated impacts of the construction. In addition to the benefits of advance notification, the process will allow D4 to resolve controversial issues during the design phase of the project segments, including impacts to business and residential communities, noise abatement measures, drainage, and maintenance of traffic.

A key initial CAP activity will be corridor kickoff workshops to update the public on project activities that have occurred, and any re-evaluation requirements that have been identified since the Public Hearing was held in November 2005. The master project schedule, phasing plan, and key upcoming project and CAP activities will also be discussed at the workshops.

The draft CAP for the individual project segments will be prepared and submitted at the Initial Engineering submittal phase for review by the various D4 functional area offices. The development and implementation of the CAP during the design phase will involve the collaboration of the FDOT Design Project Managers, the Public Information Team, and the SDC's. The CCEI's and the Public Information Team will be responsible for ensuring the CAP implementation during construction.

The CAP is to include the following:

- Detailed description of the project (incl. typical sections, communities and properties affected by the project, major issues and community concerns and how they will be addressed, special project features and amenities, and project commitments to the community)
- Detailed description of issues and impacts (incl. potential schedule and contract time impacts, and the maintenance of traffic plan – including lane closure restrictions, detours and maintenance of access, and description of access impacts)
- Proposed major project phases / activities and timeline (incl. project schedule and timeline for completed, current and upcoming CAP activities).

As a minimum, the CAP activities for the individual project segments will include:

Pre-Initial Engineering Phase

 Hand-off Meeting at the beginning of the design phase to transfer knowledge of all completed and current public involvement activities, comments, and commitments to the FDOT Design Project Manager and SDC.

Initial Engineering Review

- Phase submittal plans to city, county officials, and staff to solicit comments and concurrence.
- Notice of access impact to affected property owners.

Final Engineering Phase

- Project information workshop(s) with city and county staff, elected officials, property owners, and interested public to solicit comments. A summary report will be distributed to all attendees.
- Phase submittal plans to city, county officials, and staff, and notice to government agencies to solicit comments and concurrence.

Throughout Design

 Presentations to city, MPO, County Commission, legislators and community groups regarding design, impact and construction status.

Prior to Construction

- Hand-off Meeting from design staff to construction personnel.
- Mass mailing of project information flyers/brochures with construction dates and specific traffic impact information.

- Project information meeting / open house for all interested parties to review plans, construction schedule, and traffic impacts.
- First news release of the PIO's Weekly Traffic Report regarding the project start date, pertinent project information and specific traffic impacts (1 week prior to construction).

Throughout Construction

- News release of PIO's Weekly Traffic Report.
- Mass mailing of project information flyers for total closures.
- Presentations to city / county officials, legislators, community groups, and property owners regarding project status (as needed or requested).

12.2.3 Metrics

Public opinion of the project, verbal and written information provided by the project team, and the effectiveness and expedience of response to public questions and requests for information will be surveyed and solicited through public meetings and events, as well as the project web site. Public feedback will be routinely evaluated to enhance communication and information exchange procedures.

12.2.4 External Communication Tools

A variety of communication tools will be used to deliver, gather and distribute information to the project stakeholders and the public. Throughout the process, the CMT will integrate public information tasks with design, right of way and construction phase activities. Input from government and regulatory agencies, representatives of special interest and advisory groups, the public, and elected and appointed officials will be utilized in the decision-making process, within the bounds of financial and engineering feasibility. News releases, display ads, web sites, newsletters, meetings, briefings, presentations, hotlines and special events will be used to solicit feedback and keep the public informed of project status and activities.

12.2.4.1 Media Relations and Access

Local media groups contacted during the PD&E phase of the project have been identified and documented in the PIP Summary as part of the *PD&E Public Involvement Report (PIR)*. The Public Information Team will modify the media contacts listing as necessary during the life of the project to include:

- Contact information for major print and electronic media in the area.
- Listing of publications in the metropolitan area including weekly and small daily community newspapers, and newsletters for civic, government, neighborhood, and non-profit organizations and groups.

Media relations and access strategies will be developed by the Public Information Team to establish the protocol and schedule in providing information to the media, as well as receiving and responding to media inquiries. Information to be provided to the media may include Weekly Traffic Reports, traffic incidents, special events or announcements, and any required emergency procedures. To ensure the accuracy and consistency of all information to be provided, all correspondence and communication with the media will be coordinated through the PIO, and reviewed by the D4 PI Office and D4 Directors as necessary prior to release.

12.2.4.2 Agency / Public Meetings

As part of the CAP, the Public Information Team will organize, coordinate, facilitate and document various agency and public meetings and presentations throughout the duration of the project, including:

- Corridor-wide public kickoff meetings / workshops
- Agency information meetings with the Broward County MPO, City of Plantation, City of Weston, and Town of Davie staff and elected/appointed officials
- Public awareness meetings with Broward County MPO, City of Plantation, City of Weston, Town of Davie, special interest groups (private groups, homeowners associations, environmental groups, minority groups), and the interested public
- Homeowner associations meetings
- Standing advisory committee / team meetings
- Individual project segment kickoff meetings / workshops
- Public outreach meetings to discuss noise abatement and tolling components of the project
- Public hearings (as necessary) in compliance with the requirements of any project reevaluations or tolling of the reversible lanes.

12.2.4.3 Standing Advisory Teams

There are several standing advisory teams with specific functions that will also serve as information sources and outlets for the I-595 project. It is anticipated that the following standing advisory groups will be included in the I-595 communications process:

- Broward County MPO Technical Coordinating Committee
- Broward County Community Involvement Roundtable (CIR)
- Broward County Community Safety Team meets every 2 months to discuss reduction of the number and severity of accidents in the county through education of the public, law enforcement, emergency services, and engineering.
- Freeway Incident Management Team assembly of law enforcement, fire rescue, and emergency management personnel to discuss accidents on a regional basis (hosted by FDOT).
- Corridor Advisory Team (CAT) An I-595 advisory team may be organized to create a forum to provide updates on the project status and schedules during the construction phase of the individual project segments. This will be further discussed by the CMT and the D4 PI Office during the development of the CAP.

Public Information Team and CMT representatives will attend and participate in advisory meetings as required.

12.2.4.4 Speakers' Bureau

Upon request, the Public Information Team will assign project representative(s) to speak to community organizations about the proposed project improvements. Presentation templates will be developed and tailored for specific audience interests and topics as necessary. A listing of individual community groups that the project was presented to during the PD&E phase is included in the PIP Summary as part of the *PD&E Public Involvement Report (PIR)*.

12.2.4.5 Public / Agency Database

A public involvement database was created during the *I-595 PD&E Study* that identifies all of the governmental and regulatory agencies, county and local municipalities, legislators and local elected/appointed officials with jurisdictional authority within the limits and proximity of the project. The database will be regularly modified as necessary to update the list of contacts, and will be made available as part of the project web site.

A Geographic Information System (GIS) based Public Involvement Information Management System (PIIMS) was also maintained during the PD&E process to plot the addresses of workshop and hearing attendees, parties who provided comments, and other interested parties. The PIIMS

enabled the addresses of parties with special interests to be plotted for geographical analysis, as well as to assess the effectiveness of the public involvement program. Within the PIIMS, it was also possible to click on individual plotted points to retrieve digitized copies of correspondence and other miscellaneous data associated with the address. The necessity of updating and utilizing the PIIMS during the design and construction phases of the project will be discussed by the CMT and D4 PI Office during the development of the CAP.

12.2.4.6 Web Site / E-mail / Letterhead

The CDC will be responsible for upgrading and maintaining the current I-595 project web site, <u>www.i-595.com</u>. The project web site will provide for secured project team as well as public access for the purpose of disseminating up to date project information and enhancing both internal and external communication. The web site will house the following for external public access:

- General project and contact information
- Newsletters, announcements, etc. for current and upcoming public meetings and events
- Frequently asked questions about the project (FAQ's)
- Traffic advisories and safety messages
- Archives of official record documents
- Public requests for information and feedback on information disseminated by FDOT
- Description and status of corridor and individual project segments
- Schedule milestones
- Upcoming procurements and associated project information
- Video clips and renderings of proposed and completed project improvements.

The Public Information Team will utilize the web site, e-mail and direct mail to inform the public and stakeholders about the status of project development and upcoming public events and comment opportunities. Templates for all project-related logos, e-mails, letterhead, telephone correspondence, memoranda, brochures, etc. will be developed by the CMT and the D4 PI Office to ensure consistency and effective 'branding' of the project correspondence.

12.2.4.7 Storefronts—Open Door / Documents Review

In addition to electronic (web site) access and public meetings, the Public Information Team will establish locations for the public to view project documents and displays. As a minimum, it is anticipated that the FDOT D4 and CCEI offices will serve as information centers. Visitors, their questions, and any responses to questions will be logged by the Public Information Team.

12.2.4.8 3-D Visual Aids

It is anticipated that the CDC will provide animated and narrated 3-dimensional CADD models of the project for viewing by the general public via the web site and at meetings and workshops. The animated renderings will provide detailed replication of the existing topography and proposed project features (e.g.- pavement, striping, signing, walls, bridges, lighting, ITS/signing, landscaping, transit, reversible lanes, etc.), and will be fully articulated with vehicular traffic simulations. The viewer will be provided with a virtual tour of the corridor to better visualize the project improvements and benefits.

A scale model of the topography and corridor improvements may also be constructed for display at various public information workshops, meetings and information centers.

12.2.4.9 Hotline

A project hotline will be established and maintained by the Public Information Team to accept calls from constituents and to provide updates, announcements, and traffic information to the public.

12.2.4.10 Targeted Messages

Public service announcements using local media outlets will be used to alert the public to safety messages, upcoming publications, the web site, and other avenues to obtain information. Traveler information and advisories will also be provided to the public during construction via variable message signing in advance of construction zones.

12.2.4.11 Project Newsletter / Brochures

A project newsletter will be published, posted on the web site, and mailed periodically to provide the public with updated project information and status. Brochures may also be developed to explain the design and construction work, the schedule, and how to get further information on the project.

12.2.4.12 Special Events

Special project events will be advertised via the hotline, web site, newsletters and media releases, and may include groundbreaking and ribbon cutting ceremonies, lane openings, corridor promotions, and community events that impact I-595 traffic operations.

13.0 CIVIL RIGHTS PROGRAM

13.1 OVERVIEW

As a recipient of Federal funds for the construction of highways and bridges, FDOT is required to ensure Equal Employment Opportunity (EEO) contract compliance on all Federal Aid highway construction projects. Contractors who participate on FDOT contracts are required to comply with certain EEO, Disadvantaged Business Enterprise (DBE), On the Job Training (OJT) and Wage Rate special provisions to be eligible for participation. Compliance requirements are provided in Section 1.6 of the FDOT EEO Construction Contract Compliance Work Book.

FDOT Specifications, Section 9, FHWA Form 1273, 23 CFR Part 230 and *49 CFR Part 26* gives FDOT the authority to take sanctions for the conditions and state of Contractor non-compliance. Under the FDOT's Office of Administration, the Equal Opportunity Office is responsible for the development and monitoring of policies and procedures that provide assurances to the FHWA. Under each District Construction Office, District Contract Compliance Managers (DCCM's) are responsible for the day to day administration of the contract compliance program for their respective Districts. It is anticipated that the CCEI's will provide a Compliance Specialist for administering compliance for the I-595 corridor projects.

The FDOT Equal Opportunity Reporting (EOR) System provides a centralized reporting system for DBE certification, for monitoring Consultant/Contractor payments to DBE and non-DBE sub-consultants and sub-contractors, and for reporting EEO and OJT requirements.

13.2 DISADVANTAGED BUSINESS ENTERPRISE (DBE)

In accordance with FDOT Policy No. 001-275-015-i – Disadvantaged Business Enterprise Utilization, it is the policy of FDOT that disadvantaged businesses, as defined by 49 Code of Federal Regulations, Part 26, shall have an opportunity to participate in the performance of FDOT contracts in a non-discriminatory environment. The FDOT DBE Program is designed to assist small business owned and controlled by socially and economically disadvantaged individuals to participate on FDOT contracts. The objectives of the program are to:

- Ensure non-discrimination in the award and administration of FDOT-assisted contracts in the FDOT's highway, transit, and airport financial assistance programs
- Create a level playing field on which DBE's can compete fairly for FDOT-assisted contracts
- Ensure that the FDOT's DBE Program is narrowly tailored in accordance with applicable law;
- Ensure that only firms that meet 49 CFR Part 26 eligibility standards are permitted to participate as DBE's
- Help remove barriers to the participation of DBE's in FDOT-assisted contracts
- Assist in the development of firms so they can compete successfully in the marketplace outside the DBE program
- Provide appropriate flexibility to recipients of federal financial assistance in establishing and providing opportunities for DBE's.

The FDOT's Equal Opportunity Office administers the FDOT DBE Program in accordance with the USDOT *Code of Federal Regulations (Title 49 CFR Part 26), FDOT DBE Policy, FDOT DBE Program Plan*, and the *FDOT EEO Construction Contract Compliance Work Book*.

As part of the DBE Program, the Equal Opportunity Office also administers DBE Matchmakers Conferences at the various FDOT districts to promote DBE outreach through prime consultant/contractor and DBE interaction and to discuss upcoming FDOT contracts to be advertised.

13.2.1 DBE Goal

Contract specific DBE participation goals are not placed on Federal and state contracts; however, the FDOT has an overall 7.9% DBE race neutral goal it must achieve. The FDOT encourages DBE's to compete for professional services and construction contracts, and encourages non-DBE Consultants and Contractors to utilize DBE's as sub-consultants and sub-contractors.

13.2.2 Bid Opportunity List

As part of bid or proposal packages, Consultants and Contractors are required to submit a Bid Opportunity List to identify both DBE and non-DBE sub-consultants and sub-contractors interested in teaming and/or providing subcontract or material supplies quotes. The FDOT maintains a bidders list to determine the number of DBE's relative to all pre-qualified businesses to help establish FDOT's annual DBE goal.

13.2.3 DBE Participation Statement

As part of bid or proposal packages, the Consultants and Contractors will also be required to provide a DBE Participation Statement to report to FDOT the names of the DBE's, type of work, and the expected percentage of contract fees (dollars awarded for DBE sub-contractors) on the segment projects. This information will be reported to the FHWA and is the primary tracking mechanism used to measure the progress in achieving the FDOT's annual DBE goal.

13.2.4 DBE Reporting

The Consultants and Contractors will be required to report the actual payments to all subconsultants, sub-contractors and major suppliers in FDOT's Equal Opportunity Reporting (EOR) System on a monthly basis. The Consultants and Contractors are required to pay all subconsultants and sub-contractors within 30 days of receipt of payment from FDOT.

The CCEI Compliance Specialist will be responsible for monitoring Consultant and Contractor compliance and administering contract compliance reviews. Non-compliance with program requirements could result in the withholding of monthly progress payments and/or performance deficiency ratings as part of the Consultant and Contractor performance evaluations.

13.3 ON THE JOB TRAINING (OJT)

As part of the Contractor's EEO affirmative action program, On the Job Training (OJT) shall be provided to develop full journeymen / women in the types of trade or job classifications involved in the work. Contractors are encouraged to utilize the OJT Program to achieve diversity. The OJT Special Provisions in the segment construction contracts will direct the requirements of the program.

A training evaluation meeting will be held by the D4 Contract Compliance Manager prior to the start of construction to finalize the number of trainees that will be required on the individual segment contracts. The OJT Monthly Time Report will be prepared by the Contractor for reporting all training hours accumulated on the project for the reporting month. The certified payroll of the trainees will be referenced by the CCEI Compliance Specialist in verifying the Monthly Time Report data. Compliance requirements for the OJT Program are provided in Chapter 5 of the *FDOT EEO Construction Contract Compliance Work Book*.

14.0 PROJECT DOCUMENTATION

14.1 MANAGEMENT AND APPROACH

All documentation, design files, reports, specifications, reviews, and correspondence for the project will be prepared and filed in electronic format. The CMT will be responsible for establishing and maintaining the filing system utilizing FDOT's Electronic Document Management System (EDMS) format. The FDOT D4 standard folder directory may be modified or supplemented as necessary for the specific filing needs of the project. On a weekly basis, the project Consultants and Contractors will be required to provide all official project documents to the CMT in accordance with the filing system structure. The appropriate CMT manager will review the documents prior to uploading into EDMS.

All files will be uploaded in .pdf format to preserve the integrity of the data and to enable efficient search and retrieval of information. The filing system will be duplicated in the project web site to allow for secured internal and public access to appropriate project files. All internal filing systems for the Consultants and Contractors will follow the EDMS format to ensure compatible filing structures.

14.2 SOFTWARE

FDOT's EDMS is comprised of 9 production libraries housing digital records for FDOT's various business areas. All records are indexed to standard key attributes for easy retrieval. Access to the project filing system will require security access through the FDOT D4 intranet and/or the project web site.

14.3 CADD STANDARDS

All project design files will be computer automated and developed and submitted utilizing Computer Aided Drafting and Design (CADD) systems and standards in accordance with the FDOT CADD Manual and FDOT CADD Production Criteria Handbook.

15.0 RIGHT OF WAY

The FDOT D4 Right of Way (ROW) Office will be responsible for the management and oversight of all right of way activities for the project. All maintenance of right of way documents will be in accordance with the *FDOT Right of Way Manual*, Section 11.3 – Right of Way Records Management.

15.1 ACQUISITION REQUIREMENTS

As previously indicated in Section 3.5, it is anticipated that project Segments 1, 3-8, 11, 11A and 12 will require additional right of way due to roadway improvements and drainage attenuation requirements. During the PD&E process, approximately 47 acres of impact was identified for drainage needs, and approximately 9 acres for roadway improvements. The CDC will refine the right of way requirements as part of the Master Design Plan development, including the assessment of shared use agreements with several golf courses along the corridor to substantially reduce the drainage right of way impacts (refer to Section 15.1.1). Anticipated easement and relocation requirements are described in Sections 15.1.2 and 15.4, respectively.

15.1.1 Proactive Acquisition

FDOT D4 is currently evaluating the feasibility of acquiring permanent drainage rights in exchange for compensation for renovation improvements with the following golf courses along the I-595 corridor:

- Lago Mar Golf Course north of I-595 east of 136th Avenue
- Jacaranda Country Club north of I-595 east of Nob Hill Road
- Pine Island Ridge Golf Course south of I-595 east of Nob Hill
- Arrowhead Country Club south of I-595 east of Pine Island Road.

These shared use agreements will be mutually beneficial to all parties, and will result in substantial cost and schedule reductions for the I-595 projects due to a large reduction in drainage right of way requirements.

Preliminary discussions with the golf course representatives have been favorable, and the FDOT D4 Programs Office is in the process of advancing programmed right of way dollars to enable the construction of the golf course improvements in advance of the I-595 corridor construction. The conceptual Environmental Resource Permit application will include the results of the shared use drainage evaluation, and will establish a legal basis for the justification of right of way needs upon issuance. All proactive acquisition activities will be in accordance with the *FDOT Right of Way Manual*, Section 8.1 – Advance Acquisition.

15.1.2 Easements

Any easements required for the project, above and beyond those associated with drainage needs described in Section 15.1.1, will be identified during the design phases of the project. Preliminary investigation of utility easement and associated subordination agreement requirements will be initiated by the CDC during the Master Design Plan development, and finalized by the SDC's during the Final Design phase of the project segments. Any temporary or permanent easements required as a result of construction operations will be evaluated by the SDC's in the preparation of the Traffic Control Plans for the individual project segments. All activities associated with the evaluation, estimation, negotiation, and preparation of legal agreements associated with the easement requirements will be developed in accordance with the *FDOT Utility Accommodation Manual* and the *FDOT Right of Way Manual*.

15.2 COST ESTIMATES

The D4 ROW Office Cost Estimates group has prepared preliminary cost estimates for the anticipated parcels to be acquired for the I-595 improvements in accordance with the *FDOT Right of Way Manual*, Section 6.3 – Right of Way Cost Estimating, and Guidance Document 2 – Right of Way Cost Estimates. The estimates are prepared utilizing historical and statistical information from similar projects, previous estimates, real estate market data, cost manuals, field reconnaissance, and coordination with relocation, appraisal, acquisition and legal staff, as well as planners and economists (where appropriate).

The estimates are divided into the appropriate FDOT work program right of way phases per parcel and per project segment, and include costs for all elements of the required right of way coordination and acquisition process, including: land, improvements, damages, litigation awards and administrative settlements, business damage payments, owner fees (appraisal, CPA, attorney and other costs), in-house and consultant fees, appraisal and review fees, CPA fees, court reporter and witness fees, demolition contracts, outside counsel fees, title search fees, hazardous materials investigation, relocation costs, utility reimbursement costs, and intergovernmental service fees. The preliminary total estimated cost of right of way per project segment is included in the preliminary cost estimates provided as Exhibit J of the Appendices.

The estimates will be updated annually (at a minimum) by the D4 ROW Office prior to the programming of right of way funds for the upcoming fiscal year. The D4 right of way cost methodology will be periodically validated by comparison of preliminary estimates versus actual project costs.

15.3 ACQUISITION PROCESS

15.3.1 Mapping

Refer to Section 3.5 for the description of the right of way mapping process, roles and responsibilities for the project.

15.3.2 Appraisals

Upon the review and acceptance of the Initial Right of Way Maps for the individual project segments, the D4 ROW Office will initiate the preparation of appraisals for the parcels to be acquired for the project. All appraisal preparation and review will be in accordance with the *Uniform Standards of Professional Appraisal Practice* (USPAP), and the *FDOT Right of Way Manual*, Sections 6.1 – Appraisal and Appraisal Review and 6.2 – Supplemental Standards of Appraisal. The appraisal reports will be developed by Fee Appraisal consultants under contract with FDOT D4. D4 ROW staff will review the appraisals and provide a Review Appraisal Statement (RAS), certifying compliance with the USPAP and conformity with state laws, rules, policies and procedures applicable to valuation under eminent domain for transportation purposes. All data books, appraisal reports, RAS's, and other reports will be entered into the D4 Right of Way Management System.

15.3.3 Negotiations

Prior to or concurrently with a written offer to purchase property, the D4 ROW Office will provide each property owner with a Notice to Owner which stipulates the guaranteed rights of the property owner in accordance with Section 73.015 of the Florida Statutes. A copy of the approved appraisal, as well as all right of maps, construction plans, and support documentation will be provided to the property owner within 15 days upon request.

The initial binding offer will be delivered directly to the property owner, and the D4 ROW Agents (either in-house or contracted staff) will negotiate in good faith with the property owner or his/her representative in accordance with the *FDOT Right of Way Manual*, Section 7.2 – The Real Property Negotiation Process. The property owner will be allotted 30 days from the receipt of the initial binding offer to respond before FDOT D4 will be permitted to file a condemnation suit, unless the 30 day period is waived by the property owner in writing.

If an agreement is reached as to the amount of compensation, a binding purchase agreement will be drafted for execution by all parties, requiring the signature of the D4 ROW Manager on behalf of the FDOT.

15.3.4 Suit Preparation

If an agreement is not reached after a reasonable effort to negotiate, eminent domain lawsuit information will be prepared by the D4 ROW Agents to include all information as required under the *FDOT Right of Way Manual*, Section 7.6.2 – Information Necessary to Prepare a Lawsuit. Prior to filing the lawsuit, the attorney assigned to the case by the D4 Legal Office is responsible for reviewing the pleadings and letters to verify the documents are acceptable, and for signing the documents prior to filing.

15.3.5 Closing / Certification

A closing shall not be conducted prior to final FDOT D4 acceptance. Final acceptance will be granted by the D4 ROW Manager when FDOT has obtained a binding agreement, has delivered a copy to the seller, and at least 30 days have elapsed since the date of execution of the binding agreement by all parties.

Prior to right of way closing for the project, the D4 ROW Office will insure all real property has been acquired and all subordinate interests cleared in accordance with the *FDOT Right of Way Manual*, Section 11.3 – Right of Way Records Management. The right of way will be closed within 18 months of the date of closing on the last parcel on the project, or the date of entry of the last final judgment on the project, whichever is later. In accordance with the *FDOT Right of Way Manual*, Section 11.4 – Right of Way Project Closing, the D4 ROW Office will:

- Ensure all right of way documents are filed and the Right of Way Management System is updated
- Determine the financial and contractual status of the project, and ensure that final billings have been processed
- Request the D4 Programs Office to place the project in closed status for expenditures, but open for receipt of revenue
- Execute Form No. 575-090-10, Right of Way Project Completion FAP Projects, certifying that all parcels have been acquired and all legal documents are on file
- Document the date the project was closed or certified for final vouchering, in order to determine when the records retention schedule has been met.

In accordance with the *FDOT Right of Way Manual*, Section 12.1 – Right of Way Certification, the D4 ROW Manager shall execute *Form No. 575-095-05, Right of Way Certification*. Right of way certification is required prior to construction letting to certify that FDOT has title to all right of way has been acquired, all displaced persons, businesses and personal property have been relocated, and all required demolition of structures and improvements have been completed or specified for removal by the Contractor.

15.4 RELOCATION ASSISTANCE PROGRAM

Right of way acquisition for the I-595 corridor will involve partial and/or complete purchase of parcels resulting in the displacement of residential and non-residential properties. Under the

requirements of federal law and state statute, property owners will be paid fair market value for their property and given assistance in finding replacement business sites and dwellings.

Three potential areas of displacement result from the proposed corridor roadway improvements, and include:

- 1. The proposed improvements at the Florida's Turnpike interchange will displace some residences along the southbound Florida's Turnpike mainline to accommodate the proposed Griffin Road off-ramp and the widening of Florida's Turnpike in that area.
- A new ramp is proposed that will complete the extension of the westbound I-595 C-D system to the east by connecting to I-95. The ramp will be in the area east of Pond Apple Slough along the north side of the existing westbound I-595 mainline. Several businesses will be impacted due to the proposed improvements.
- 3. A new ramp is proposed that will complete the extension of the eastbound I-595 C-D system to the east by connecting to I-95. The area along the south side of the existing I-595 EB-NB flyover will be impacted by the proposed ramp to I-95 southbound from the eastbound C-D road. Several businesses will be impacted due to the proposed improvements.

Approved Alternative	Anticipated Relocations				
	Residential	Commercial	Signs	Personal Property Relocations	
Alternative 2A	27	22	11	4	

The following table summarizes the anticipated relocations:

Note: Numbers do not include relocations necessary for any required drainage pond construction.

As noted in the table above, the overall relocations for a corridor of this size are relatively small, with only 27 residential mobile home relocations and 22 commercial relocations within 6 total parcels. A review of the study area has revealed that there are a sufficient number of comparable homes and commercial sites available at the present time both for sale and for rent. Furthermore, all of the affected mobile home occupants occupy leased lots and could be readily moved to other leased lots within the vicinity. Additional information regarding these relocations is provided in the *Conceptual State Relocation* Plan (CSRP) prepared for the project during the PD&E phase.

In order to provide the affected residents opportunities to comment on the alternatives being developed for the project, FDOT D4 conducted public workshops and hearings during the PD&E phase. During the course of these public involvement opportunities with the affected residents, concerns were expressed about noise impacts and relocation compensation. However, considering the magnitude of the I-595 improvements and the related improvements to Florida's Turnpike, these relocations are considered minimal and unavoidable.

In order to minimize the unavoidable effects of right of way acquisition and displacement of people, the FDOT D4 will carry out a right of way acquisition and Relocation Assistance Program in accordance with: Florida Statute 339.09; the *FDOT Right of Way Manual*, Section 9.1 – Relocation Assistance Program, Section 9.2 – General Relocation Requirements, and Section 9.5 – Relocation Assistance for Mobile Homes; and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

The D4 ROW Office will provide advance notification of impending right of way acquisition to the affected parcel owners. Before acquiring right of way, all properties will be appraised on the basis of comparable sales and land use values in the area. Owners of property to be acquired will be offered and paid fair market value for their property rights.

No person lawfully occupying real property will be required to move without at least 90 days written notice of the intended vacation date, and no occupant of a residential property will be required to move until decent, safe and sanitary replacement housing is made available. "Made available" is interpreted to mean that the affected person has either by himself obtained and has the right of possession of replacement housing, or that the FDOT has offered the displacee decent, safe and sanitary housing which is within his financial means and available for immediate occupancy.

A Right of Way Relocation Specialist will contact each owner to be relocated to determine individual needs and desires, and to provide information, answer questions, and provide assistance in finding replacement property. Relocation services and payments will be provided without regard to race, color, religion, gender, or national origin.

All tenants and owner-occupant displacees will receive an explanation regarding all options available to them, such as (1) varying methods of claiming reimbursement for moving expenses; (2) rental replacement housing, either private or publicly subsidized; (3) purchase of replacement housing; and (4) moving owner-occupied housing to another location.

Financial assistance will be made available to the eligible displacee to:

- 1. Reimburse the displacee for the actual reasonable costs of moving from homes, businesses, and farm operations acquired for a highway project
- 2. Make up the difference, if any, between the amount paid for the acquired dwelling and the cost of a comparable decent, safe and sanitary dwelling available on the private market
- 3. Provide reimbursement of expenses, incidental to the purchase of a replacement dwelling
- 4. Make payment for eligible increased interest cost resulting from having to assume another mortgage at a higher interest rate. Replacement housing payments, increased interest payments, and closing costs are limited to a \$22,500 combined total.

A displaced tenant may be eligible to receive a payment, not to exceed \$5,250, to rent a replacement dwelling or room, or to use as down payment, including closing costs, on the purchase of a replacement dwelling.

On or before November 1 of each year, the State Relocation Administrator will submit the FDOT statewide Uniform Relocation Assistance and Real Property Acquisition Report to the FHWA for review.

15.5 SCHEDULING AND REPORTING

The D4 ROW Office has prepared a Parcel and Expenditure Plan for the I-595 corridor that will be updated annually to forecast parcels to be acquired and the anticipated acquisition expenditures per parcel for the next two fiscal years. The plan is broken down into a monthly forecast for the next fiscal year, and a quarterly forecast for the subsequent fiscal year. As a complement to the Parcel and Expenditure Plan, the D4 Legal Office has prepared a Litigation Expenditure Plan to forecast litigation costs for the parcels to be acquired. These plans will be utilized in evaluating acquisition performance and establishing and updating the annual work program right of way budget for the I-595 corridor segments. A Right of Way Certification and Parcel Production Report will be prepared annually to document the certified parcels, acquisition tasks completed, and the associated actual expenditures for the fiscal year.

The D4 ROW Office will also prepare a monthly Production Status Report to track the on-going status of parcel acquisition. The acquisition schedule will be updated on a monthly basis by the D4 Scheduling Office as part of the master project schedule updates, and the right of way status and activities for each project segment will be documented in the monthly Project Status Report.

16.0 SYSTEM-WIDE ELEMENTS

16.1 UTILITIES

The CDC will assume FDOT D4's role as the utility liaison in providing full corridor utility management and coordination, with the ultimate goal of achieving advanced utility clearance for the corridor. The CDC shall ensure that FHWA/FDOT standards, policies, procedures, and design criteria are followed concerning utility coordination. The FDOT standards, policies, procedures, and design criteria are contained in the *FDOT Plans Preparation Manual*, *Standard Specifications for Road and Bridge Construction*, Rule 14-46.001 (*Utility Accommodation Manual*), *Utility User's Guide*, and any supplemental specifications, provisions, or agreements that will be derived specifically for the I-595 corridor project segments.

Existing utilities that have been identified within the corridor project limits are described in Section 1.2.13. The CDC will initiate coordination with the various utility agency owners (UAO's) (provided in the table below) during the Master Design Plan development, and will develop an updated contact list and composite utility drawings for the corridor. The utility coordination process, roles, and responsibilities for the CDC and the SDC's during the Master Design Plan and Final Design phases of the project is further described in Section 8.6.3.

The utilities within FDOT right of way that are in conflict with the proposed construction shall be redesigned and relocated at the UAO's expense, or at FDOT's expense if the District Utility Engineer determines that the utility relocation work is eligible for reimbursement. If any work is determined to be at FDOT's expense, the agreements and funding for the agreements will be coordinated and processed through the District Utilities Office. All reimbursable and non-reimbursable utility work will be completed in accordance with approved or acquired FDOT permit(s), the *Utility Accommodation Manual*, Florida Statute 337, and 23 CFR 645. For the utility design relocation and/or construction, a legal agreement and/or a Utility Work Schedule between FDOT and the UAO will be drafted detailing responsibility and pertinent areas such as construction specifics, cost, schedules, etc.

The CDC, in collaboration with the District Utilities Office, will be responsible for ensuring all coordination efforts are identified, documented and completed in accordance with the *FDOT Utility Accommodation Manual*. Coordination efforts shall include, but are not limited to, design reviews, construction oversight, initiating and drafting of all necessary legal agreements, preparation of relocation schedules, administering utility coordination meetings and validating that all necessary permits are acquired. In addition, utility cut-over time shall be coordinated in such a manner that ensures minimal or preferably no interruption of utility service.

Utility Type	Owner	Contact	Phone Number
Telephone	AT&T	Bill Ham	407-578-5000
Telephone	Bellsouth	Mike Posten	954-723-2540
Electric	FPL Distribution	Wylie Kenard	954-321-2052
Electric	FPL Transmission	Neelesh Shah	561-694-3507

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Communications	FPL Fibernet	Noel Reese	305-552-3249
Communications	BC Traffic Engineering	Robert Blount	954-484-9600
Fiber Optics	Xspedius Fiber	David Schwartz	954-334-0308
Petroleum	Enron Corporation	Steven Dowd	713-345-7219
Petroleum	Florida Gas Transmission	Herb Eiremann	954-341-0100
Gas	Florida Gas Transmission	Joe Sanchez	407-838-7171
Gas	TECO Peoples Gas	Jorge Bouza	954-453-0814
Gas	Florida Public Utilities	Vincent Krepps	561-838-1785
Cable	Cable Protection Bureau	Guillermo Vadell	305-416-7214
Cable	Comcast	Andrew Cassell	954-236-6133
Water and Sewer	City of Plantation	Hank Breitenkam	954-797-2209
Water and Sewer	Town of Davie	Larry Peters	954-797-1113
Water and Sewer	Ferncrest Utilities	Robert Salerno	954-587-8833
Water and Sewer	City of Fort Lauderdale	Mike Bailey	954-492-7809
ITS Fiber Optic	FDOT District 4	Dong Chen	954-777-4362
Traffic Monitoring	FDOT Central Office	Traffic Data Section Mgr	850-414-4848

16.2 INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

The I-595 corridor improvements project will include local and regional traffic management technologies that will connect to and enhance the existing traffic management infrastructure, which will require comprehensive systems integration activities for design, installation, testing, commissioning, and operations and maintenance. The I-595 Intelligent Transportation System (ITS) Master Plan will be comprised of a Satellite Transportation Management Center (STMC) and ITS components to manage, control, and operate the corridor general use lanes, the reversible lanes, and the access points to the reversible lanes. Refer to the *PD&E Preliminary Engineering Report*, Section 9.25 for more information regarding the preliminary design, components, and operations concept overview for the proposed ITS plan for the reversible lanes.

FDOT D4 is now completing the last phases of the ITS projects for the existing I-595 corridor, and is also in the process of implementing a mid-term ITS solution that would integrate the I-595 mainline ITS with the various arterials approaching the I-595 corridor. These systems will be integrated within the regional ITS network through an existing operational agreement with the South Florida Regional Coalition. The purpose of the agreement is to integrate all regional ITS facilities to enable the response coordination of all traffic and emergency incidents and shared images between the traffic management centers (TMC's) of the regional coalition members.

The FDOT D4 Traffic Operations Office, with the assistance of the CDC as directed, will be responsible for the coordination with all stakeholders and development of the ITS Master Plan that will accommodate the proposed project improvements and will integrate the ITS components of the proposed general use and reversible lanes system with the I-595, FDOT D4, Broward County and Florida's Turnpike Enterprise TMC's. In addition to the coalition members, a wide range of stakeholders will be involved in the I-595 traffic operations, including enforcement, emergency management, incident management, traffic signal operations, and regional traffic coordination.

The ITS Master Plan will be developed upon the completion and approval of the Master Design Plan line and grade geometry. The development of the ITS plan for the reversible lanes will require extensive coordination between FDOT D4 and the operational authority (as applicable), once the funding, design, construction, operations and maintenance authority of the reversible lanes has been determined.

The SDC's and Contractors will be responsible for accommodating the ITS Master Plan within the proposed Traffic Control Plan (TCP) for the individual project segments, and to:

- Minimize impacts to the existing ITS components
- Ensure that the existing ITS is maintained at all times during construction to monitor construction activities and allow for continual incident management.

This may require the use of temporary wireless technology, but the ultimate ITS concept is to have complete fiber optic connections to all components.

16.3 SIGNING

The CDC will be responsible for the development of a Master Signing and Pavement Marking Plan as part of the Master Design Plan development. The Master Signing Plan will be a valuable tool in providing for corridor signing consistency and validating the project geometry from a signing standpoint in accordance with the requirements of the *FHWA Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)*.

As part of the Master Signing Plan development, the CDC will be responsible for:

- Development of the existing corridor sign inventory and providing recommendations for existing signing deficiencies
- Sign panel design and locations for the proposed corridor guide signs for the Master Signing Plan, as well as the signing and locations for the phasing of the individual project segments
- Coordination with FDOT D4 and Florida's Turnpike Enterprise to ensure signing consistency and accommodation of ITS dynamic message signing, lighting, service points and other appurtenances on the I-595 and Florida's Turnpike facilities.

Coordination with Broward County and local municipalities will be also required to coordinate sign placement on local / county streets and relocation requirements for existing signing. The sign panel design for the reversible lanes will be evaluated versus industry standards to establish the most effective delineation of the reversible lanes signing for optimal safety and operational benefit.

The SDC's will utilize the Master Signing Plan to develop the signing design plans for the individual project segments to include all temporary and supplemental signing as required per project segment.

16.4 NOISE BARRIERS

As part of the *I-595 PD&E Study*, a *Noise Study Report* was conducted in accordance with the *FDOT PD&E Manual*, Chapter 17 – Noise, and with Title 23 CFR Part 772 - Procedures for

Abatement of Highway Traffic Noise and Construction Noise. Noise abatement measures were evaluated for each of the noise sensitive sites that have predicted design year (2034) noise levels which approach the Noise Abatement Criteria (NAC) levels. 672 noise sensitive sites in 26 of the 44 areas evaluated are predicted to approach or exceed the NAC. Following analysis of abatement alternatives, available right of way, safety criteria, and constructability and maintenance issues associated with providing noise abatement along the project corridor, construction of noise barriers was determined to be the most reasonable and feasible noise abatement alternative.

Noise barriers were evaluated at 19 locations representing all the 26 areas where predicted noise levels approach or exceed the NAC. Noise barriers at 12 locations were recommended for further consideration and public input. These noise barriers are expected to reduce traffic noise levels by at least 5 dBA at 541 residences along the project corridor. The general location, dimensions, and costs of the noise barriers recommended for further consideration are summarized in Table 7-1 and Figure 7.1 in the *PD&E Noise Study Report*. The cost to construct noise barriers at the remaining locations that were evaluated substantially exceeded FDOT's reasonable cost criteria of \$35,000 per benefited residence. Therefore, noise barriers were not recommended for further consideration or construction at these locations because they are not cost feasible.

Upon completion and approval of the Master Design Plan line and grade geometry, the CDC will identify any design changes that would require a reanalysis of the traffic noise, and subsequently the results of the *Noise Study Report*, and will coordinate accordingly with the CMT and D4 Environmental Management Office (EMO). The CDC will also perform a land use review to identify noise sensitive areas that may have received a building permit subsequent to the completion of the *Noise Study Report*, but prior to the date of public knowledge, or locations where land use has changed. Eligible noise sensitive sites that were not considered during the PD&E phase will be subjected to a traffic noise evaluation, and if applicable, a noise barrier evaluation.

The SDC's will be provided with the latest noise analysis findings for further evaluation (as required) as part of the Final Design phase for the individual project segments. The noise barriers will be re-analyzed as necessary for feasibility and reasonableness to re-establish barrier height and length if design constraints require alteration in the barrier locations or dimensions. Prior to any noise barrier analysis or decisions, the CDC and SDC's are to meet with the CMT and D4 EMO to coordinate the analysis efforts.

The results of any re-analysis and the public involvement efforts to establish final noise barrier locations, types, heights, etc. will be documented in a Noise Study Report Addendum.

FDOT D4 is committed to the construction of feasible noise abatement measures at the locations where noise barriers have been recommended for further consideration during the Final Design phase, contingent upon the following conditions:

- Detailed noise analyses during the final design process supports the need for abatement
- Reasonable cost analyses indicate that the economic cost of the barrier(s) will not exceed the guidelines
- Community input regarding desires, types, heights, and locations of barriers has been solicited by FDOT
- Preferences regarding compatibility with adjacent land uses, particularly as addressed by officials having jurisdiction over such land uses, have been noted
- Safety and engineering aspects as related to the roadway user and the adjacent property owner have been reviewed
- Any other mitigating circumstances found in Section 17-4.6.1 of the *FDOT PD&E Manual* have been analyzed.

It is anticipated that the noise abatement measures for the identified locations will be constructed in advance of the segment construction if found feasible based on the contingencies listed above. If, during the Final Design phase, any of the contingency conditions listed above cause abatement to no longer be considered reasonable or feasible for a given location(s), such determination(s) will be made prior to requesting approval for advertisement of construction. Commitments regarding the exact abatement measure locations, heights, and type (or approved alternatives) will be made during project re-evaluation and at a time before the construction advertisement is approved.

Residential areas adjacent to the project limits may be affected by noise and vibration associated with construction activities. Construction noise and vibration impacts to these sites will be minimized by adherence to the controls listed in the *FDOT Specifications*. Furthermore, to aid Broward County in promoting land use compatibility, FDOT will provide Broward County and local communities with a copy of the *Noise Study Report* which provides information that can be used to protect future land development from becoming incompatible with anticipated high traffic noise levels.

17.0 PROJECT CLOSEOUT PLAN

The CMT will notify the FDOT D4 Programs Office upon the closing of each project phase and the associated contracts per corridor segment. Final accountability will be determined by the Programs Office once all project phases of each segment are completed and contract completion is certified by the appropriate FDOT or CCEI manager. Each phase closeout will be certified in accordance with Federal-Aid project standards and procedures.

Upon Final Acceptance of each project segment, authority will be transferred to the FDOT D4 Ft. Lauderdale Operations Center for incorporation of assets and administration of maintenance agreements. Any and all construction warranties will be provided to the FDOT D4 Warranty Coordinator for administration and monitoring oversight. All remedial work covered under the warranties will be the responsibility of the Contractor until expiration of the warranty.

Any required System Operations Plan and/or System Maintenance Plan for the reversible lanes will be developed during the design phase with the full collaboration of the CMT, D4 Maintenance and Operations staff, and the appropriate maintenance and operations staff of the agency (or entity) with jurisdictional authority of the reversible lanes system (if other than FDOT D4). All required review, testing, and pre-operational procedures will be documented in the maintenance and operations plans, and will be conducted prior to construction Final Acceptance. Any additional procedures required to provide appropriate transfer of authority will be conducted prior to the commissioning of the reversible lanes system.

18.0 APPENDICES

EXHIBIT A – PROJECT CORRIDOR MAP EXHIBIT B – LDCA DOCUMENT EXHIBIT C – I-595 TYPICAL SECTION EXHIBIT D – CORRIDOR MANAGEMENT ORGANIZATION CHART EXHIBIT E – FHWA RESPONSIBILITIES MATRIX EXHIBIT F – FHWA FLORIDA DIVISION ORGANIZATION CHART EXHIBIT G – FDOT D4 ORGANIZATION CHART EXHIBIT H – CDC ORGANIZATION CHART EXHIBIT I – DESIGN STANDARDS EXHIBIT J – PRELIMINARY COST ESTIMATES SUMMARY EXHIBIT K – PRELIMINARY CORRIDOR SCHEDULE EXHIBIT L – ENVIRONMENTAL COMMITMENTS MATRIX EXHIBIT M – LIST OF ACRONYMS

EXHIBIT N – REFERENCE HYPERLINKS

PROJECT MANAGEMENT PLAN

for

I-595 (SR 862) CORRIDOR IMPROVEMENTS From I-75 Interchange to I-95 Interchange Broward County, Florida

EXHIBIT A – PROJECT CORRIDOR MAP



I-595 Corridor Improvement Projects



Updated: 8/16/2006



PROJECT MANAGEMENT PLAN

for

I-595 (SR 862) CORRIDOR IMPROVEMENTS From I-75 Interchange to I-95 Interchange Broward County, Florida

EXHIBIT B – LDCA DOCUMENT



U.S. Department of Transportation

Federal Highway Administration 545 John Knox Road, Suite 200 Tallahassee, Florida 32303

(850) 942-9650

June 29, 2006

In Reply Refer To: HPO-FL

Mr. James Wolfe, P.E. District Four Secretary Florida Department of Transportation 3400 west Commercial Boulevard Ft. Lauderdale, Florida 33309

Attention: Mr. Paul Lampley P.E.

Dear Mr. James Wolfe:

Subject: Location and Design Concept Approval

I-595 /SR-862 from west of I-75/Sawgrass Expressway to east of I-95 Federal-Aid Project No.: 595-1 (539) I Financial Project ID: 409354-1-22-01 Broward County

Enclosed is one signed copy of the Environmental Class of Action Determination for a Type II Categorical Exclusion (CE) for the subject project. The Federal Highway Administration (FHWA) reviewed the Type II CE document according to the requirements of the National Environmental Policy Act of 1969 (NEPA), and 23 CFR 771.

The Type II CE is considered appropriate, and approval for the location and design concept of the preferred alternative is granted.

Should you have any questions, please contact Mrs. Nahir DeTizio at (850) 942-9650, extension 3027.

Sincerely,

Chur Kuhte For:

David C. Gibbs Division Administrator

Enclosure

cc: Mr. Steve Braun, P.E., Senior Project Manager, FDOT District Four





ENVIRONMENTAL MANAGEMENT - 12/03 Page 1 of 14

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ENVIRONMENTAL DETERMINATION

1. GENERAL INFORMATION

County:	Broward	
Project Name:	1-595 (SR 862) PD&E	Study
Project Limits:	From the I-75 Interch	ange to the I-95 Interchange
Project Numbers:	<u>409354-1-22-01</u>	<u>5951 539 l</u>
	Financial Project	Federal

2. PROJECT DESCRIPTION

- a. Existing: See Attachment 2.A.
- b. Proposed Improvements: See Attachment 2.B.

3. CLASS OF ACTION

- a. Class of Action:
- [] Environmental Assessment
- b. Other actions:
- [X] Section 4(f) Statement [X] Section 106 Consultation
- [] Environmental Impact Statement [X] Type 2 Categorical Exclusion
- [X] Endangered Species Assessment
- c. Public Involvement:
 - 1. [] A public hearing is not required, therefore, approval of this Environmental Assessment constitutes acceptance of the location and design concepts for this project.
 - [X] A public hearing was held on November 29, 2005 and a transcript is included with the environmental determination. Approval of this Type 2 Categorical Exclusion constitutes location and design concept acceptance for this project.
 - [] An opportunity for a public hearing was afforded and a certification of opportunity is included with the environmental determination. Approval of this constitutes Type 2 Categorical Exclusion acceptance of the location and design concepts for this project.
 - [] A public hearing will be held and the public hearing transcript will be provided at a later date. Approval of this Type 2 Categorical Exclusion DOES NOT constitute location and design concept acceptance for this project.
 - [] An opportunity for a public hearing will be afforded and a certification of opportunity will be provided at a later date. Approval of this Type 2 Categorical Exclusion DOES NOT constitute acceptance of the project's location and design concepts.
- d. Cooperating Agency: [] COE [] USCG [] FWS [] EPA [] NMFS [X] NONE

4. REVIEWER'S SIGNATURE

DOT Project Manager

DOT Environmental Specialist

FHWA Transportation Engineer

HWA CONCURRENCE

Division Administrator

<u>5 / 31 / 2006</u> Date

<u>5 , 31 , 2006</u> Date

<u>6 | 29 | 06</u> Date

6,29,06 Date

PROJECT MANAGEMENT PLAN

for

I-595 (SR 862) CORRIDOR IMPROVEMENTS

From I-75 Interchange to I-95 Interchange Broward County, Florida

EXHIBIT C – I-595 TYPICAL SECTION



PROJECT MANAGEMENT PLAN

for

I-595 (SR 862) CORRIDOR IMPROVEMENTS

From I-75 Interchange to I-95 Interchange Broward County, Florida

EXHIBIT D – CORRIDOR MANAGEMENT ORGANIZATION CHART

I-595 Corridor Management Organization Chart

EXECUTIVE OVERSIGHT COMMITTEE

FHWA Area Engineer

FDOT District 4 Secretary

FDOT District 4 Director of Transportation Development

CORRIDOR MANAGEMENT TEAM

FDOT District 4 Director of Operations

FDOT District 4



District Const. Engineer

Ft. Lauderdale Operations Engineer

District Maintenance Engineer



FDOT DESIGN ADVISORY STAFF

District Design Engineer

District Consult. Mgmt. Engineer

<u>Design</u>

FDOT Corridor Design Manager

FDOT Design Project Managers

Corridor Design Consultant (CDC) Project Manager

CDC Senior Support Staff

FDOT Corridor Construction Manager

CEI Consultant Senior Project Engineers

Construction

CEI FDOT and Consultant Project Engineers
PROJECT MANAGEMENT PLAN

for

I-595 (SR 862) CORRIDOR IMPROVEMENTS

From I-75 Interchange to I-95 Interchange Broward County, Florida

EXHIBIT E – FHWA RESPONSIBILITIES MATRIX

FHWA Responsibilities Matrix

_									
l	#	Activity	Authority	Action	Frequency	Delegated To			
		R = Review, A = Approve, C = Compliance							
_				Statewide Planning (SP)					
	1	20 yr Statewide transportation plan	23 CFR 450.214	R for C	As updated	Community Planner			
	2	3 yr STIP & amendments	23 CFR 450.216, 220	R & A w/ FTA	As requested by State (at least biennially)	Community Planner			
	3	Interstate additions & access revisions	23 CFR 470.111, 115(a)	R & A or Recommend action to HQ for system to system or new	As requested by State	Headquarters and/or Design Engineer			
	4	NHS revisions	23 CFR 470.113, 115(a)	R & Recommend action to HQ	As requested by State	Headquarters			

	Metropolitan Planning (MP)							
1	Transportation plan for non-attainment metropolitan areas	23 CFR 450.322	R & A	Every 3 yrs	Community Planner			
2	Transportation plan for attainment metropolitan areas	23 CFR 450.322	R for C	Every 5 yrs	Community Planner			
3	Transportation Improvement Plan (TIP) and corollary STIP amendments for non-attainment areas	23 CFR 450.324 - 330(b)	R & A	As requested by State - at least biennially	Community Planner			
	Air Quality (ΔQ)							

			All Guality (AG)		
1	Transportation plan conformity	23 CFR 450.322(d)	R & A	Every 3 years	Community Planner
	determination for non-attainment areas				
2	TIP conformity determination for non-	23 CFR 450.330(b)	R & A	Every 2 years	Community Planner
	attainment				

			Environment (E)		
1	Environmental document determination (all other projects)	23 CFR 771.113	R & A	As submitted by State	Project Manager
2	Final EIS	23 CFR 771.125	R & A	As submitted by State	Division Administrator
3	Record of Decision (ROD)	23 CFR 771.127	R & A	30 days after publishing final EIS	Division Administrator
4	EIS written re-evaluations	23 CFR 771.129	R & A	If no action is taken within 3 years after final EIS as submitted by State	Project Manager
5	Section 4(f) individual	23 CFR 771.135	R & A	As submitted by State	Project Manager
6	Section 106 actions	36 CFR 800	R & A	As submitted by State	Project Manager
7	Implement Mitigation Commitments	23 CFR 635.309(3)(j)	R & A	Project by Project	Project Manager

Pavement & Materials (PM)

1	Buy America	23 CFR 635.410	R & A	As Needed	Project Manager
2	Proprietary Materials	23 CFR 635.411	R & A	As Needed	Project Manager
3	Warranties	23 CFR 635.413	R & A	As Updated	Project Manager
4	Convict Produced Materials	23 CFR 635.417	R & A	As Needed	Project Manager
5	Materials Acceptance	23 CFR 637.207	R & A	As Updated	Project Manager
6	Quality Control/Quality Assurance Programs	23 CFR 637.207	R & A	As Updated	Project Manager
7	Sampling and Testing of Materials	23 CFR 637.207	R & A	As Updated	Project Manager

	FHWA Responsibilities Matrix							
#	Activity	Authority	Action	Frequency	Delegated To			

R = Review, A = Approve, C = Compliance

Design, Construction, & Maintenance (DCM)

1	Consultant Agreements, Supplements, and Settlements for Megaproject	23 CFR 172.5	R & A	As needed	Project Manager
2	Projects Near Airports	23 CFR 620.103	R	As requested	Project Manager
3	Highway Facility Relinquishment	23 CFR 620.203	R & A	As needed	Project Manger
4	Design Exception Request	23 CFR 625.3	R & A	As needed	Project Manager (w/ Design Engineer)
5	Plans, Specifications, & Estimates (PS&E)	23 CFR 630B, 23 CFR 633.102 23 USC 106	R & A	Project by project	Project Manager
6	Competitive Bidding	23 CFR 635.104, 23 USC 112	R & A	As requested	Project Manager
7	Use of Public Owned Equipment	23 CFR 635.106	R & A	As needed	Project Manager
8	Changed Conditions	23 CFR 635.109	R & A	As needed	Project Manager
9	Concurrence in Award	23 CFR 635.114, 23 USC 112(d)	R & A	Project by project	Project Manager
10	Changes and Extra Work	23 CFR 635.120	R & A	As needed	Project Manager
11	Claims	23 CFR 635.124	R & A	As needed	Project Manager
12	Statement of Materials and Labor (NHS projects of \$1 million or more) (form FHWA-47)	23 CFR 635.126	Periodically R for C (State prepares and submits to HQ	Project by project	Project Manager
13	Public Agency Furnished Material	23 CFR 635.407	R	As needed	Project Manager
14	Utility Agreement	23 CFR 645.113	R & A	Project by project	Project Manager
15	Railroad Agreement	23 CFR 646.216	R & A	Project by project	Project Manager
16	Construction Inspection	FAPG G 6042.8	R for C	As needed	Project Manager
17	Project Authorizations/Agreements (PE, Final Design, ROW, Utilities, RR, Force Account)	23 CFR 630 Subpart C	Accept	As needed	Project Manager (w/ Finance Manager)
18	Authorization to Advertise	23 CFR 630.106 and 23 CFR 635.309	R & A	Project by project	Project Manager
19	Advanced Construction (all projects)	23 CFR 630.705	R & A	As needed	Project Manager
20	Payroll (all projects)	23 CFR 635.118	R	As needed	Project Manager
21	Termination of Contract	23 CFR 635.125	R & A	As needed	Assistant DivisionAdministrator
22	Value Engineering (NHS and \$25 million or more)	23 CFR 627 and P.L. 104- 59 Sec 303	R for C (State conducts study)	Project by project	Project Manager (w/ Design Engineer)
23	Bid Opening/Tabulations	23 CFR 635.113	Periodically R for C (State takes action)	Per letting	Field Operations Engineer
24	Utility Agreement Alternate Procedure	23 CFR 645.119	R & Accept	One time	Program Operations & EngineeringTeam Leader(w/ ADA)
25	Utility Accommodation Policy	23 CFR 645.215	R & A	When changes occur	Program Operations & EngineeringTeam Leader(w/ ADA)
26	Railroad Agreement Alternate Procedure	23 CFR 646.220	R & A	One time	Program Operations & EngineeringTeam Leader(w/ ADA)

FHWA Responsibilities Matrix

#	Activity	Authority	Action	Frequency	Delegated To		
R = Review, A = Approve, C = Compliance							

			Bridge (B)		
1	HBRRP eligibility determinations	23 CFR 650 Subpart D	R & A	Project by project	Finance
2	HBRRP discretionary candidate submittals	23 CFR 650 Subpart D	R&A	Annually by July 1	Bridge Engineer
3	TS & L and PS&E reviews	23 CFR 630, 23 USC 106, and W.O. 11/13/98 memo	R & A	Project by project	Project Manager (w/ Bridge Engineer)
4	Innovative Bridge Research and Construction Program eligibility determination	23 USC 503(b)	R & A and submit to HQ	Annually (date varies)	Bridge Engineer
5	Construction inspections	FAPG G 6042.8	R for C	As needed	Project Manager (w/ Bridge Engineer)

Mobility/ITS (M)

1	Congestion management system	23 CFR 500.109	R for C	As needed/revised by MPO/State	Project Manager (w/ ITS Engineer)
2	Conformity with National ITS Architecture	FHWA Final Rule dated January 8, 2001	R for C	As needed w/PS&E submission (full oversight projects that affect regional integration)	Project Manager (w/ ITS Engineer)
3	ITS Life Cycle Cost (>\$3 million) and ITS Financing and Operations Plan	TEA-21 Section 5210	R for C	As needed for projects funded by TEA-21 Sections 5208 and 5209	Project Manager (w/ ITS Engineer)
4	ITS Service Plan	TEA-21 Section 5207	Develop	As needed	ITS Engineer

	Financial Management (FM)							
1	Finance Plan & Annual Updates for	TEA-21 Section 1308, and	Review & Accept	Prior to authorization of	Division Administrator			
	Megaprojects	associated FHWA		construction, and annually				
		Guidance		thereafter.				
2	Project Agreements - including drug	23 CFR 630 Subpart C	Accept	As needed	Finance Manager(w/ Project			
	free work place and other provisions				Manager)			
3	Fed-aid billing reimbursement of	23 CFR 140 and 635.122	R&A	Weekly	Finance Manager			
	eligible expenditures							
4	Transfer of funds as requested by State	23 USC 104 (c) and 119 (f)	R&A	As needed	Finance Manager			

			Safety (S)		
1	Work Zone Safety Process review of	23 CFR 630.1010	R&A	Annually by Sept. 30	Safety Engineer
	effectiveness				

			Right-of Way (R/W)		
1	State R/W Manual changes	23 CFR 710.201	R & A	Jan. 1, 2001 & every 3 years thereafter	ROW
2	Uniform Relocation Assistance and Real Property Acquisition Report - (OMB Form 2125-0030)	49 CFR 24.9(c) and Appendix B	R	Every 3 years	ROW
3	Requests for waivers	49 CFR 24.204(b)	R & A	As submitted by State	ROW
4	Use of R/W Air Space authorization request (on Interstate system)	23 CFR 710.405	R & A	Project by project	ROW
5	Access Break / R/W Disposal authorization request (if on Interstate system or fair market value not charged)	23 CFR 710.401 & 409	R & A	Project by project	ROW
6	Functional Replacement	23 CFR 710.509	Periodically R for C (State takes action)	As needed	ROW
7	Lead Agency Uniform Act monitoring activities	49 CFR 24.603	R for C	As needed	ROW
8	Develop R/W oversight agreement	23 CFR 710.201(i)	R & A	By Jan. 1, 2001 and updated as needed	ROW

FHWA Responsibilities Matrix

	FITWA Responsibilities Matrix							
#	Activity	Authority	Action	Frequency	Delegated To			
-	R = Review, A = Approve, C = Compliance							
1	Title VI Plan accomplishments and next year's goals	23 CFR 200.9	R & A	Annually by Oct. 1	Civil Rights			
2	Title VI Plan update	23 CFR 200.9	R & A	As needed or requested by State	Civil Rights			
3	EEO Contract Compliance review reports (form FHWA 86)	23 CFR 230.409, 230.413	R & A	As submitted by State	Civil Rights			
4	Disadvantaged Business Enterprise (DBE) Program revisions	49 CFR 26.21(b)	R & A	As needed or as requested by State	Civil Rights			
5	State's DBE program goals	49 CFR 26.41	R & A	Annually by Aug 1	Civil Rights			
6	Supportive services funds requests	23 CFR 230.113	R & A	As requested by State	Civil Rights			
7	Annual Contractor Employment Report (Construction Summary of Employment Data (form PR-1392))	23 CFR 230.121(a)	R for C and send to HQ	Annually by Sept 25	Civil Rights			
8	Report on supportive services (On-the- Job Training (OJT) & DBE)	23 CFR 230.121(e)	R for C and send to HQ	Quarterly by April15, July 15, Oct 12, and Jan 15	Civil Rights			
9	OJT goals & accomplishments	23 CFR 230.111(b)	R for C	Annually by Jan 30	Civil Rights			
10	Report on supportive services (OJT & DBE)	23 CFR 230.111, 113	R for C	Quarterly	Civil Rights			
11	Americans with Disabilities Act Review complaint	Voluntary agreement with Justice Dept.	Conduct evaluation & correct or recommend action to HQ	As requested by HQ	Project Manager			

PROJECT MANAGEMENT PLAN

for

I-595 (SR 862) CORRIDOR IMPROVEMENTS

From I-75 Interchange to I-95 Interchange Broward County, Florida

EXHIBIT F – FHWA FLORIDA DIVISION ORGANIZATION CHART



PROJECT MANAGEMENT PLAN

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EXHIBIT G – FDOT D4 ORGANIZATION CHART

DEPARTMENT OF TRANSPORTATION DISTRICT FOUR ORGANIZATION



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EXHIBIT H – CDC ORGANIZATION CHART



RS&H	- Reynolds, Smith and Hills, Inc.
URS	– URS Corporation Southern
GBF	- GBF Engineering (DBE)
PB	– PB Faradyne
BCC	– BCC Engineering, Inc. (DBE)
TBE	– TBE Group
GCME	– GCME, Inc. (DBE)
Nutting	– Nutting Engineers of Florida
MRG	– Media Relations Group, LLC (DBE)
CEC	- Construction Engineering Consultants, Corp
PD&E	- Progressive Design & Engineering, Inc. (DE
ACA	- Aerial Cartographics of America, Inc.

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From I-75 Interchange to I-95 Interchange Broward County, Florida

EXHIBIT I – DESIGN STANDARDS

I-595 DESIGN STANDARDS

All maps, plans and designs are to be prepared with English values in accordance with all applicable current DEPARTMENT manuals, memorandums, guidelines and other documents listed below:

General

- Florida Statutes
- o Florida Administrative Codes
- Florida Department of Transportation Project Development and Environmental Manual
- Florida Department of Transportation Plans Preparation Manual
- Florida Department of Transportation Standard Specifications for Road and Bridge Construction
- Florida Department of Transportation Handbook for Preparation of Specifications Package
- Florida Department of Transportation Design Standards for Design, Construction, Maintenance, and Utility Operations on the State Highway System
- Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways
- o Bicycle Facilities Planning and Design Manual, Rev. Ed. 1982
- CADD Production Criteria Handbook
- o CADD Manual
- Florida's Level of Service Standards and Guidelines Manual for Planning
- Equivalent Single Axle Load Guidelines
- Design Traffic Procedure
- K-Factor Estimation Process
- Project Traffic Forecasting Guidelines
- Florida Department of Transportation Basis of Estimates Manual
- Quality Assurance Guidelines
- Safety Standards
- Rule 61G17-6, F.A.C., Minimum Technical Standards for Professional Surveyors and Mappers
- Department of Environmental Protection Rules Governing Mean High Water and Jurisdictional Line Surveys
- Any special instructions from the DEPARTMENT
- Utility Accommodations Guidelines
- Policy for Geometric Design of Highways and Streets
- Florida Department of Transportation Materials Manual
- Americans with Disabilities Act Accessibility Guidelines (ADAAG)
- 40 CFR, Part 61, Subpart M National Emission Standard for Hazardous Air Polutants (NESHAP), Environmental Protection Agency (EPA)
- 40 CFR, Part 763, Subpart E Asbestos-Containing Materials in Schools, EPA
- 40 CFR, Part 763, Subpart G Asbestos Worker Protection, EPA
- 29 CFR, Part 1910.1101 Asbestos Standard for Industry, U.S. Occupational Safety and Health Administration (OSHA)
- o 29 CFR, Part 1926, 1101 Asbestos Standard for Construction,

OSHA

- Ch. 62257, F.A.C. Asbestos Program, Florida Department of Environmental Protection (DEP)
- Ch. 469, F.S. Asbestos Abatement, Florida Department of Business and Professional Regulation (DBPR)
- Model Guide Specifications Asbestos Abatement and Management in Buildings, National Institute for Building Sciences (NIBS)

Permits

- Chapter 373, F.S.
- Bridge Permit Application Guide, COMDT PUB P16591.3B
- Building Permit

PD&E Related Services

- U.S.C.: Title 23: Highways
- 43 U.S.C. 4332(2)(c), popularly known as Section 102(2)(c) of the National Environmental Policy Act of 1969, P.L. 91-190
- 42 U.S.C. 1653 (f), popularly known as Section 4(f) of the Department of Transportation Act of 1966, P.L. 89-670
- The National Historic Preservation Act of 1966 (P.L. 89-665) and Executive Order No. 11593 ('Protection and Enhancement of the Cultural Environment') as implemented in 'Procedures for the Protection of Historical and Cultural Properties', 36 C.F.R.; Part 800
- The 'Endangered Species Act of 1973 (as amended)', 16 U.S.C. (P.L. 93-205)
- Executive Order No. 11990, 'Protection of Wetlands'
- Executive Order No. 11988, 'Floodplain Management'
- Chapter 339.155 of the Florida Statutes
- F.D.O.T. PD&E Manual

Drainage

- o Drainage Manual
- Drainage Handbooks
- o Storm Drain
- Optional Pipe Materials
- Stormwater Management Facility
- Cross Drain
- Erosion and Sediment Control
- Hydrology
- Temporary Drainage Handbook

Survey

- Location Survey Manual
- Highway Field Survey Specifications
- Automated Survey Data Gathering
- Outline Specifications for Aerial Surveys and Photogrammetry for Transportation Projects
- Standards for I-595 CORRIDOR DESIGN CONSULTANT-Submitted G.P.S. Static Control Projects
- EFB User Guide
- Chapter 472, F.S.

- Chapter 177, F.S.
- FDEP Bureau of Surveying and Mapping

Traffic Operations Manuals

- American Disabilities Act
- AASHTO Guide for Development of Bicycle Facilities
- Federal Highway Administration Standard Highway Signs Manual
- Florida Department of Transportation Traffic Engineering Manual
- Florida Department of Transportation Manual on Uniform Traffic Studies (MUTS)
- National Electrical Code
- National Electric Safety Code
- Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD)
- o Minimum Specifications for Traffic Control Signal Devices
- Florida Department of Transportation Florida Roundabout Guide
- FHWA Roundabouts: An Informational Guide
- Florida Department of Transportation Median Handbook
- AASHTO An Information Guide for Highway Lighting

Mapping

- Right-of-Way Mapping
- Florida Department of Transportation Right-of-Way Handbook
- Florida Department of Transportation Right-of-Way Manual

Structures

- AASHTO Standard Specifications for Highway Bridges and Interims (for curved steel bridges and pedestrian bridges only)
- AASHTO LRFD Bridge Specifications and Interims
- AASHTO LRFD Movable Highway Bridge Design Specifications and Interims
- AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, dated 1994
- AASHTO LRFD Guide Specifications for Steel Curved Girder Bridges
- AASHTO Guide Specifications for Horizontally Curved Highway Bridges
- AASHTO/-AWS-D1. 5M/D1.5: An American National Standard Bridge Welding Code
- AASHTO Guide Specifications for Design of Pedestrian Bridges
- AASHTO Guide Specifications for Structural Design of Sound Barriers
- Florida Department of Transportation Structures Design Guidelines
- Florida Department of Transportation Structures Detailing Manual
- Florida Department of Transportation Structures Standard and Semi-Standard Drawings
- Florida Department of Transportation Structures Design Office Temporary Design Bulletins (available on Florida Department of Transportation Structures web site only)
- Florida Department of Transportation Preferred Details (available on Florida Department of Transportation Structures web site only)

- Florida Department of Transportation New Directions For Florida Post-Tensioned Bridges Volumes 1-5
- Florida Department of Transportation Bridge Load Rating Permitting And Posting Manual

Geotechnical

- Soils and Foundation Handbook
- Manual of Florida Sampling and Testing Methods

Landscape Architecture

• Florida Highway Landscape Guide

Architectural

- Building Codes
 - Florida Building Code
- Accessibility for Persons with Disabilities
 - Florida Accessibility Code for Building Construction
 - Chapter 13D-1, FAC
 - Section 255.21 and Chapter 553, Part V, F.S.
 - ANSI A117.1 1986
 - Titles II and III, Americans With Disabilities Act (ADA), Public Law 101-336; and the ADA Accessibility Guidelines (ADAAG)
- Fire Codes and Rules
 - NFPA 70-1990 National Electrical Code
 - NFPA 101-1997 Life Safety Code
 - NFPA 10-1998 Standard for Portable Fire Extinguishers
 - NFPA 11-1999 Standard for Low-Expansion Foam Systems
 - NFPA 11A-1998 Standard for High- and Medium-Expansion Foam Systems
 - NFPA 12-1998 Standard for Carbon Dioxide Extinguishing Systems
 - NFPA 13-1996 Installation of Sprinkler Systems
 - NFPA 30-1996 Flammable and Combustible Liquids Code
 - NFPA 54-1996 National Gas Fuel Code
 - NFPA 58-1998 LP-Gas Code

Florida Fire Prevention Code as adopted by the State Fire Marshal. Consult with the Florida State Fire Marshal's office for other frequently used codes.

- Energy Conservation
 - Rule 13D-10, FAC, Rules for Construction and Leases of State-Owned Buildings to Ensure Energy Conservation
 - Section 255.251, F.S., Florida Energy Conservation Act of 1974
 - Section 255.255, F.S., Life-Cycle Costs
- o Glass

- Chapter 553, F.S., Part III, Glass
- Elevators
 - Chapter 7C-5, Florida Elevator Code
 - Chapter 399, F.S., Elevators
- Flood Plain Management Criteria

- Section 255.25, F.S., Approval Required Prior to Construction or Lease of Buildings
- Rules of the Federal Emergency Management Agency (FEMA)
- Extinguishing Systems
 - NFPA 10 Fire Extinguishers
 - NFPA 13 Sprinkler
 - NFPA 14 Standpipe and Hose System
 - NFPA 17 Dry Chemical
 - NFPA 20 Centrifugal Fire Pump
 - NFPA 24 Private Fire Service Mains
 - NFPA 200 Standard on Clean Agent Fire Extinguishing Systems
- Detection and Fire Alarm Systems
 - NFPA 70 Electrical Code
 - NFPA 72 Standard for the Installation, Maintenance and Use of Local Protective Signaling Systems
 - NFPA 72E Automatic Fire Detectors
 - NFPA 72H Testing Procedures for Remote Station and Proprietary Systems
 - NFPA 72G Installation, Maintenance, and Use of Notification Appliances
 - NFPA 74 Household Fire Warning Equipment
 - NFPA 75 Protection of Electronic Computer Equipment
- Mechanical Systems
 - NFPA 90A Air Conditioning and Ventilating Systems
 - NFPA 92A Smoke Control Systems
 - NFPA 96 Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment
 - NFPA 204M Smoke and Heating Venting
- Miscellaneous Systems
 - NFPA 45 Laboratories Using Chemicals
 - NFPA 80 Fire Doors and Windows
 - NFPA 88A Parking Structures
 - NFPA 105 Smoke and Draft-Control Door Assemblies
 - NFPA 110 Emergency and Standby Power Systems
 - NFPA 220 Types of Building Construction
 - NFPA 241 Safeguard Construction, Alteration, and Operations
 - SFM F.A.C. 4A-47 Elevators
 - SFM 4A-51 Boilers
- o Other
 - Chapter 10D-6 FAC On Site Sewage Disposal Systems (Septic Tanks)
 - Chapter 17-6.070 FAC Wastewater Facilities (Treatment Plants)
 - Chapter 17-761 FAC Underground Storage Tank Rules

These documents are revised periodically by the responsible agencies and adopted by authorities having jurisdiction on building projects. The I-595 CONSULTANTS are advised to obtain applicable versions of these documents from the responsible agency prior to use.

• American Concrete Institute

- American Institute of Architects Architect's Handbook of Professional Practice
- American Society for Testing and Materials ASTM Standards
- Southern Building Code Congress International Standard Building Codes
- Brick Institute of America
- DMS Standards for Design of State Facilities
- Florida Concrete Products Association
- Florida Department of Transportation Standard Specifications for Road and Bridge Construction
- Florida Department of Transportation Plans Preparation Manual
- Florida Department of Transportation Roadway and Traffic Design Standards
- Florida Department of Transportation Structures Design Guidelines
- Florida Department of Transportation Structures Detailing Manual
- Florida Department of Transportation Structures Standard Drawings
- Florida Department of Transportation ADA/Accessibility Procedure
- Florida Department of Transportation Fixed Capital Outlay Program
- Florida Department of Transportation Building Code Compliance Procedure
- Florida Department of Transportation Asbestos Management Program Procedure
- Florida Department of Transportation Design Build Procurement and Administration
- National Concrete Masonry Association
- National Electrical Code (current edition)
- National Fire Protection Association Life Safety Code (current edition)
- Portland Cement Association Concrete Masonry Handbook
- South Florida Building Code

PROJECT MANAGEMENT PLAN

for

I-595 (SR 862) CORRIDOR IMPROVEMENTS

From I-75 Interchange to I-95 Interchange Broward County, Florida

EXHIBIT J – PRELIMINARY COST ESTIMATES SUMMARY

I-595 CORRIDOR IMPROVEMENTS PRELIMINARY COST ESTIMATES SUMMARY (PRESENT DAY COST IN \$MILLIONS)

Segment	Financial ID	I-595 Segment Limits	Direct Const. (LRE) (e) Phase 52	Incentives (f) Phase 5A	Construction Contingency (g)	ROW Phases 4B,42,43,45	Railroad Coordination Phase 57	Utility Relocation (h) Phase 56	Design (i) Phase 32	CEI (j) Phase 62	Total Cost per Project Segment
-	420809-1	I-595 CORRIDOR DESIGN CONSULTANT	-	-	-	-	_	-	\$12.000	-	\$12.000
1 (TPK A)	409353-1	W. OF DAVIE RD. TO SR 7 (SR-7/ TPK INT) (WB)	\$56.853	\$2.843	\$5.685	\$0.087	_	\$1.000	\$5.685	\$6.822	\$78.976
2 (TPK B)	413271-1	E. OF UNIVERSITY DR. TO E. OF TPK (EB)	\$32.140	\$1.607	\$3.214	-	-	\$1.000	\$3.214	\$3.857	\$45.032
3	413272-1	E. OF UNIVERSITY DR. TO W. OF DAVIE RD. (WB)	\$23.457	\$1.173	\$2.346	\$27.755	-	\$1.000	\$2.346	\$2.815	\$60.891
4	413058-1	E. OF NOB HILL RD. TO E. OF UNIVERSITY DR. (WB)	\$112.108	\$5.605	\$11.211	\$23.922	-	\$1.000	\$11.211	\$13.453	\$178.510
-	421854-1	ADVANCED ROW ACQUISITION	-	-	-	\$20.000	_	-	-	-	\$20.000
5	419339-1	E. OF PINE ISLAND RD. TO E. OF UNIVERSITY DR. (EB)	\$24.713	\$1.236	\$2.471	\$15.392	_	\$1.000	\$2.471	\$2.966	\$50.249
6	413270-1	W. OF SW 136 AVE TO E. OF NOB HILL RD. (WB)	\$77.709	\$3.885	\$7.771	\$27.928	_	\$1.000	\$7.771	\$9.325	\$135.389
7	413057-1	W. OF NOB HILL RD. TO E. OF PINE ISLAND RD. (EB)	\$45.251	\$2.263	\$4.525	\$5.516	-	\$1.000	\$4.525	\$5.430	\$68.510
8	413274-1	W. OF SW 136 AVE. TO W. OF NOB HILL RD. (EB)	\$64.511	\$3.226	\$6.451	\$3.108	-	\$1.000	\$6.451	\$7.741	\$92.488
9	413273-1	REVERSIBLE LANES FROM W. OF SW 136TH AVE. TO E. OF SR 7	\$380.145	\$19.007	\$38.015	-	_	-	\$38.015	\$45.617	\$520.799
10	419341-1	DIRECT CONN. (EAST) FROM REV. LANES TO TPK MEDIAN N. & S. OF I-595	\$82.562	\$4.128	\$8.256	-	-	\$1.000	\$8.256	\$9.907	\$114.110
10A (a)	TBD	SEGMENTS 11 & 12 INTERIM IMPROVEMENTS TO ACCOMMODATE REV. LANES (EAST)	\$22.407	\$1.120	\$2.241	-	_	-	\$2.241	\$2.689	\$30.698
11A (b)	409354-3	ENVIRONMENTAL MITIGATION FOR SEGMENTS 11 & 12	\$0.775	-	\$0.078	\$22.713	_	-	\$0.050	\$0.093	\$23.709
11	409354-2	SR 7 TO I-95 (WB)	\$101.531	\$5.077	\$10.153	\$34.365	\$0.500	\$1.000	\$10.153	\$12.184	\$174.962
12	413277-1	E. OF TPK TO I-95 (EB)	\$122.535	\$6.127	\$12.254	\$6.912	\$0.500	\$1.000	\$12.254	\$14.704	\$176.285
TPK C (c)	419336-1	TPK FROM I-595 TO GRIFFIN RD. AND SB ON-RAMP (SB)	\$34.688	-		\$3.970	-	\$1.000	\$3.100	\$5.000	\$47.758
TPK D (c)	419337-1	TPK SB FLYOVER RAMP TO I-595	\$29.807	-	-	-	-	\$1.000	\$2.000	\$5.000	\$37.807
TPK E (c)	419338-1	TPK FROM GRIFFIN RD. TO I-595 (NB)	\$19.765	-			-	\$0.500	\$2.000	\$3.000	\$25.265
I-75A (d)	419342-1	DIRECT CONN. (WEST) FROM REV. LANES TO 1-75 MEDIAN SOUTH OF 1-595	-	-	-		-	-	-	-	\$0.000
		TOTAL COST PER WORK PROGRAM PHASE	\$1,230.957	\$57.296	\$114.670	\$191.668	\$1.000	\$13.500	\$133.742	\$150.604	
										TOTAL PROJECT COST	\$1,893.437

NOTES

 NOTES

 (a) Direct construction cost estimated at 10% of the cost for Segments 11 & 12

 (b) Does not include cost for post-construction maintenance or monitoring

 (c) To be designed and constructed by Florida's Turnpike Enterprise

 (d) To be further evaluated as part of 1-75 PD&E Study

 (e) Direct construction cost (LRE) includes 15% contingency for scope creep (typ.)

 (f) Incentives (typ. 5% of LRE) to be programmed by FDOT D4 in the year following construction contract award

 (g) Construction costs to be programmed 1 year in advance of construction

 (i) Design (PE) cost estimated as 10% of LRE (typ.)

 (j) CEI cost estimated as 12% of LRE (typ.)

PROJECT MANAGEMENT PLAN

for

I-595 (SR 862) CORRIDOR IMPROVEMENTS

From I-75 Interchange to I-95 Interchange Broward County, Florida

EXHIBIT K – PRELIMINARY CORRIDOR SCHEDULE

I-595 CORRIDOR IMPROVEMENTS PRELIMINARY CORRIDOR SCHEDULE (years based on FDOT July to June fiscal calendar)

Segment	Financial ID	I-595 Segment Limits	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23
-	420809-1	CORRIDOR LINE & GRADE DEVELOPMENT (CDC)																	
1 (TPK A)	409353-1	W. OF DAVIE RD. TO SR 7 (SR-7/ TPK INT) (WB)																	
2 (TPK B) (a)	413271-1	E. OF UNIVERSITY DR. TO E. OF TPK (EB)																	
3	413272-1	E. OF UNIVERSITY DR. TO W. OF DAVIE RD. (WB)																	
4	413058-1	E. OF NOB HILL RD. TO E. OF UNIVERSITY DR. (WB)																	
-	421854-1	ADVANCED ROW ACQUISITION																	
5	419339-1	E. OF PINE ISLAND RD. TO E. OF UNIVERSITY DR. (EB)																	
6	413270-1	W. OF SW 136 AVE TO E. OF NOB HILL RD. (WB)																	
7	413057-1	W. OF NOB HILL RD. TO E. OF PINE ISLAND RD. (EB)																	
8	413274-1	W. OF SW 136 AVE. TO W. OF NOB HILL RD. (EB)																	
9 (a)	413273-1	REVERSIBLE LANES FROM W. OF SW 136TH AVE. TO E. OF SR 7																	
10 (a)	419341-1	DIRECT CONN. (EAST) FROM REV. LANES TO TPK MEDIAN N. & S. OF I-595																	
10A (a)	TBD	SEGMENTS 11 & 12 INTERIM IMPROVEMENTS TO ACCOMMODATE REV. LANES (EAST)																	
11A	409354-3	ENVIRONMENTAL MITIGATION FOR SEGMENTS 11 & 12																	
11	409354-2	SR 7 TO I-95 (WB)																	
12	413277-1	E. OF TPK TO I-95 (EB)																	
TPK C (b)	419336-1	TPK FROM I-595 TO GRIFFIN RD. AND SB ON-RAMP (SB)																	
TPK D (a&b)	419337-1	TPK SB FLYOVER RAMP TO I-595																	
TPK E (a&b)	419338-1	TPK FROM GRIFFIN RD. TO I-595 (NB)																	
I-75A (c)	419342-1	DIRECT CONN. (WEST) FROM REV. LANES TO 1-75 MEDIAN SOUTH OF 1-595																	



CONCEPT DEVELOPMENT PHASE

DESIGN / ROW PHASES

CONSTRUCTION PHASE

NOTES

All phase start dates assumed in first quarter of funding year Joint construction letting is anticipated for Segments 4&5 and 9&10 (a) No right-of-way needs are anticipated for these projects (b) To be designed and constructed by Florida's Turnpike Enterprise (c) Schedule to be determined as part of I-75 PD&E Study

PROJECT MANAGEMENT PLAN

for

I-595 (SR 862) CORRIDOR IMPROVEMENTS

From I-75 Interchange to I-95 Interchange Broward County, Florida

EXHIBIT L – ENVIRONMENTAL COMMITMENTS MATRIX

I-595 NEPA Commitment Matrix

Project Priority	1	2	3	4	5	6	7	8	9	10	11	12	1TR	1T	2T	3T
FM Project No.	409353-1	413271-1	413272-1	413058-1	419339-1	413270-1	413057-1	413274-1	413273-1	419341-1	409354-2	413277-1	411189-2	419336-1	419337-1	419338-1
Segment	W. of DAVIE ROAD to SR 7 (SR 7/IPK INTERCHANGE) (WB)	E. of UNIV. DR. to E. of TURNPIKE (TPK INTERCHANGE) (EB)	E. of UNIV. DR. to W. of DAVIE RD. (WB)	E. of NOB HILL RD. to E of UNIV. DR. (WB)	E. of PINE ISLAND RD. to E. of UNIV. DR. (EB)	W. of 136TH AVE. to E. OF NOB HILL RD. (WB)	W. of NOB HILL RD. to E. of PINE ISLAND RE (EB)	 W. of SW 136TH AVE. to W. of NOB HILL RD. (EB) 	SW 136TH AVE. to E. of SR-7 (REVERSIBLE LANES)	ELEVATED DIRECT CONNECT (EAST) AT THE TURNPIKE	SR 7 to I-95 (WB)	W. of SR 7 to I-95 (EB)	Transit Portion Eligible for SIS Funds - Only ROW in I-595 Corridor	TPK from I-595 to GRIFFIN RD. SB ON-RAMP (SB)	TPK SB FLYOVEF RAMP to I-595	TPK from GRIFFIN RD. to I-595 (NB)
Agency	ency ENVIRONMENTAL COMMITMENTS															
BCPRD	3,6,17	17,18	3,17	17	17	17	17	17	17	17	5,17	5,12,17	TBD	17	17	17
NMFS	12,13,14,15,17	17	12,13,14,15,17	12,13,14,15,17	17	12,13,14,15,17	17	17	17	17	12,13,14,15,17	12,13,14,15,17	TBD	17	17	17
SFWMD	1,6,7,17	17	1,17	1,17	17	1,17	17	17	17	17	5,17,19,20,21	5,17,19,20,21	TBD	17	17	17
SHPO	3,16,17,18	16,17	3,16,17,18	16,17,18	16,17	16,17,18	16,17	16,17	16,17	16,17	16,17	16,17	TBD	16,17	16,17	16,17
USCG	2,17	1/	17	17	17	17	17	17	17	17	2,17	2,17	IBD	17	17	17
	17,22,23	4,17,22,23	17,22,23	9 10 11 17	17,22,23	17,22,23	17,22,23	9 10 11 17	9 10 11 17	17,22,23	17,22,23	4,17,22,23		17,22,23	4,17,22,23	4,17,22,23
03FW3	0,9,10,11,17	0,10,11,17	0,9,10,11,17	0,10,11,17	0,10,11,17	8,10,11,17	8,10,11,17		0,10,11,17	0,10,11,17	0,9,10,11,17	0,10,11,17	IBD	0,10,11,17	0,10,11,17	0,10,11,17
*Preliminary Engineering											1					
*Bight-of-Way	3/17/2008	N/A	7/2/2008	7/1/2008	7/2/2008	6/24/2009	7/1/2009	10/28/2010	Not Scheduled	Not Scheduled	7/18/2014	Not Scheduled	Not Scheduled	Not Scheduled	Not Scheduled	Not Scheduled
*Construction	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	3/5/2010	4/2/2012	5/6/2013	12/1/2014	Not Scheduled	7/26/2017	Not Scheduled	Not Scheduled	Not Scheduled	Not Scheduled	Not Scheduled
LEGEND																
1	PROVIDE SFWMD WITH THE WIND LOADINGS THAT ARE USED IN THE DESIGN OF THE NOISE WALLS; PROVIDE A 100' STAGING AREA NEXT TO ALL BRIDGE STRUCTURES OVER THE NORTH NEW RIVER CANAL; PROVIDE A MINIMUM 25' GAP, OR APPROPRIATE MAINTENANCE ACCESS APPROVED BY SFWMD, IN THE NOISE WALL AT THE SFWMD "LOT #29"; AND; PROVIDE A 3' ASPHALT MOW STRIP, SIMILAR TO A GUARDRAIL TREATMENT, IN FRONT OF PROPOSED NOISE WALLS. IF NOISE WALLS CANNOT BE CONSTRUCTED ON SOUTH SIDE OF THE CANAL AND THEREFORE MUST BE LOCATED ON THE NORTH SIDE OF THE CANAL: LOCATE THE NOISE WALLS ±4' FROM THE RESIDENTIAL PROPERTY LINE TO ALLOW FOR CONSTRUCTION OF THE WALL AND MONTH SIDE OF 40' FROM TOP OF BANK TO THE NOISE WALLS THE DESEMBLE A MINIMUM OF 40' FROM TOP OF BANK TO THE NOISE WALLS															
2	MAINTAIN AT LEAS	AINTAIN AT LEAST 20' OF VERTICAL CLEARANCE AND 30' OF HORIZONTAL CLEARANCE FOR VESSEL NAVIGATION IN THE NORTH NEW RIVER CANAL.														
3	AVOID ANY PERMA	NENT IMPACTS TO E	ITHER SEWELL LO	OCK PARK OR ITS A	CCESS FROM SR 8	4.										
4	ADHERE TO ALL PR	ROVISIONS OF THE E	PA CONSENT DEC	CREE AND COORDIN	IATE WITH THE EP	A ON ANY SUBSTAN	ITIAL CONSTRUCTION	ON PLAN CHANGES	DURING THE FIN	AL DESIGN PHA	SE.					
5	MINIMIZE IMPACTS	MINIMIZE IMPACTS TO THE LIMITED ACCESS RIGHT OF WAY ADJACENT TO POND APPLE SLOUGH NATURAL AREA AND PROVIDE ANY MITIGATION MEASURES THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES.														
6	IMPACTING THE EX	KISTING SECTION (TH	EREBY RESULTIN	IG IN NO NET LOSS	OF GREENWAY OF	R ITS FUNCTION).	THE NORTH NEW F	RIVER CANAL BETWI	EEN SR 7 AND TH	IEURETICAL SW	5151 AVENUE.	CONSTRUCT THE	RELOCATED SE	CTION OF THE	GREENWAY PR	IOR TO
7	CONSTRUCT THE F	RELOCATED SECTION	N OF THE GREEN	WAY AT EXISTING G	RADE AND WITHOU	JT ANY PERMANENT	OR TEMPORARY I	MPACTS TO MAINTA	INABILITY OF TH	E CANAL.						
8	WETLANDS WITHIN BANK.	N THE CORE FORAGI	NG AREA IS NOT F	PRACTICABLE, COOI	RDINATE WITH USP	FWS TO DENTIFY AC	CEPTABLE WETLA	ND COMPENSATION	OUTSIDE THE C	ORE FORAGING	AREA, SUCH AS	S PURCHASING WE	TLAND CREDITS	S FROM A "FWS	APPROVED" MI	TIGATION
9	FOLLOW THE USF	WS STANDARD CONS	STRUCTION COND	ITIONS FOR THE FL	ORIDA MANATEE D	URING IMPLEMENT	ATION OF THE PRO	JECT (IF APPLICABL	E).							
10	FOLLOW THE USF	WS STANDARD CONS	STRUCTION COND	ITIONS FOR THE EA	STERN INDIGO SN	AKE DURING IMPLE	MENTATION OF THE	E PROJECT (IF APPL	ICABLE).							
11	INCORPORATE FLO	DRIDA MANATEE AND	DEASTERN INDIG	O SNAKE TECHNICA	L SPECIAL PROVIS	SIONS INTO THE CON	NTRACTOR'S BID DO	OCUMENTS (IF APPL	ICABLE).							
12	PERMITTING, AND	IMPLEMENTATION ST	TAGE.	non activities co		JBAQUEOUS WORK	AND TTPES OF CO		ODS (I.E., FILE D	NIVENS, UNAINE	S, DREDGES, RC	DFFENO, UN DANG	ES, ETC.) AS TH		JGRE33E3 10	HE DESIGN,
13	PROVIDE A LIST OF	F CONSERVATION AN	ND AVOIDANCE ME	EASURES FOR LISTE	ED SPECIES ON CO	DNSTRUCTION METH	ODS AS THE PROJ	ECT PROGRESSES	TO THE DESIGN,	PERMITTING, A	ND IMPLEMENTA	TION STAGE.				
14	PROVIDE A SHORT	DESCRIPTION OR D	RAWINGS OF THE	NEW BRIDGES OVE	ER TIDAL WATERS	AS THE PROJECT P	ROGRESSES TO TH	IE DESIGN, PERMIT	ING, AND IMPLE	MENTATION STA	AGE.					
15	PROVIDE A STORM		NT PLAN AS THE P	PROJECT PROGRES	SES TO THE DESIG	GN, PERMITTING, AN		N STAGE.								
10							ATION OF THE I-595	CONSTRUCTION PF	OJECTS.							
18		THE STATE HISTOR			NING THE DESIGN (LACENT TO NORTH									
19	MITIGATE FOR ANY	WETLAND IMPACTS	RESULTING FRO	M THE CONSTRUCT	ION OF THIS PROJ	ECT BY USING ONE	OF THE OPTIONS D	SCUSSED DURING	 THE INTERAGEN	ICY MEETING HE	ELD ON JUNE 28	2005.				
20	MAINTAIN COORDI	MAINTAIN COORDINATION WITH ALL APPROPRIATE REGULATORY AND GOVERNMENT AGENCIES REGARDING THE MITIGATION REQUIRED FOR UNAVOIDABLE IMPACTS TO WETLANDS ADJACENT TO POND APPLE SLOUGH NATURAL ARFA														
21	EVALUATE THE US	E OF DRAINAGE STR	UCTURES, SUCH	AS BOX CULVERTS,	TO MINIMIZE OR A	VOID HAUL ROAD IN	MPACTS TO NATUR	AL FLOW AREAS FR	OM THE LIMITED	ACCESS RIGHT	OF WAY INTO P	OND APPLE SLOUG	GH NATURAL AR	EA.		
22	REQUIRE CONTRA NOISE QUALITY FR	REQUIRE CONTRACTOR TO ADHERE TO AIR QUALITY AND NOISE PROVISIONS OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS WELL AS APPROPRIATE BEST MANAGEMENT PRACTICES, TO MINIMIZE THE ADVERSE EFFECTS ON AIR AND														
23	REQUIRE THE CONTRACTOR TO DISPOSE OF ALL OIL, CHEMICAL, FUEL, ETC., IN AN ACCEPTABLE MANNER ACCORDING TO LOCAL, STATE, AND FEDERAL REGULATIONS AND FORBID ANY DUMPING OF 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. REQUIRE THE CONTRACTOR TO ADHERE TO THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.															
AGENCY ACRONYMS																
BCPRD	BROWARD COUNTY PARKS AND RECREATION DEPARTMENT															
NMFS	NATIONAL MARINE FISHERIES SERVICE (UNTED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION)															
SFWMD	SOUTH FLORIDA WATER MANAGEMENT DISTRICT															
SHPO	STATE HISTORIC P	RESERVATION OFFIC	CER (FLORIDA DE	PARTMENT OF STAT	E DIVISION OF HIS	STORICAL RESOURC	CES)									
USCG	UNITED STATES CO	DAST GUARD	TEATION	,												
	UNITED STATES EN			ſ												
USEWS	UNITED STATES FISH AND WILDLIFE SERVICE															

*Re-evaluation should be started at least three months prior to these re-evaluation dates.

PROJECT MANAGEMENT PLAN

for

I-595 (SR 862) CORRIDOR IMPROVEMENTS

From I-75 Interchange to I-95 Interchange Broward County, Florida

EXHIBIT M – LIST OF ACRONYMS

LIST OF ACRONYMS Page 1 of 3

ACOE	US Army Corps of Engineers
AN	Advanced Notification
BCEPD	Broward County Environmental Protection Department
BCT	Broward County Transit
BDR	Bridge Development Report
CADD	Computer Aided Drafting and Design
CAP	Community Awareness Plan
CAR	Contamination, Assessment and Remediation
CAT	Corridor Advisory Team
CBE-WTAA	Central Broward East-West Transit Alternatives Analysis
CBWCD	Central Broward Water Control District
CCEI	Construction Engineering & Inspection Consultant
CDC	Corridor Design Consultant
C-D	Collector-Distributor
CEI	Construction Engineering & Inspection
CERCLA	Comprehensive Environmental Response, Compensation
	and Liability Act (a.k.a. Superfund)
CFR	Code of Federal Regulations
CIR	Community Involvement Roundtable
CITS	Consultant Invoice Transmittal System
СМТ	Corridor Management Team
СРА	Certified Public Accountant
СРАМ	Construction Project Administration Manual
CSER	Contamination Screening Evaluation Report
CSRP	Conceptual State Relocation Plan
D4	District 4 (Florida Department of Transportation)
DBE	Disadvantaged Business Enterprise
DCCM	District Contract Compliance Manager
DCEC	District Construction Environmental Coordinator
DFEO	District Final Estimates Office
DMS	Dynamic Message Signs
DRB	Disputes Review Board
EDMS	Electronic Document Management System
EEO	Equal Employment Opportunity
EMO	Environmental Management Office
EOC	Executive Oversight Committee
EOR	Equal Opportunity Report
EPA	Environmental Protection Agency
ERC	Electronic Review Comments
ERP	Environmental Resource Permit
EVM	Earned Value Management
FAQ	Frequently Asked Question
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FHWA	Federal Highway Administration
FIHS	Florida Intrastate Highway System
FPL	Florida Power & Light
FPR	Florida Petroleum Reprocessors
FTA	Federal Transit Authority

LIST OF ACRONYMS Page 2 of 3

FTE	Florida's Turnpike Enterprise
GIS	Geographic Information System
HCS	Highway Capacity Software
IFP	Initial Financial Plan
IOAR	Interchange Operational Analysis Report
ITS	Intelligence Transportation System
JPA	Joint Participation Agreements
LDCA	Location Design Concept Approval
LPA	Locally Preferred Alternative
LRE	Long Range Estimate
LRT	Light Rail Transit
MDP	Master Design Plan
мот	Maintenance of Traffic
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MSE	Mechanically Stabilized Earth
	Manual on Uniform Traffic Control Devices
NAC	Naise Abstement Criteria
	National Environmental Policy Act
	National Marine Ficharias Sarvice
	National Ballutant Discharge Elimination System
NFDE3	National Politicant Discharge Elimination System
	On the Joh Training
	Old Diantation Water Control District
	Old Plantation Water Control District
	Occupational Salety & Health Administration
	Public-Private Partnership
	Plantation Acres Improvement District
PD&E	Project Development & Environment
PI	Public Involvement
PIIMS	Public Involvement Information Management System
PIO	Public Information Officer
PIP	Public Involvement Program
PIR	Public Involvement Report
PMP	Project Management Plan
PPM	Plans Preparation Manual
PS&E	Plans, Specifications and Estimate
PSR	Project Status Report
QA	Quality Assurance
QC	Quality Control
QDI	Quality Delivery Indicator
RAS	Review Appraisal Statement
RCI	Roadway Characteristics Inventory
RFI	Request for Information
RFP	Request for Proposal
ROW	Right of Way
RRR	Rehabilitation, Resurfacing and Restoration
SAFETEA-LU	Safe, Accountable, Flexible Efficient, Transportation
	Equity Act – A Legacy for Users
SDC	Segment Design Consultant
SFRC	South Florida Rail Corridor

LIST OF ACRONYMS Page 3 of 3

SFWMD	South Florida Water Management District
SHPO	State Historic Preservation Office
SIMR	Systems Interchange Modification Report
SIS	Strategic Intermodal System
SWPPP	Stormwater Pollution Prevention Plan
ТСР	Traffic Control Plan
THISCD	Tindall Hammock Irrigation & Soil Conservation District
TIP	Transportation Improvement Program
ТМС	Traffic Management Center
ТРК	Florida's Turnpike
TRC	Technical Review Committee
UOA	Utility Agency Owner
USCG	US Coast Guard
USDOT	US Department of Transportation
USFWS	US Fish and Wildlife Service
USPAP	Uniform Standards of Professional Appraisal Practice
VE	Value Engineering
VECP	Value Engineering Change Proposal
VE/DR	Value Engineering / Design Review
VPN	Virtual Private Network
WTS	Worksite Traffic Supervisor

PROJECT MANAGEMENT PLAN

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From I-75 Interchange to I-95 Interchange Broward County, Florida

EXHIBIT N – REFERENCE HYPERLINKS

Reference Hyperlinks

Document	URL
Code of Federal Regulations	http://www.gpoaccess.gov/cfr/index.html
FHWA Manual on Uniform Traffic Control Devices (MUTCD)	http://mutcd.fhwa.dot.gov/
Florida Administrative Code	http://fac.dos.state.fl.us/
Florida Statutes	http://leg.state.fl.us/Statutes/index.cfm?Mode=View %20Statutes&Submenu=1 =statutes&CFID=34 86148&CFTOKEN=21551428
FDOT Basis of Estimates Handbook	http://www.dot.state.fl.us/estimates/BOE/06BOEonline.htm
FDOT CADD Manual	http://www.dot.state.fl.us/ecso/downloads/publication s/Manual/default.htm
FDOT CADD Production Criteria Handbook	http://www.dot.state.fl.us/ecso/downloads/publication s/CriteriaHandBook/CriteriaHBV8/criteriaV8.htm
FDOT Construction Project Administration Manual (CPAM)	http://www.dot.state.fl.us/construction/manuals/cpam/CPAM70000000/cpamman.htm
FDOT Design Standards	http://www.dot.state.fl.us/rddesign/DesignStandards/ Standards.htm
FDOT D4 Community Awareness Plan (CAP) Guidelines	District 4 intranet
FDOT D4 Local Government Input in Design Process	District 4 intranet
FDOT D4 Production / Construction Hand-off Meeting Guidelines	District 4 intranet
FDOT D4 Public Notification Process	District 4 intranet
FDOT D4 Quality Control Plan	District 4 intranet
FDOT D4 Right of Way Mapping Guidelines and General Information	District 4 intranet
FDOT EEO Construction Contract Compliance Work Book	http://www.dot.state.fl.us/equalopportunityoffice/cont ractcomplianceworkbook.htm
FDOT Final Estimates Preparation & Documentation Manual	http://www.dot.state.fl.us/procurement/pdf/negot.pdf
FDOT Final Estimates Review & Administration Manual	http://www.dot.state.fl.us/construction/manuals/finale st/review%20&%20admin/chapters/aduit%20&%20a dmin.htm
FDOT Guidelines on Performance Based, Warranty and Guarantee Specifications	http://www.dot.state.fl.us/specificationsoffice/Perfor manceBased.htm
FDOT Long Range Estimates User's Handbook	http://www.dot.state.fl.us/estimates/Archive/LREmainframe/Introduction.pdf
FDOT Negotiation Handbook	http://www.dot.state.fl.us/procurement/pdf/negot.pdf
FDOT Plans Preparation Manual (PPM)	http://www.dot.state.fl.us/rddesign/PPMManual/2006 /Volume1/2006Vol1.htm

Reference Hyperlinks

FDOT Policy No. 001-275-015-i- Disadvantaged	http://www2.dot.state.fl.us/proceduraldocuments/pro				
Business Enterprise Utilization	cedures/bin/001275015.pdf				
FDOT Procedure No. 375-020-010-c - Identifying					
& Assigning Responsibilities for Errors,	http://www2.dot.state.fl.us/proceduraldocuments/pro				
Omissions and Contractual Breaches by	cedures/bin/375020010.pdf				
Professional Engineers					
FDOT Procedure No. 375-030-002-i - Acquisition	http://www2.dot.state.fl.us/proceduraldocuments/pro				
of Professional Services	cedures/bin/375030002.pdf				
FDOT Procedure No. 375-030-007 - Project and Performance Management Professional Services Consultant Work Performance Evaluation	http://www2.dot.state.fl.us/proceduraldocuments/pro cedures/bin/375030007.pdf				
FDOT Procedure No. 375-030-010-d - Amendments and Task Work Orders for Professional Service Agreements	http://www2.dot.state.fl.us/proceduraldocuments/pro cedures/bin/375030010.pdf				
FDOT Procedure No. 625-030-002-f - Value	http://www2.dot.state.fl.us/proceduraldocuments/pro				
Engineering Program	cedures/bin/625030002.pdf				
FDOT Procedure No. 625-030-005-c - Value	http://www2.dot.state.fl.us/proceduraldocuments/pro				
Engineering Change Proposal	cedures/bin/625030005.pdf				
FDOT Project Development and Environment (PD&E) Manual	http://www.dot.state.fl.us/emo/pubs/pdeman/pdeman .htm				
FDOT Project Management Handbook	http://www.dot.state.fl.us/projectmanagementoffice/P Mhandbook/PMHManual.pdf				
FDOT Right of Way Manual	http://www.dot.state.fl.us/rightofway/Documents/RO WManual/toc.htm				
FDOT Right of Way Mapping Handbook	http://www.dot.state.fl.us/surveyingandmapping/RW MappingHandbook.pdf				
FDOT Soils and Foundations Handbook	http://www.dot.state.fl.us/structures/Manuals/SFH.pd f				
FDOT Standard Specifications for Road and Bridge Construction (Specifications)	http://www.dot.state.fl.us/specificationsoffice/2004BK//toc.htm				
FDOT Utility Accommodation Manual	http://www.dot.state.fl.us/rddesign/utilities/files/UAM 04.htm				
FDOT Utility User's Guide	http://www.dot.state.fl.us/rddesign/utilities/files/UUG Docs.htm				
Uniform Standards of Professional Appraisal Practice (USPAP)	http://www.appraisalfoundation.org/s_appraisal/sec. asp?CID=3&DID=3				
United States Code	http://www.gpoaccess.gov/uscode/index.html				

Reference Hyperlinks

I-595 PD&E DOCUMENTS (14 total)	<u>www.i-595.com</u>
1) Type 2 Categorical Exclusion	
2) Preliminary Engineering Report	
Appendix A - Public Involvement Report	
Appendix B - Existing Conditions	
Appendix C - Alternative Concept Plans	
Appendix D - Preferred Alternative Concept Plans	
Appendix E - Water Quality Impact Evaluation	
Checklist	
Appendix F - Noise Study Report Summary	
3) Contamination Screening Evaluation Report	
4) Value Engineering / Design Review	
Documentation	
5) Preliminary Drainage and Pond Siting Report	
6) Essential Fish Habitat Assessment	
7) Cultural Resource Assessment Survey	
8) Air Quality Report	
9) Programmatic Section 4(f) Evaluation	
10) Wetland Evaluation Report	
11) Endangered Species Biological Assessment	
12) Noise Study Report	
13) Conceptual Stage Relocation Plan	
14) Systems Interchange Modification Report	
(SIMR) - I-595 from I-75 to I-95	

19.0 EXECUTIVE LEADERSHIP ENDORSEMENT

19.1 GENERAL

The FHWA and FDOT District 4 have reviewed and participated in the development of the initial Project Management Plan (PMP) and are in agreement with the project roles, responsibilities, processes and activities as described in the PMP for the design and construction of the I-595 Corridor Improvements Project. The effectiveness of the PMP will be continuously evaluated, and revisions will be issued as the project progresses in order to generate the most effectively managed project that meets the project goals and objectives as described in Section i.3.

19.2 ENDORSEMENT

The undersigned fully endorse the PMP, are committed to achieving the goals and objectives for the project, and hereby authorize the initiation of the procedures and requirements as set forth in the PMP.

Date

David C. Gibbs Division Administrator Federal Highway Administration - Florida Division

Date

James A. Wolfe, P.E. District Secretary Florida Department of Transportation – District 4



